

Misparing and syntactic reanalysis

John Whitman

Cornell University, USA

This paper argues that syntactic misparing is not a significant factor in syntactic change, contrary to many earlier claims. It examines the best known examples in the literature of syntactic change resulting from alleged misparing, and shows that the misparing analysis is rejected in the most current research, or at best subject to alternative explanations. Cases discussed include SVO word order in Niger-Congo, the Chinese *bǎ* construction, and English *for* NP *to* VP infinitives. The paper concludes with a brief comparison of the roles of misparing, broadly construed, in syntactic and phonological change.

1. Boundary shift, misparing, rebracketing

Langacker's (1977) oft-cited definition of syntactic reanalysis¹ includes a specification of several subtypes. The topic of this article is the subtype that Langacker calls "boundary shift," which he schematizes as in (1):

$$(1) \quad \begin{array}{cccc} A & B & > & A & B \\ | & | & & | & | \\ XY & Z & & X & YZ \end{array}$$

Langacker cites only one example of boundary shift, and speculates that it can be subsumed under two separate processes, "boundary creation" and "boundary loss" (1978:66, 118).² Despite the marginal status of this process in Langacker's original paper, it plays a major part in many treatments of syntactic reanalysis. The basic idea behind these treatments is that various factors, primarily global ambiguity, cause language learners to misparse the input, assigning a bracketing different from the one associated with the grammar of the previous generation.

1. "a change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modification of its surface manifestation" (1977:58).

2. Langacker's example is the change resulting in the Mono accusative suffix *-na* (1977:65). This results from the proto-Uto-Aztecan accusative suffix *-a after 'prenasalizing' noun stems. The suffix was reanalyzed as *-na* and generalized to all environments in Mono.

The purpose of this paper is to argue that such misparsings do not play a significant part in syntactic change, contrary to much previous literature. I will adopt Hopper & Traugott's (1993) term "rebracketing" to refer to the type of alleged misparsing in (1). Among examples of rebracketing, Hopper and Thompson cite such well-known cases as the Ewe complementizer *bé*, derived from the verb 'say' (Lord 1976), the Mandarin preverbal object pattern with *bǎ* (Li & Thompson 1976), and the emergence of English modals (Lightfoot 1979). Similar examples are cited by Harris & Campbell (1995) and Newmeyer (1999). These authors represent very different theoretical viewpoints, but they concur in identifying certain well-known syntactic changes as examples of rebracketings, that is, the type of process in (1).

The analyses cited from Hopper & Traugott above all date from the 1970s. A theme of my argument will be that as the accuracy of syntactic analyses of diachronic data has improved, the role imputed to rebracketing-type changes has decreased. Let us take, as a very well-known example, Lightfoot's (1979) original treatment of the English modals. This held that output from a grammar containing the rule AUX → Tense was reanalyzed, resulting in the acquisition of a grammar containing the rule AUX → Tense Modal. If we follow Langacker's practice and consider a direct mapping between the surface structures produced by these two grammars, the result is a rebracketing:

- (2) a. [_S Nⁿ [_{AUX} Tense] [_{V'} [_{V'} *cunn-/will-/mot-/mæg-/scul-...*]]] >
 b. [_S Nⁿ [_{AUX} Tense [_{Modal} *can/will/must/may/shall*]] Vⁿ]

In other words, the premodals *cunn-/will-*, etc. once constituents of Vⁿ, are rebracketed as constituents of AUX.

However few, if any, specialists in Middle and Early Modern English syntax would accept (2) as a meaningful representation of the change resulting in the EME modals. Since Roberts (1985), the basic assumption of scholars treating these facts has been that the ME rule of Verb Raising played a crucial role in generating the data that triggered the change resulting in the EME modals. As a result of this rule, the data triggering the change have the form of (3) (where, for the purposes of this argument, S and AUX can be regarded as equivalent to TP and T).

- (3) [_S NP [_{AUX} *cunn-/will-...* + Tense] [_{V'} [_{V'} t_{*cunn-/will-...*}]]]

In the reanalysis (3) resulting in the EME modals, no rebracketing takes place at all. The only syntactic change is the elimination of the trace in (3), resulting from the reanalysis of modals as base generated in their surface position.

