

Right Node Raising

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Abstract

Right Node Raising is the term used by linguists to refer to a construction in which a shared argument surfaces at the right periphery of a coordinate structure (e.g. *Phil loves, but Mary hates, Greek tragedies*). This paper begins by introducing some of the basic properties of this construction, and then moves on to present and compare two of the main approaches to analyzing this construction. One of these approaches states the shared argument is external to the coordinate structure, while the other approach states the shared argument is internal to the coordinate structure. The possibility is raised that both of these approaches may be required for a complete analysis of Right Node Raising, as pre-figured in recent work by Barros & Vicente (2011). While most scholarly work on Right Node Raising has focussed on English, the construction is attested cross-linguistically. Some of the discoveries about Right Node Raising in languages other than English will be discussed here as well.

1 Introduction

Right Node Raising is the name commonly used to refer to sentences of the type illustrated by the English sentences in (1):¹

- (1) a. Some people love, but other people hate, the role that government plays in this country.
- b. The children donated some old toys, and encouraged their parents to donate some old clothes, to the local orphanage.

¹This name was first introduced by Postal (1974:125), but was described in earlier work by Ross (1967) and Hankamer (1971).

Right Node Raising (hereafter, RNR) constructions of this sort characteristically exhibit the properties summarized in (2).^{2,3}

- (2) a. A constituent which typically occurs at the right periphery of the sentence⁴ (hereafter, the *Pivot*) is associated with an argument position within each of the preceding conjuncts.
- b. The argument positions that the pivot is associated with typically correspond right peripheral positions within each of the conjuncts.

Property (2a) can be straightforwardly observed in the examples in (1). For example, the DP *the role that government plays in this country* in (1a) is associated with the direct object position of *love* and *hate* occurring in the preceding conjuncts.

Property (2b) differentiates the grammatical sentences in (1) from the ungrammatical sentences in (3), where the pivot does not correspond to an argument position that (in English) would licitly occur at the right edge of the preceding conjuncts.

- (3) a. *Love fried pickles ____, but hate fried artichokes ____, some people.
(cf. *Love friend pickles some people)

²For the purposes of this short paper, I will focus on cases of RNR where the pivot corresponds to a category that is uncontroversially a constituent (e.g. DP or PP) and which serves as an argument of some element (e.g. a verb) contained within each conjunct. A variety of other categories can also serve as the pivot in what appear to be RNR sentences. For instance, VPs and NPs as in (i) and (ii). In addition, the pivot of an RNR sentence may be a category whose constituency is a more controversial issue, as in (iii), and it may also be a sub-lexical element as in (iv).

- (i) I think that I would, and I know that John will [_{VP} buy a portrait of Elvis]. (McCawley 1988)
- (ii) You buy those, and I'll buy these [_{NP} roses].
- (iii) I borrowed and my sister stole [_? large sums of money from Chase Manhattan Bank]. (Abbot 1976)
- (iv) There were many pro- and anti-_{[N} marijuana legalization] protestors at the rally.

Some (if not most) of the literature on RNR assumes that examples like (i)-(iv) and examples like those in (1) are all instances of the same phenomenon, namely, RNR. While it might be desirable to have a unified analysis of all of these examples, it is not clear that such a unified analysis is either possible or correct. At the very least, some cases of what might appear to be RNR are amenable to an analysis involving a different grammatical phenomenon. For instance, examples like (i) and (ii) might simply involve ellipsis of a type that is independently attested (cf. *I will steal a portrait of Elvis if John will* [_{VP} Δ]).

³Typical RNR sentences also exhibit specific pragmatic and prosodic properties. On the pragmatic side, there typically must be contrastive focus on the element that precedes the positions that the pivot is associated with in all conjuncts (Hartmann 2000; Féry & Hartmann 2005; Ha 2008). On the prosodic side, the focussed elements in a typical RNR sentence are followed by a L+H* pitch accent and a usually substantial pause (Selkirk 2002). In addition, the conjuncts of the coordinate structure and the pivot itself apparently need to be able to form their own Intonation Phrase (Abbot 1976, Swingle 1993), thus precluding very weak elements such as pronouns from serving as the pivot. See references above for more detailed discussion of these pragmatic and prosodic properties.

⁴See Section 2.3 for examples where the pivot does not occur at the right periphery of the sentence.

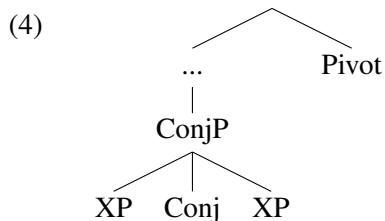
- b. *Max sent some books ---, and Sally sent some letters ---, the local orphanage.
 (cf. *Max sent some books the local orphanage.)