The English modal example is representative of how our understanding of syntactic change has evolved since the 1970s, and as it has, the role of rebracketing in describing syntactic change has diminished. Nevertheless, both textbooks and scholarly works continue to cite outdated analyses or poorly understood syntactic data in support of the view that rebracketing is a common type of syntactic change. In this paper I will

focus on a few of the more widely cited cases. In Section 2, I survey some examples of rebracketing widely cited in the literature, and show that they do not in fact involve rebracketing. The examples discussed in this section involve analyses first developed in the 1970s that are still widely cited. In Section 3 I discuss the kinds of restructuring that actually do occur, introducing the Relabeling hypothesis of Whitman (2001). In section 4 I make a brief comparison with misparsing in phonological change.

2. An overview of frequently discussed cases of rebracketing

2.1 Reanalyzed right dislocation as a source for VO order

In a widely cited paper, Hyman (1975) proposes that proto-Niger-Congo had SOV order and that the SVO pattern much more widely attested in the family results from reanalysis of a right dislocated ‘afterthought’ construction. This putative change is illustrated in (4), with Swahili standing in for earlier stages of Niger-Congo.

- (4) a. ***Mary kitabu a-me-nunu-a* (Hypothesized pNC OV order) >
 Mary 7.book 1.S-PERF-buy-FV
 “Mary bought a book.”
- b. **[Mary a-me-nunu-a], kitabu* (Right Dislocation of the object) >
 Mary 1.S-PERF-buy-FV 7.book
 “Mary bought pro, a book.”
- c. *Mary a-me-nunu-a*
 Mary 1.S-PERF-buy-FV
kitabu (RD reanalyzed as underlying VO order)
 7.book
 “Mary bought pro, a book.”

Hyman’s hypothesis is representative of a number of earlier claims that word order change can result from rebracketing the output of an optional dislocation process. Analyses of right dislocation in SOV languages assume that the dislocated constituent is adjoined to a clausal projection. One such analysis claims that the structure is biclausal; adjunction of the dislocated material to the left boundary of the right-hand clause is followed by ellipsis of the rest of the clause (Kuno 1978; Kayne 1994; Whitman 2000). This structure is shown for Japanese in (5):

- (5) [_{CP} *Mary ga pro katta no*], [_{tp} *sono hon wo Mary ga katta*]
 Mary NOM bought Q that book ACC
 “Did Mary buy it, that book?”

Another view is that the dislocated constituent is simply right-adjoined to the clause. On this analysis too, a clause boundary intervenes between the dislocated constituent

and material to its left. On either view, reanalysis of right dislocation involves rebracketing, as in (6).

$$(6) \quad [_{CP} \text{ Subject } [_{VP} \text{ Verb}] [_{TP} \text{ Object}] \approx > [_{CP} \text{ Subject } [_{VP} \text{ Verb Object}]]$$

There is still not a complete consensus about the diachronic relationship between SVO and SOV languages in Niger-Congo (see Gensler 1997 for an overview). But it appears safe to say that no specialist accepts the scenario in (4), where VO order results from rebracketing of a right dislocated object. Claudi (1993, 1994) argues that word order in proto-Niger-Congo was SVO, and that the shift to SOV, where it occurred, resulted from several types of changes that she described as grammaticalizations. Claudi adopts the proposal of Heine (1976) that one source of OV order is a pattern where the diachronic origin of the verb phrase is a nominalization. Under this approach, OV order results from (i) nominalizations with internal head final order and (ii) reanalysis of the original matrix verb as an auxiliary:

$$(7) \quad \begin{array}{l} \text{a. } [_{TP} \text{ NP V } [_{NOMLP} \text{ O V}_{NOML}]] > \\ \text{b. } [_{TP} \text{ NP Aux } [_{VP} \text{ O V}]] \end{array}$$

I do not know if this hypothesis as a source for OV order in Niger-Congo is correct.³ But what is significant about it from the perspective of this paper is that it involves no rebracketing at all. The object and verb form a constituent in (4b) just as they do in (4). The only change in the representations is the label of this constituent, and the categorial features of its head. Thus the change is in features, specifically categorial features, not in constituent structure.

Gensler (1994, 1997), argues that word order in proto-Niger-Congo was S-Aux-O-V-XP, where XP stands for any constituent other than the subject or object. He points out that this order, otherwise crosslinguistically rare, is attested in various branches of the family, as in the following example from Bambara (Mande):

$$(8) \quad \begin{array}{l} \text{Bala } b\grave{e} \quad j\acute{i} \quad d\acute{i} \quad den \quad ama \\ \text{Bala Aux water give child to} \\ \text{‘‘Bala is giving water to the child.’’} \end{array} \quad (\text{Koopman 1997:558})$$

Gensler’s view of the origin of SVO order in, e.g. Bantu, is that original constituent order S-Aux-O-V-XP is the source of the Tense/Aspect and subject and object concord affixes:

3. Nikitina (2007) argues for the opposite development: she suggests that proto-Niger-Congo was SOV, and that SVO resulted from reanalysis of nominalizations built on an innovative NP-internal order, N-possessor. But on this hypothesis too, rebracketing plays no role.