The restriction that the pivot must be connected to a licit right peripheral position within each conjunct is often referred to as the *Right Edge Restriction* (Postal 1974, McCawley 1982, Swingle 1993, Wilder 1997, 1999, Hartmann 2000, Sabbagh 2007).

2 Analyses of Right Node Raising

RNR is typically found with structures containing a coordinate structure of some type.⁵ Specific analyses of RNR fall into one of two types, depending on whether or not the pivot is analyzed as being external or internal to the coordinate structure. I summarize these two types of analyses below, and then review some of the specific types of evidence that has been discussed in support of them in Section 2.1.

External pivot: Analyses of RNR that treat the pivot as being external to the coordinate structure envisage a constituent structure of the type represented in (4).



Ross (1967) was most likely the first to have proposed that RNR sentences have a constituent structure like (4), which for him is derived by across-the-board rightward movement of the pivot and subsequent adjunction of the pivot outside of the coordinate structure. This approach, which is revived much later in Sabbagh (2007), is among a family of other analyses which similarly suppose that the pivot is external to the coordinate structure. For instance, in the framework of (Combinatory) Categorical Grammar (Steedman 1985, 1987, 1990, 1996), RNR structures are derived by

⁵It not entirely clear whether this is a defining property of RNR or not. Hudson (1976) discusses cases of non-coordinate RNR like (i).

- (i) It's interesting to compare the people who like with the people who dislike the power of big unions. (Hudson, 1976, 550)

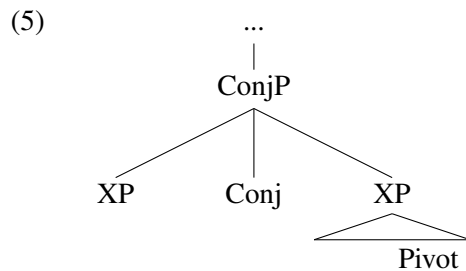
In addition, examples like (ii) appear to involve non-coordinate RNR involving an adjunction structure.

- (ii) John offended by not recognizing his favorite uncle from Cleavland. (Engdahl, 1983, 12)

The actual analysis of these examples, especially examples like (ii), is controversial. Some scholars assume that they are actually RNR sentences while others have argued that they are instances of a Parasitic-gap construction (Engdahl 1983, and, more recently, Nissenbaum 2000). See Postal (1994) for discussion.

an operation of *Forward Composition*, which permits, among other things, two or more “incomplete” categories (e.g. *Keats cooked and might eat*) to be coordinated directly and subsequently combined with a shared argument (e.g. *apples*). This combinatory rule yields something like a constituent structure in which the pivot of a RNR sentence is external to the coordinate structure, though such constituent structures are derived directly without appeal to movement. Finally, Postal (1998) argues that RNR sentences are derived by a type of extraction operation. While Postal uses the term extraction in a theory neutral way, one can assume that he has in mind the non-movement based mechanisms for analyzing extraction phenomenon within the theory of Arc Pair Grammar (Johnson & Postal 1980). In any event, Postal’s discussion makes relatively clear the position that the pivot is external to the coordinate structure as a result of extraction.

Internal pivot: For analyses of RNR that treat the pivot as internal to the coordinate structure, the constituent structure of an RNR sentence is, roughly, as shown in (5).



One of the earliest pivot internal approaches to RNR is Wexler & Cullicover (1980), who proposed that RNR sentences derive from an ellipsis operation which deletes a constituent from all non-final conjuncts under identity with an in-situ constituent (i.e. the pivot) which occurs overtly in the final conjunct. Other ellipsis analyses include Swingle (1993), Kayne (1994), Wilder (1997), Hartmann (2000, 2003), Abels (2005), Ha (2009), and many others. A second internal approach treats RNR as involving an instance of multiple dominance, whereby the pivot is multiply dominated by as many conjuncts as are present in the sentence. This approach, first proposed by McCawley (1982), has been further elaborated in Levine (1985), Blevins (1990), Phillips (1996), Wilder (1999), Bachrach & Katzir (2007, 2009), Gracanin-Yukse (2007), Grosz (2009), among others.

2.1 Evidence that the pivot is internal to ConjP

Evidence for the pivot-internal approach to RNR has come in two main flavors. The first type of evidence is specifically intended to be contrast with analyses of RNR that rely on extraction as the means of generating an external position for the pivot. For instance, it is well-known that certain types of extraction—e.g. *Wh*-movement—are limited in environments containing islands (Ross 1967). For instance, movement of a *Wh*-phrase across a relative clause gives rise to a certain degree of unacceptability.

- (6) *Which speech did Max denounce [the senator [who wrote ___]]?

If RNR involves (across-the-board) movement of the pivot and subsequent attachment of the pivot to a position external to the coordinate structure, then—all things being equal—this movement ought to be sensitive to the same restrictions as other movement operations such as *Wh*-movement. The relevant RNR example to consider, then, would be something like (7).