- (9) Proto-Niger-Congo S Aux O V XP (Gensler 1994: 13)
- | | | | | | |
|--------------|------------------------------------|--|--|--|--|
| Bantu | | | | | |
| e.g. Swahili | Subj-Tns/Asp-Obj-V _{stem} | | | | |
| | ni-li-mw-ona “I saw him.” | | | | |

Postverbal XP is inherited as the locus for non-core arguments. Full DP arguments surface as clitic doubled items in A' positions: “old pronouns cliticize onto the verb and become agreement markers, doubling any full-NP arguments that may be present” (1994: 13). This characterizes the situation in Chichewa as described by Bresnan & Mchombo (1987), where full DP subjects and objects doubled by concord affixes occupy A' positions (10a). We may hypothesize a next step where concord affixes are reanalyzed as agreement affixes, and core argument DPs as moved to rather than base generated in A' positions (10b). In the third and final stage (10c), in a language such as Swahili, movement is lost, or rather acquired as optional, and DP subjects and objects appear in their base-merged argument positions.

- (10) a. DP_i [_{TP} *pro*_i [_T Subj_i-Tns/Asp-Obj_j-V_{stem} [_{VP} *t*_V *pro*_j]]] DP_j
 b. DP_i [_{TP} *t*_i [_T Subj_i-Tns/Asp-Obj_j-V_{stem} [_{VP} *t*_V *t*_j]]] DP_j
 c. [_{TP} DP_i [_T Subj_i-Tns/Asp-Obj_j-V_{stem} [_{VP} *t*_V DP_j]]]

Such an analysis is completely different from the ‘afterthought’ hypothesis, in that it involves no modification of structure, and in particular, no rebracketing. Instead, changes in constituent order are the result of innovation of movement (10b) or loss of obligatory movement (10c).

2.2 ‘Have’ perfects

Perfect constructions involving an auxiliary derived from a verb with the meaning ‘have’ have been interpreted as examples of rebracketing. The literature on passive to perfect reanalyses is extensive. Heine (1997) holds that a construction “specifying possession” is the source for the reanalysis, which he schematizes as follows (1997: 1992):

- (11) a. He has a letter
 b. He has a letter # (a) written (one)
 c. He has written # a letter

On this view, ‘letter’ originates as the object of ‘have’ and is modified by ‘written’ (12a). Rebracketing occurs when ‘letter’ is reanalyzed as a complement of ‘written’ (12b):

- (12) a. He has [_{NP} a letter [_{PTCP} (a) [_{VP} written (one)]]]
 c. He has [_{VP} written a letter]

For concreteness, I will focus on the intensively studied case of the Romance periphrastic perfects, which derive from Latin *habere* + perfect participle. De Acosta

(to appear) disputes the claim that these derive from the ‘specifying possession’ construction. He points out that two potential source constructions involving *habēre* + perfect participle are attested from the earliest literary Latin sources. The first, which de Acosta calls the “adnominal type,” corresponds to Heine’s “specifying possession” construction (13). The second construction is called by de Acosta the “attained state type” (14). The examples below are cited from de Acosta.

- (13) *Longa nomina, contortiplicata habemus*
 long.ACC.NEUT.P names.ACC.P twisted.ACC.NEUT.P have.PS.1P
 “We have long, complicated names.” (Plautus, *Persa* 707)
- (14) *illa omnia missa*
 those.ACC.NEUT.P all.ACC.NEUT.P abandoned.ACC.NEUT.P
habeo quae ante agere occepi
 have.PS.1S which.ACC.NEUT.P before do.INF undertook.PF.1S
 “I have all those things abandoned which before I undertook to do.”
 (Plautus, *Pseudolus* 602)

De Acosta argues that the attained state type exemplified by (14) cannot be interpreted as meaning that the subject possesses the object. (14), for example, does not mean that the speaker possesses all things which he previously undertook to do but then abandoned. He analyzes the attained state type as predicating a “relation of pertaining” to the subject of *habēre*. He argues in detail that the source of the Romance periphrastic perfects is the attained state pattern, not the adnominal pattern.