- (7) Max publicly denounced [the senator [who wrote ___]], and Pauline outwardly criticized [the magazine editor who published ___], the speech that encouraged all parents to blame the public schools for their children's failures.

In Ross' early discussion of RNR, examples similar to (7) were claimed to be ungrammatical, though to a lesser extent than other instances of island-crossing movement. Later, Wexler & Culicover (1980) reported that similar sentences are completely grammatical, and this judgment has remained as the accepted fact in virtually all work on RNR since.

Accepting that sentences like (7) are grammatical, examples like this clearly lend positive support to either of the analyses of RNR in which the pivot is assumed to be internal to the coordinate structure. However, the grammaticality of such sentences is not necessarily in conflict with analyses, e.g., the across-the-board rightward movement analysis, which assume that the pivot is external to the coordinate structure. Concretely, the grammaticality of sentences like (7) can only be taken as evidence against analyses of this type if the mechanisms responsible for deriving leftward and rightward movement are assumed to obey the same set of (island) restrictions. Whether or not this is the case depends, of course, on a theory of the relevant restrictions. Sabbagh (2007), for instance, argues that rightward movement is in fact not predicted to obey the same island constraints as leftward movement given an approach to island phenomenon of the sort developed by Fox & Pesetsky (2004), in which islands violations arise as a result of constraints on linearization rather than categorical bans on movement out of certain syntactic configurations.⁶

A second type of argument for analyses of RNR that treat the pivot as internal to the coordinate structure involves various demonstrations that the pivot must be C-commanded by material that is internal to one or both conjuncts of the coordinate structure. One such demonstration of this is due to Levine (1985), who observed that Condition C effects arise when the pivot is or contains an R(eferring)-expression that is bound by some element of one or both conjuncts.

- (8) *Congress is likely to veto, but he₁ is still going to try to pass, the president₁'s health care plan.

Another demonstration that the pivot must be C-commanded by conjunct internal material is offered by Kayne (1994), Phillips (1996), and Hartmann (2000), who observe that the pivot may be a Negative Polarity Item (NPI) licensed by a conjunct internal element.

- (9) Nobody enjoyed, and few people even liked, *any* of the talks on 'Right Node Raising'.

⁶Postal (1998) also explicitly denies the "unity" of extraction phenomenon.

These facts follow from the view that the pivot is internal to the coordinate structure on the assumption that the following two conditions hold at the surface structure level of syntactic representations.

- (10) a. An R-expression cannot be bound. (Condition-C)
- b. An NPI must be C-commanded by a suitable downward entailing element (e.g. negation).

Of course, it is fairly well established that the conditions in (10) do not necessarily hold of surface structure given the existence of reconstruction effects in which a displaced constituent is treated for various (mostly semantic) purposes as if it had not been displaced (cf. *?*Guess which of John's friends he just visited.*). The facts in (8) and (9), in other words, are compatible with an analysis in which the pivot has been moved out of the coordinate structure assuming the possibility that this movement can (and perhaps must) reconstruct.

2.2 Evidence that the pivot is external to ConjP

Whereas the arguments demonstrating that pivot is internal to the coordinate structure in RNR sentences involve the absence of island effects and the need for the pivot to be C-commanded by conjunct internal material, the arguments demonstrating that the pivot is external to the coordinate structure make exactly the opposite claims.

Postal (1998) demonstrates that a number of restrictions on *Wh*-movement, relative clause formation, Topicalization, and the like, also restrict RNR formations. Postal provides 12 arguments to this effect, one of which involves a restriction observed by Stowell (1991) that the complement of adjectives like *evil*, *nice*, *wonderful*, among others, cannot undergo leftward movement.

- (11) a. *Of whom was that nice/wonderful?
- b. *Who was that nice/wonderful of?

Postal observes (pg. 123-133) that the complement of this same set of adjectives cannot be the pivot of an RNR sentence.

- (12) a. *That may have been wonderful, and probably was wonderful, of the person who I had just met in the park. (Postal 1998:132)
- b. *That may have been wonderful of, and probably was wonderful of, the person who I had just met in the park. (Postal 1998:132)

Sabbagh (2007) offers a similar type of argument demonstrating that RNR sentences exhibit Coordinate Structure Constraint effects.⁷

⁷Postal (1998:121-122) also demonstrates this, but his demonstration involves examples showing that RNR is restricted by the part of the Coordinate Structure Constraint that precludes movement of a conjunct from a coordinate structure, rather than a subpart of a conjunct.

- (13) a. *Joss wrote a paper about RNR, Mary was reviewing ---, and Paul wanted to read ---, a paper about semiotics.
 b. *Joss wrote ---, Mary was reviewing a paper about semiotics, and Paul wanted to read ---, a paper about RNR.
 c. Joss wrote ---, Mary was reviewing ---, and Paul wanted to read ---, a paper about semiotics.