In terms of a structural analysis, de Acosta follows La Fauci (1988), who provides the Relational Grammar representation in (15) (cited from de Acosta to appear:40):

- (15) a. *habēre* + perfect participle
- | | | | | |
|------------|--------------|---------------|-----------------|---|
| | | 2 | P | |
| 1 | P | 2 | Chô | > |
| <i>ego</i> | <i>habeo</i> | <i>librum</i> | <i>scriptum</i> | |
| I.NOM | have | book.ACC | written.ACC | |
- “I have a book written.”
- b. Periphrastic Perfect
- | | | | |
|------------|--------------|---------------|-----------------|
| | | 2 | P |
| 1 | P | 2 | Chô |
| <i>ego</i> | <i>habeo</i> | <i>librum</i> | <i>scriptum</i> |
| I.NOM | have | book.ACC | written.ACC |
- “I have written a book.”

In (15a), *librum scriptum* “book written” is introduced into the derivation as clausal argument, which I label in (16) Participial Phrase. *Habeo* “I have” selects this clausal argument as its complement and inherits *librum* “book” as its object, represented in (16) as a Raising to Object or Exceptional Case Marking relationship.

- (16) a. habēre + perfect participle
 [ego [VP habeo [PrTP librum scriptum]]
 I.NOM have book.ACC written.ACC
 “I have a book written.”
- b. Periphrastic Perfect
 ego [AspP habeo [VP librum scriptum]]
 I.NOM have book.ACC written.ACC
 “I have written a book.”

Again, the only change in (16) is in the label of the projection headed by *habeo*, which corresponds to its grammaticalization as an aspectual auxiliary. No rebracketing of the constituents in (16) occurs.

2.3 *bǎ*

Following Li & Thompson (1974), the change resulting in the modern Mandarin *bǎ* “disposal” construction and its counterparts in other Sinitic languages is often described as reanalysis from the first verb in a serial construction to a preposition or case marker. Similar analyses are given to reanalyses of a verb meaning ‘take’ in a serial construction in other languages (Lord 1976). Such analyses call for rebracketing. The combination of *bǎ* “take” + object in the source construction (17) is considered to be rebracketed with the second verb after the change (18):

- (17) [VP *ba zhuyu*]_i [VP *zixi kan e*]_i
 take dogwood carefully look
 “(I) take the dogwood and look at it carefully.”
 (Tu Fu, 8th century, cited by Wang 1958: 411)

- (18) *Wo [ba Lisi] pian le*
 I ba Lisi cheat PERF
 “I cheated Lisi.”

See, for example, the discussion in Hopper & Traugott (1993: 27). Whitman and Paul (2005) argue in detail that this kind of analysis is inadequate. First, the source construction is not simply a coordinate structure; as shown by Peyraube (1985), it is a serial verb construction of the object-sharing type. In the generative literature, object sharing serial verb constructions are analyzed as complementation constructions, with the first verb taking the second VP as a complement (Campbell 1989; Larson 1991; Collins 1993, 1997). On this view, object sharing is treated as an instance of control (Equi):

- (19) [VP *ba* [VP *zhuyu*]_i [V' *t_{ba}* [VP *zixi pro_i kan*]]]]
 take dogwood carefully look
 “(I) take the dogwood and look at it carefully.”

Second, *bǎ* in Modern Chinese is not a preposition or a case marker. A tradition extending back nearly forty years analyzes it as a higher head, either a verb (Hashimoto 1971; Ross 1991; Sybesma 1999; Bender 2000), or as the head of a functional projection (Sybesma 1992; Zou 1993; Paul 1999), taking the VP headed by the verb to its right as its complement, exactly as in the source serial construction (19). Among the many arguments given by these researchers for analyzing *bǎ* as a higher head, a set of facts pointed out by Whitman and Paul is particularly straightforward. It is possible to conjoin two instances of preverbal object + VP under *bǎ*:

- (20) *Wo ba* [_{VP} [*Zhangsan jieshao* *gei Lisi*], [_{VP} *Wangwu jieshao*
I BA Zhangsan introduce to Lisi Wangwu introduce
gei Laoli]]
to Laoli
“I introduced Zhangsan to Lisi, and Wangwu to Laoli.”

The pattern in (20) contrasts with the behavior of true prepositions, which do not allow such coordination without the preposition being repeated:

- (21) *Wo* [_{PP} *dui Wangwu*] *hen you yijian* *(*dui*)
I toward Wangwu very have prejudice towards
Laoli ye you yijian
Laoli also have prejudice
“I am very prejudiced against Wangwu, and also against Laoli.”