Like the argument for the internal approach based on apparent island violating behavior (see (7)), the strength of the arguments based on examples like (12) and (13) for the external approach depends upon whether or not the analysis of the relevant constraints *predicts* these facts. More specifically, it must be shown that CSC and whatever constraint is responsible for facts like (11) are constraints on movement alone, and not of other grammatical processes (e.g. ellipsis). It must furthermore be demonstrated that the relevant constraints are predicted to limit both leftward and rightward extractions. The CSC is usually assumed to be a constraint on movement and movement alone and to be impervious to the directionality of movement (see Sabbagh 2007:376 for an argument to this effect). However, the nature of the constraint(s) that is responsible for the ungrammaticality of examples like (11) is much less clear and the argument based on the ungrammaticality of examples like (12) for an external analysis of the pivot in RNR sentences may therefore not be as strong as some others.

The second type of argument that the pivot is external to the coordinate structure involves demonstrations that the pivot must C-command the coordinate structure or constituents contained within it. Sabbagh (2007:365-367) observes, for instance, that a quantified noun phrase pivot can have scope over the coordinate structure. This is demonstrated by examples like (14) (slightly modified from Sabbagh's example) in which the universal quantifier can take scope over the subject of the sentence, which is itself external to the coordinate structure.

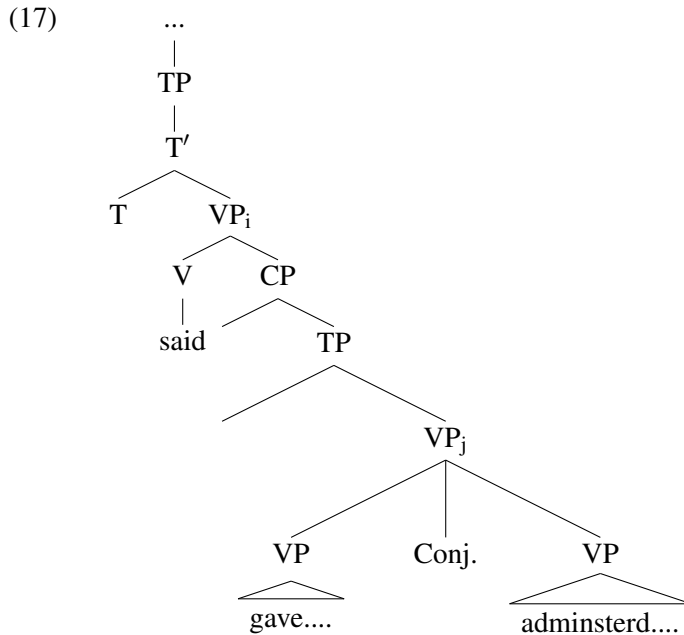
- (14) Some nurse gave a flu-shot, and administered a blood-test, to every patient who was admitted last night to the ER. ($\exists > \forall$; $\forall > \exists$)

Sabbagh (2007:367-369) also points out that the scope potential of the pivot can also be observed with the help of Antecedent Contained Deletion. Consider (15) and the two possible interpretations for the elided VP given in (16).

- (15) The nurse said that she was going to give a flu shot, and administer a blood test, to every patient that the doctor did [_{VP} Δ].
- (16) a. Δ = gave a flu shot to x and administered a blood test for x
 b. Δ = said that he (the doctor) was going to give a flu shot to x and administer a blood test for x

In order for the ellipsis site contained within its antecedent to be supplied with a suitable antecedent, the constituent containing the ellipsis (=the pivot of the RNR sentence) must raise to a position that

is crucially not contained within its antecedent (May 1985, Baltin 1987, Larson & May 1990, among others). Thus, in order to obtain the interpretation in (16a) for Δ , the pivot must be at least external to VP_j in the structure in (17). In order to derive the interpretation for Δ in (16b), the pivot must have scope above VP_i .



The premise of the argument based on (14) and (15) is the same—namely, the relevant interpretations could not be derived on the assumption that the pivot is internal to the coordinate structure. While the validity of this argument has generally been accepted, alternative analyses have been put forward. Bachrach & Katzir (2007) develop a framework for analyzing Quantifier Raising, which, when coupled with their analysis of RNR in terms of multi-dominance structures yields an account of the scope behaviors observed above.⁸ These scope facts are somewhat more challenging, however, for analyses of RNR involving ellipsis since the structure associated with a sentence like (14) would not be much different than one like (18).

(18) Some nurse gave a flu shot to **every patient...** and administered a blood test for **every patient...**

However, the wide scope of the pivot in (14) is not available for the universal quantifiers in (18). In other words, RNR is apparently a pre-requisite for certain wide scope patterns. Ha (2008), working under the assumption that RNR is derived by deletion, attempts to solve this problem by stipulating that deletion of the quantified expression in the initial conjunct allows it to be interpreted

⁸For reasons of space, I refer the reader to Bachrach & Katzir's work rather than offering a summary of their proposal here.

as a variable, which can then be bound by the (covertly) raised quantifier in the second conjunct. If the quantifier is not deleted from the initial conjunct, then covert raising of the quantifier in the second conjunct will yield an instance of vacuous quantification. Problematically, though, Ha offers no explicit proposal for when a constituent elided in RNR can or must be interpreted as a variable. It must not be the case that elided constituents are always interpreted as variable, since otherwise simple RNR sentences like those in (1) would contain unbound variables.

2.3 Interim Summary: Directions for future studies

The preceding sections have attempted to offer a general idea of the types of evidence that have been put forward in support of analyses of RNR that treat the pivot as either internal or external to the coordinate structure. While most work on RNR in the past 5 years or so weigh in favor of the view that the pivot is internal, the issue is still not completely settled. I am not aware, for instance, of any recent work on RNR that has dealt with the 12 arguments provided by Postal (1998:121-137) in defense of an “extraction” analysis of RNR or for CSC facts like (13).

At this point, though, a more interesting question to ask about RNR is not which of the analyses is correct, but whether or not there might be evidence for the correctness of multiple analyses. The question is raised and answered in the affirmative in recent work by Barros & Vicente (2011) who demonstrate that there at least some cases of RNR that are better handled by multiple dominance structures, while other cases are better handled in terms of ellipsis. To see how they reach this conclusion, consider first the observation illustrated by example (19) that RNR exhibits Vehicle Change (Fiengo & May 1994).

- (19) She₁ fears, but Bob is not worried, that Alice₁ might lose the election.
(Barros & Vicente 2011:8)

In order to avoid a Condition C violation, the pivot must be “reconstructed” in the first conjunct as something like [*that she₁ might lose the election*]. Sentences like (19) are most likely predicted to be ungrammatical under an analysis in which the pivot occurs only once in the structure and is multiply dominated by each of the conjuncts. However, on an analysis of RNR involving ellipsis, Vehicle Change effects of this sort are unsurprising given the widely attested occurrence of such effects with other ellipsis operations (cf. *I hope that the boss won't fire Alice₁, but she₁ fears that he will [fire her₁].*)

RNR also exhibits a phenomenon of *cummulative agreement*, as illustrated in (20).

- (20) Alice is happy that Beatrix, and Clair is proud that Diana, {have, *has} traveled to Cameroon.
(Barros & Vicente 2011:6)

Barros & Vicente cite Grosz (2009) who argues that cumulative agreement effects of this sort cannot be accounted for under a deletion analysis of RNR because the source structure for sentences like (20) under such an analysis would incorrectly lead to the expectation of singular

agreement in both conjuncts.⁹

- (21) Alice is produce that Beatrix {*have, has} travelled to Cameroon, and Clair is happy that Diana {*have, has} travelled to Cameroon.
(Barros & Vicente 2011:4)

Of particular interest is Barros & Vicente's observation that Vehicle Change and cumulative agreement effects appear to be in complementary distribution. They cite the following example which demonstrates that when there is cumulative agreement, Vehicle Change is blocked.

- (22) She_{*1/2} fears that Alex, and I worry that Bob, {have/*has} decided to nominate Claire₁.
(Barros & Vicente 2011:8)

The complementary distribution of Vehicle Change and cumulative agreement effects furnishes an argument for an "eclectic theory of RNR" in which both multiple dominance and deletion must exist as routes to deriving RNR sentences with different properties.

Barros & Vicente's work opens up the possibility that in addition to multiple dominance and ellipsis, there may be yet other instances of RNR that require an approach involving (across-the-board) rightward movement. The method for discovering whether this possibility might exist is clearly laid out in their work: The evidence would be based on demonstrating that some property of RNR sentences that can only be explained by a movement analysis is in complementary distribution with some other property that can only be explained in terms of multiple dominance or ellipsis.

To offer an example of what the relevant data might look like, consider first the following examples from Whitman (2009:238-240) which appear to demonstrate that the pivot can appear inside of the final conjunct.

- (23) a. A Monroe County man, convicted yesterday of raping, beating, and stuffing a 7-year-old girl into an abandoned well, could be executed by lethal injection.
b. The blast upended and nearly sliced an armored Chevrolet Suburban in half.

Examples of this sort (referred to as *Right Node Wrapping* by Whitman 2009) do not have a straightforward analysis in terms of across-the-board rightward movement. The reason for this is that the material to the right of the pivot in these examples is associated only with the final conjunct in which the pivot surfaces. Hence, if the pivot has undergone across-the-board rightward movement, then the material to its right would have to be assumed to have undergone non-across-the-board movement in violation of the Coordinate Structure Constraint. Examples like this are therefore more amenable to an analysis that assumes that the pivot is internal to the coordinate structure (e.g. ellipsis or multi-dominance).