This contrast is impossible to explain if *bǎ* is simply a preposition. On the analysis of *bǎ* as a higher head or verb, it takes the constituent containing the object and lexical verb as a complement:

- (22) *Wo* [_{VP} *ba* [_{baP} *Lisi* *t_{ba}* [_{AspP} *pian* *le* [_{VP} *t_{pian}* *t_{Lisi}*]]]]
I BA Lisi cheat PERF
“Zhangsan cheated Lisi.”

The change from (19) to (22) involves no rebracketing, only changes in category label.

2.4 for_{comp}

The English complementizer *for* has been widely claimed to result from rebracketing (Stockwell 1976; Harris & Campbell 1995; Jarad 1997), going back to a proposal of Jespersen (1910). The basic idea is that the matrix PP in (20a) is misparsed as complementizer and infinitival subject, resulting in the rebracketings in (23):

- (23) a. [_{VP} be easy [_{PP} for NP] [_{TP} PRO to VP]] >
b. [_{VP} be easy [_{CP} for [_{TP} NP to VP]]]]

There is considerable evidence that this analysis is wrong. De Smet (2008, 2009) shows that clear examples of [*for* NP_{subj} *to* VP] occur by the 15th century:⁴

- (24) Also it ys a certayn techinge [for hele (i.e. “health”) to be keped], þat a man vse metys þat accordyn to his complexioun and nature.
(1400–49, *Innsbruck Middle English Prose Corpus (Sampler)*, cited from De Smet 2009: 1745)

De Smet points out that these early examples of [*for* NP_{subj} *to* VP] do not occur in the environment (23a) where reanalysis is supposed to have taken place, that is, where the *for* PP is a complement of the preceding predicate. He observes that if clear [*for* NP_{subj} *to* VP] cases like (24) somehow arose as an extension from contexts like (23) where the status of the *for* PP is ambiguous, we might expect to find a match between the various contexts where *for* PP is ambiguous in ME and the earliest contexts for unambiguous [*for* NP_{subj} *to* VP]. He surveys the *Penn-Helsinki Parsed Corpus of Middle English* (second edition) to show that there is no such match (2009: 1746). De Smet thus concludes that [*for* NP_{subj} *to* VP] did not arise through the reanalysis in (23).

Garrett (2010, ~~to appear~~) arrives at the same conclusion, but with two additional arguments. First, he shows that [*for* NP_{subj} *to* VP] as an extraposed infinitival subject occurs as early as De Smet’s examples like (24), around 1400:

- (25) Hit is worship to þe [for hym in þo mene tyme [to] be nackened of honoure].
(a1400 DCChrist (Roy 17.B.17) 61, *Middle English Dictionary*, cited from Garrett 2010: 8)

In contexts like this, *for* PP is unambiguously not the complement of the predicate (in this case the noun *worship*) to its left.

Second, Garrett points out that in the class of adjectival and nominal ‘subjective’ predicates such as *good*, *possible*, *shame*, in ME texts from the fourteenth to early fifteenth century, the experiencer argument is most frequently marked with *to*, not with *for*. This is so in examples where the experiencer PP is followed by an infinitival complement, as in (26b) below.

- (26) a. It is shame **to you** said sir Dynadan that ye gouerne you soo shamefully.
(Malory (Caxton) Book 10 capitulum xj)
b. Therefore as ye be good gentyll knyghtes see me not thus shamefully to dye for it is shame **to alle knyghthode** thus to see me dye. (Malory (Caxton) Book 8 capitulum xxxiiij)

4. I am indebted to Andrew Garrett for the reference to De Smet’s research.

Given the frequency of marking with *to*, it is unclear why the target of the reanalysis hypothesized in (23) should be *for*.

To sum up, De Smet and Garrett show that [*for* NP *to* VP] emerges earlier than has been supposed, that it emerges in contexts where (23a) cannot be the source, that the most common early contexts for it do not match contexts where *for* NP can be interpreted as a complement, and that it is unclear why *for*, rather than *to*, would have been the target of rebracketing in the first place. Why, then has the rebracketing analysis been so attractive to previous researchers? A main reason for this is that contexts where [*for* NP *to* VP] occurs in subject position of the main clause have been assumed to be the only environments where *for* NP can be shown not to be a complement. De Smet and Garrett demonstrate that this assumption is incorrect, but the question remains why examples like [*For John to go*] is *difficult* appear much later than examples like (25) and (26). In the 15th century, subjects of subject infinitives appear in nominative case, as pointed out by Garrett:

- (27) [Thou to love that lovyth not the] is but grete foly. (a1470 Malory Works [Vinaver 1990:322], cited from Garrett 2010:10)