Now, if it is correct that examples like the ones in (23) cannot be derived by across-the-board rightward movement (or some comparable extraction mechanism), then it ought to follow that

⁹See Grosz (2009) for an analysis. As Grosz notes and attempts to explain, not all speakers of English are equally comfortable with the cumulative agreement pattern.

phenomenon associated with RNR that are specifically attributed to this type of operation should not found with cases like these. One such phenomena is the (exceptional) wide scope mentioned earlier in Section 2.2. A relevant minimal pair to consider, then, would be the pair of sentences (24) and (25).

(24) The lieutenant will either arrest or shoot *every suspected arsonist* with his rifle.

(25) The lieutenant will either arrest or shoot with his rifle, every suspected arsonist.

Sentence (25) seems to have a reading that is lacking in (24) in which some suspected arsonists might be arrested while others might be shot. Sentence (24), on the other hand, seems to have only an interpretation in which every suspected arsonist will end up arrested or every suspected arsonists will end up shot. The reading for (25) that is absent in (24) is one that can be derived from a structure where the pivot has scope over the coordinate structure head by *or* (see, e.g., Partee & Rooth 1983, and Larson 1985). The absence of this interpretation in (24) suggests that the pivot is internal to the coordinate structure. Assuming something like across-the-board movement as the mechanism for deriving a structure in which the pivot is external, then, following Barros & Vicente’s logic, we can conclude that across-the-board rightward movement might be at least among the possible routes to deriving RNR sentences alongside ellipsis and multiple dominance.

3 RNR Cross-linguistically

There has been relatively little comparative work on RNR, despite the fact that RNR appears to be a fairly common constructions cross-linguistically. Investigations of RNR in languages other than English has proved important in at least two ways. First, as a constituency test, it has been especially useful for probing constituent structure in languages whose surface order might suggest a certain degree of non-configurationality.

For instance, McCloskey (1991, 2011) uses RNR in Irish, a verb initial (VSO) language, to demonstrate that subject and object form a constituent of some type to the exclusion of the verb. He cites (26) as an example.

(26) Níor chulas gur leag nó gur mharaigh [na tramanna duine ar bith
 not heard C-[PAST] knock-down or C-[PAST] kill the trams person any
 ariamh].
 ever
 ‘I never heard that the trams ever knocked down or killed anyone’

A constituent consisting of the subject and object but excluding the verb may seem unusual, but as McCloskey argues, a constituent of exactly this type is predicted to exist by analyses of VSO word order according to which which VSO is derived by an operation of verb-raising, as schematized in (27), which raises the verb to a position in the syntax that is to the left of the subject and dominates a category that contains the subject and all other arguments of the verb.

(27) [V [SUBJECT _{tv} OBJECT]]

Interestingly, there are other verb-initial (VSO) languages where RNR examples analogous to the Irish example in (26) are ungrammatical. For instance, in the Austronesian language Chamorro, RNR sentences of a familiar type are attested, as in (28) (Chung 1990: 601).

(28) Kao un-guaiya yan kao un-respeta si nana-mu?
 Q INFL(2S)-love and Q INFL(2S)-respect mother-AGR(2S)?
 ‘Do you love and do you respect your mother?’

It is apparently not possible in Chamorro for the pivot of an RNR sentence to be a string consisting of a subject and an object. This fact is illustrated by the ungrammatical example in (29) (Chung 1990:602), which is similar in form to the grammatical Irish example in (26).

(29) *Ha-chatli’i’ yan ma’a’ñaο [si Maria ni ma’estra].
 INFL(3S)-hate and INF(S).afraid Maria OBL teacher
 (Hates, and is afraid, Maria the teacher)

The ungrammaticality of (29) suggests that there is no constituent of the sort derived by verb-raising as in (27), and in fact, Chung (1990, 1998) provides other independent evidence that VSO in Chamorro is not derived in the same manner (by verb-raising) as it is in Irish.

Studies of RNR in languages other than English have also produced new types of arguments for one or another analysis of how RNR constructions are derived. In Irish, for example, RNR can strand prepositions even though preposition stranding is otherwise impossible in the language.

(30) Brian Mag Uidhir ... ag glacadh le agus ag cabhrú le plandáil a dtailte
 Brian Maguire take(PROG) with and help(PROG) with planting their lands
 féin
 REFLEX
 ‘Brain Maguire...accepting, and helping with, the planting of their own lands’ (McCloskey 1986:184)

McCloskey (1986) takes the fact that preposition stranding is possible with RNR to be an argument that, in Irish at least, RNR constructions cannot be derived by movement. As it happens, the opposite conclusion can be drawn on the basis of data from Tagalog described by Sabbagh (2008). Tagalog is like Irish in not allowing preposition stranding. Unlike Irish, however, Tagalog does not permit preposition stranding with RNR as is demonstrated by the ungrammaticality of (31).¹⁰

¹⁰Sabbagh (2008) additionally shows that other constituents that cannot be extracted by *Wh*-movement in Tagalog (e.g. direct objects of active clauses, agents of passive clauses) likewise cannot be RNRred. Larson (2011) provide an alternative explanation for these facts.

- (31) **Linuto*’ ni Pedro ang pagkain para at *hinugas-an* ni Juan ang mga pinggan para
 ASP.cook NS Pedro S food for and ASP.wash-AGR NS Juan S PL dish for
 kay Maria.
 OBL Maria
 (Pedro cooked for for, and Juan washed dishes for, Maria.) (Sabbagh 2008:507)

This difference between Irish and Tagalog suggests that different mechanisms may be involved in deriving RNR in different languages.¹¹

4 Summary

In this paper, I have introduced some of the basic properties of RNR and discussed the two mainstream analyses for this construction (one according to which the pivot is internal to the coordinate structure, and another according to which the pivot is external to the coordinate structure). As I have tried to indicate, the arguments that have been put forward to adjudicate between these two broad approaches are, to a certain extent, equivocal. Further progress on understanding RNR, I believe, can be made with further investigation into the “eclectic” view of RNR that Barros & Vicente’s work has opened up. If this view continues to produce the kind of observations it already has, then then the deeper and more interesting architectural question that RNR raises is whether there is a general theory that can explain why there should be multiple mechanisms available to derive what appears, in certain cases at least, to be the same superficial result (i.e. RNR).

References

- Abbot, Barbara. 1976. Right node raising as a test for constituenthood. *Linguistic Inquiry* 7, 639-642.
- Ables, Klaus. 2005. Right node raising: Ellipsis or across the board movement. In K. Moulton and M. Wolf, eds., *Proceedings of NELS 34*, pp. 45-59. Amherst, MA: GLSA.
- Bacharach, Asaf and R. Katzir. 2007. Spelling out QR. In Puig-Waldmüller, ed., *Proceedings of Sinn und Bedeutung 11*, 6375. Barcelona: Universitat Pompeu-Fabra.
- Bacharach, Asaf and R. Katzir. 2009. Right node raising and delayed spellout. In K. Grohmann, ed., *InterPhases: Phase-theoretical investigations of Linguistic interfaces*, pp. xxx-xxx. Oxford: Oxford University Press.
- Baltin, Mark. 1987. Do antecedent contained deletions exist? *Linguistic Inquiry* 18, 579-595.
- Barros, Matthew and Luis Vicente. 2011. Right node raising requires both ellipsis and multidomination. *University of Pennsylvania Working Papers in Linguistics* 17:1, Article 2.
- Blevins, Jim. 1990. Syntactic complexity: Evidence for discontinuity and multidomination. PhD dissertation, University of Massachusetts, Amherst. Distributed by GLSA.

¹¹A conclusion of this sort should not be too much of a surprise if it also turns out, as it was suggested might be the case in Section 2.3, that different cases of RNR may be derived by different mechanisms even within a single language.

- Chung, Sandra. 1990. VP's and verb movement in Chamorro. *Natural Language & Linguistic Inquiry* 8, 559-619.
- Chung, Sandra. 1998. *The Design of agreement: Evidence from Chamorro*. Chicago: Chicago University Press.
- Engdahl, Elisabet. 1983. Parasitic gaps. *Linguistics and Philosophy* 6, 334.
- Féry, Caroline and K. Hartmann. 2005. Focus and prosodic structures of German Gapping and Right Node Raising. *The Linguistic Review* 22, 671-14.
- Fiengo, Robert and R. May. 1994. *Indices and identity*. Cambridge, MA: MIT Press.
- Fox, Danny and D. Pesetsky. 2004. Cyclic spell-out, order, and the typology of movement. *Theoretical Linguistics* 31, 1-42.
- Gracanin-Yukse, M. 2007. About sharing. PhD dissertation, MIT. Cambridge, MA.
- Grosz, Patrick. 2009. Movement and agreement in right node raising constructions. MS, MIT. Cambridge, MA.
- Ha, Seungwan. 2008. Ellipsis, right node raising, and across-the-board constructions. PhD dissertation, Boston University, Boston, MA.
- Hankamer, Jorge. 1971. *Deletion in coordinate structures*. New York: Garland (Outstanding Dissertations in Linguistics series).
- Hartmann, Katharina. 2000. *Right node raising and gapping: Interface conditions on prosodic deletion*. Amsterdam: John Benjamins.
- Hartmann, Katharina. 2003. Background matching in right node raising constructions. In K. Schwabe and S. Winkler, eds., *The interfaces: Deriving and interpreting omitted structure*, pp. 121-151. Amsterdam: John Benjamins.
- Hudson, Richard. 1976. Conjunction reduction, gapping, and right-node-raising. *Language* 52, 535-562.
- Johnson, David E. and Paul M. Postal. 1980. *Arc pair grammar*. Princeton: Princeton University Press.
- Kayne, Richard. 1994. *The antisymmetry of syntax*. Cambridge, MA: MIT Press.
- Larson, Bradley. 2011. Problems with a movement analysis of right node raising in Tagalog. *Linguistic Inquiry* 42, 163-171.
- Larson, Richard. 1985. On the syntax of disjunction scope. *Natural Language & Linguistic Theory* 3, 217-264.
- Larson, Richard and R. May. 1990. Antecedent containment or vacuous movement: A reply to Baltin. *Linguistic Inquiry* 12, 103-122.
- Levine, Robert D. 1985. Right node (non-)raising. *Linguistic Inquiry* 16, 492-497.
- May, Robert. 1985. *Logical form: Its structure and derivation*. Cambridge, MA: MIT Press.
- McCawley, James D. 1982. Parentheticals and discontinuous constituent structure. *Linguistic Inquiry* 13, 911-106.
- McCawley, James. 1988. *The Syntactic phenomena of English*. Chicago: Chicago University Press.
- McCloskey, James. 1986. Right Node Raising and Preposition Stranding. *Linguistic Inquiry* 17, 183-186.