Nominative subjects also occur with infinitival adjuncts, right dislocation from subject, and in infinitival complements of comparative *as* (ibid). They also occur in contexts like (28a), which looks at first blush like a minimal contrast with (28b):

- (28) a. Hit is the custom of my contrey [a knyght allweyes to kepe his wepyn with him]. (a1470 Malory Works [Vinaver 1990: 83: 188], cited from Garrett 2010: 11)
 b. “Fy fy!” seyde the damesell, “hit is shame [for you to sey him suche worhsip].” (a1470 Malory Works [Shepherd 2004: 188], cited from Garrett 2010: 11)

However there is a semantic and structural contrast between (28a–b). While *shame* in (28b) is a subjective predicate, selecting an infinitival complement and (optionally) an experiencer argument as shown in (26), *custom* in (28a) is a predicate nominal selecting no arguments. On this analysis, the infinitival clause in (28a) is the underlying subject of the predication: *BE [a knyght allweyes to kepe his wepyn with him] the custom of my contrey*. This suggests a general explanation for the distribution of nominative subjects of infinitives in the 15th century: subjects of infinitives are assigned nominative case when they are accessible to a higher head which licenses nominative case. In matrix subject position this higher head is matrix T. In contexts such as (28a), as the subject of the predication, *a knyght* is the highest nominal category in VP, and thus accessible to matrix T. Complement infinitives such as in (28b), on the other hand, are too deeply embedded to be accessible to T. On this view, nominative subjects of infinitives disappear from the language as a result of a later change, possibly the relabeling

of infinitival subjects as CPs, which makes the subject of the infinitive inaccessible to matrix T.

I have concluded this section with a proposal to account for the later emergence of [*for* NP *to* VP] in subject position. Although details of this proposal remain to be worked out, De Smet and Garrett's arguments establish the basic point of the section: [*for* NP *to* VP] infinitives are not the result of rebracketing matrix *for*.

2.5 Haspelmath's (1998) cases

Haspelmath (1998) makes a general argument against the role of reanalysis in syntactic change. He argues that many changes widely characterized in the literature as reanalyses in fact involve only a change in category label. He makes this point, for example, with regard to the well-known change from serial verb to complementizer, specifically the case of Ewe *bé* mentioned by Hopper & Traugott (1993). The structures posited by Haspelmath differ for those that we posited for Chinese *bǎ* in 2.3, but the argument is exactly parallel:

(29) **Reanalysis of Ewe *bé* "say" in serial constructions** (Haspelmath 1998: 328)

- a. [_S [_{NP} *é* -] [_{VP} *súsú*] [_{VP} [_V *bé*] [_S *ye-á-vá*]]] >
 he- think say he-FUT-come
- b. [_S [_{NP} *é* -] [_{VP} *súsú*] [_S [_{Comp} *bé*] [_S *ye-á-vá*]]]
 he- think that he-FUT-come
- "He thinks that he will come."

As Haspelmath points out, the structural configurations in (29a–b) are the same. The changes are in category label: VP to S, and V' to Comp. Haspelmath makes this argument for many additional well-known cases of reanalysis, including N > P reanalyses, V > P reanalyses (e.g. *passed* > *past*), and A > Det reanalyses (OE *an* "one" > NE *a(n)* 1998: 329). See Whitman (2001) for similar arguments of this type.

Haspelmath also directly addresses several cases specifically identified in the literature as rebracketing (1998: 331). The most frequently cited example is reanalysis from relational noun to preposition, as in Hopper and Thomson's analysis of English *back*:

(30) **Reanalysis of (*in*) *back* as P** (Hopper & Thomson 1993: 41)

- a. [back] of the barn]] >
 [back of] [the barn]

As Haspelmath points out, there is no evidence that the complex preposition *back of in* (30b) is rebracketed as in (30b). Haspelmath observes that "The alternative solution ... would require that the preposition *in back* takes a prepositional complement (*of the barn*), and this may seem odd, but it is no more unusual than genitive-taking adpositions in Latin" (1998: 332). The alternative Haspelmath describes is exactly the analysis

of “axial part” items such as (*in*) *back* proposed in Svenonius (2007) and much related work. Here for comparative purposes, I adapt Svenonius’s structures for relational nouns and axial part phrases to the general structure proposed by Cinque (~~to appear~~).