- McCloskey, James. 1991. Clause structure, ellipsis and proper government in Irish. *Lingua* 85, 259-302.
- McCloskey, James. 2011. The shape of Irish clauses. In Andrew Carnie, ed., *Formal approaches to Celtic linguistics*, pp. 143-178. Cambridge Scholars Publishing.
- Nissenbaum, Jon. 2000. Investigations of covert phrasal movement. PhD dissertation, MIT. Cambridge, MA.
- Partee, Barbara H. and M. Rooth. 1983. Generalized conjunction and type ambiguity. In Rainer Bäuerle, Christoph Schwarze and Arnim von Stechow, eds., *Meaning, Use, and Interpretation of Language*, pp. 361-381. Berlin: Walter de Gruyter.
- Phillips, Collin. 1996. Order and structure. PhD dissertation, MIT. Cambridge, MA.
- Postal, Paul M. 1974. *On Raising*. MIT Press, Cambridge, MA.
- Postal, Paul M. 1994. Parasitic and pseudoparasitic gaps. *Linguistic Inquiry* 25, 63-117.
- Postal, Paul M. 1998. *Three investigations of extraction*. Cambridge, MA: MIT Press.
- Ross, John. 1967. Constraints on variables in syntax. PhD dissertation, MIT. Cambridge, MA. Published (1986) as *Infinite Syntax!*. Norwood, NJ: Ablex.
- Sabbagh, Joseph. 2007. Ordering and linearizing rightward movement. *Natural Language & Linguistic Theory* 25, 349-401.
- Sabbagh, Joseph. 2008. Right node raising and extraction in Tagalog. *Linguistic Inquiry* 39, 502-511.
- Selkirk, Elizabeth. 2002. Contrastive FOCUS vs. presentational focus: Prosodic evidence from right node raising in English. In *Speech Prosody 2002: Proceedings of the 1st International Conference on Speech Prosody*, pp. 643-646, Aix-en-Provence.
- Steedman, Mark. 1985. Dependency and coordination in the grammar of Dutch and English. *Language* 61, 523-568.
- Steedman, Mark. 1987. Combinatory grammar and parasitic gaps. *Natural Language & Linguistic Theory* 5, 403-439.
- Steedman, Mark. 1990. Gapping and constituent coordination. *Linguistics and Philosophy* 13, 207-263.
- Steedman, Mark. 1996. *Surface structure and interpretation*. Cambridge, MA: MIT Press.
- Stowell, Tim. 1991. The alignment of arguments in adjective phrases. In S. D. Rothstein, ed., *Syntax and Semantics 25: Perspectives on phrase structure: Heads and licensing*. San Diego, CA: Academic Press.
- Swingle, Karie. 1993. The role of prosody in right node raising. In G. Pullum and E. Potsdam, eds., *Syntax at Santa Cruz* 2, 82-112.
- Wexler, Ken and Peter W. Culicover. 1980. *Formal principles of language acquisition*. Cambridge, MA: MIT Press.
- Whitman, Neal. 2009. Right-Node Wrapping. In Erhard Hinrichs and John Nerbonne, eds., *Theory and Evidence in Semantics*. Stanford University, Stanford, CA: CSLI Publications.
- Wilder, Christopher. 1997. Some properties of ellipsis in coordination. In A. Alexiadou, and T. A. Hall, eds., *Studies on universal grammar and typological variation*, pp. 59-107. Amsterdam: John Benjamins.

Wilder, Christopher. 1999. Right node raising and the LCA. In S. Bird et. al., eds., *Proceedings of the 18th West Coast Conference on Formal Linguistics*, pp. 586-598. Somerville, MA: Cascadilla Press.