- (31) a. [_{PPstat} in [_{DPplace} the [_{NP} back [_{PP} of the barn]]]] >
 b. [_{PPstat} (in) [_{AxPart} back [_{PP} of the barn]]]

Cinque, following Kayne (2004), posits an unpronounced Place DP between the stative preposition and *back*. Whether this is correct or not, there is no rebracketing of lexical material in the change from (31a) to (31b), just change in category from NP to Axial Part, and possible deletion of the brackets corresponding to DP Place in (a).

Evidence that the preposition *of* should be analyzed in the same way in the two constructions comes from extraction. Both constructions allow pied piping of the whole stative PP, disallow pied piping only of *of*, and allow stranding of *of*:

- (32) a. This is the house in the back of which Patti lives.
 b. This is the house ?(in) back of which Patti lives.
 c. *This is the house of which Patti lives in the back.
 d. *This is the house of which Patti lives (in) back.
 e. This is the house Patti lives in the back of.
 f. This is the house Patti lives ?(in) back of.⁵

Although Haspelmath rejects alleged examples of reanalysis like those above, he discusses five examples which he considers valid cases of reanalysis (1998: 322–326). One of these is the example of the English *for* NP *to* infinitives discussed in 2.4. I will briefly discuss three of the remaining four cases here.

- (33) **Reanalysis of the particle in German *an-fangen*** (Haspelmath 1998: 323)
 a. *Sie fängt an, zu singen*
 “She begins to sing.”
 b. *Wenn sie anfängt, zu singen...* (standard German)
 “If she begins to sing...”
 c. *Wenn sie an zu singen fängt...* (Haspelmath’s variety)
 “If she begins to sing...”
 (34) **German external possessive dative** (Haspelmath 1998: 325)
 a. *Da zerriss [_{NP} dem Jungen] [_{NP} seine Hose]* >
 “Then the pants tore on the boy.”

5. The decrease in acceptability with the stative preposition unpronounced in (32b) is due to a register clash between dropping this preposition and pied piping. The decrease in unacceptability with Pstat unpronounced in (32f) is unexpected under the rebracketing analysis in (32b), since on this analysis of *is* is not in fact stranded.

- b. *Da zerriss*_[NP dem Jungen seine Hose]
 “Then the boy’s pants tore.”
- (35) **French *il* “him” > *-ti* Q marker** (Haspelmath 1998: 325)
- a. *Votre père part-il?* (standard French) >
 “Is your father leaving?”
- b. *Votre père par-ti?* (colloquial French)
 “Is your father leaving?”

The alleged reanalysis in (33) assumes that the particle was originally bracketed with the verb. But many analyses of verb-particle constructions, e.g. den Dikken (1995) argue that particles form an underlying constituent with the complement. (33a) is then derived by raising of the verb without the particle, (b) by incorporating the particle into the verb. The pattern in (c), allowed in Haspelmath’s variety of German, reflects loss of incorporation and perhaps recategorization of the particle as an infinitival complementizer. But the underlying constituent [Particle Complement] requires no rebracketing.

The external possessive dative construction in (34) involves a change in varieties of German where the dative possessor is reanalyzed as a possessor internal to NP. But here too, under more recent analyses of possessor dative constructions, this change can be understood as a change in category label involving no rebracketing. Pylkkänen (2008) argues that possessor dative constructions involve a so-called Low Applicative structure, where both possessor and possessee reside in an ApplP projection selected by V:

- (36) a. *Da zerriss* [_{VP} *t_V* [_{AppIP} *dem Jungen* [_{AppI'} *Appl* [_{NP} *seine Hose*]]]] >
 “Then the pants tore on the boy.”
- b. *Da zerriss* [_{VP} *t_V* [_{NP} *dem Jungen* [_{NP} *seine Hose*]]]
 “Then the boy’s pants tore.”

On this view, the reanalysis from (36a) involves no rebracketing, only a change of labels from ApplP to NP (or DP), with perhaps some loss of intermediate structure.

The example in (35) however, involving the colloquial French question marker *-ti*, truly appears to involve rebracketing. If we analyze postverbal *il* in standard French (35a) as a head (Kayne 1983), then the rebracketing occurs prior to this stage, when subject *il* in Spec, TP is reanalyzed from subject to head:

- (37) a. *Votre père part* [_{TP} *il* [_{T'} *t_{V+T}*]]? (standard French) >
 “Is your father leaving?”
- b. *Votre père* [_F *part + il* [_{TP} *t_{V+T}*]]? (colloquial French)
 “Is your father leaving?”

I have shown *il* in (37b) as heading a functional projection, possibly CP, outside of TP. After this reanalysis, the reduction of (*t*) + *il* to *ti* is a phonological change. What is

crucial for the discussion here is that the reanalysis is indeed, as Haspelmath points out, a rebracketing. Prior to the change, *il* is immediately dominated by TP. After the change, the left edge of TP is immediately to the right of *il*. In the next section I introduce an approach that countenances minimal rebracketings like (37), while correctly disallowing the wider range of cases we have discussed in previous sections.

3. The relabeling (conservancy of structure) hypothesis

Whitman (2001) hypothesizes that reanalysis-type changes involve change in category label, rather than rebracketing in the traditional conception. We saw numerous arguments of this type in Section 2. This hypothesis is in the spirit of the dictum that the protagonists of syntactic change are individual lexical items, not syntactic constructions (Hale 2007). Syntactic change occurs when speakers change the values of discrete syntactic features associated with lexical items. Types of reanalysis that can be naturally characterized this way are simple cases of relabeling (change in categorial feature) and non-reanalysis changes such as loss or gain of movement (change in a feature which forces displacement). Whitman and Paul (2005) restate the hypothesis as follows:

(38) **Conservancy of Structure**

Lexical items change categorial or projection ([+ max, + min] features under preservation of hierarchical (c-command) relations.

Rather than a constraint on the mappings between outputs of grammars at different diachronic stages, Conservancy of Structure should be thought of as a hypothesis about language learning. It claims that accurate acquisition of the c-command relations between lexical items in the input is a kind of upper bound on misparsing in syntactic acquisition.

Let us consider how the Conservancy of Structure hypothesis applies to the change of French *il* from subject pronoun to functional head. Prior to the change, as a nonbranching category in a specifier position, *il* is [+ max, + min] in terms of the projection features of Chomsky (1995). After the change, the projection features of *il* are [-max, + min]. As a head, *il* must project its features; this forces reanalysis of *il* as a head taking TP as its complement. However this change is consistent with the Conservancy or Structure hypothesis, as c-command relations among lexical items are maintained. *Il* c-commands the same lexical material in (37b) as in (37a): the material contained in TP.⁶ This holds for the class of Spec > Head reanalyses described

6. There are complications. One arises, as pointed out to me by Jeong Seok Yang, when the reanalyzed head is the target of head adjunction, as in (37b). I assume that (38) references a

in Whitman (2001) (see also van Gelderen (2004)). This class of reanalyses includes, for example, the reanalysis of the subject demonstrative pronoun *shi* in Chinese as a copula, and the reanalysis of *kw*-type relative pronouns as complementizers (e.g. French *qui, que*).

If the Conservancy of Structure hypothesis sets an upper bound on misparsing in syntactic acquisition, a reasonable question to ask is why. Why should children reanalyze specifiers as heads, but accurately acquire the relative c-command relations among items in the input? I turn to this question in the next section, where I make a brief comparison between the role of misparsing in change in syntax and phonology.

4. Syntactic and phonological misparsing

The idea that misparsing of the phonetic input is a source of change plays a major part in many accounts of sound change. A particularly close analogue of the role often envisaged for rebracketing in syntax can be found in Ohala's (1981, 1992) characterization of dissimilation. According to this account, dissimilation occurs when a cue for a particular segment is 'misparsed' as a cue for another segment in the input string. For example, dissimilation of labiovelars in Latin /kwiŋkwē/ > *kiŋkwē > Italian /tʃiŋkwe/ results from a misinterpretation of the domain of lip rounding in the input: rounding associated with the initial labiovelar by speakers producing the input is misinterpreted as being associated with the second labiovelar (Ohala 1993: 250–251). Such changes involve not only a reinterpretation of the phonetic input, they involve a reinterpretation of which components of the input associate with which units in the phonological representation. This kind of misparsing seems very close to what is envisaged for syntactic rebracketing. In addition to these possible models from sound change, we know that in normal syntactic processing hearers commit bracketing errors. The clearest examples of this are misparses of locally ambiguous structures leading to no well-formed global parse (so-called garden path phenomena). Given the existence of such phenomena in the domains of phonological change and syntactic processing, why should misparsing not then play a more important role in syntactic change?

An explanation suggested to me by John Colarusso is that Conservancy of Structure reflects the accuracy of the acquisition of argument structure. Relabeling-type

representation prior to head movement, or, alternatively, that it applies to the entire derived head V+(t)il. A further complication is raised by the status of unpronounced material. In (37b) but not (37a), *il* c-commands a trace in Spec, TP coindexed with the subject *votre père* 'your father.' Again, there are two alternatives: unpronounced material may be ignored by (38), or more plausibly, new lexical material introduced into the structure simply not referenced by (38).

changes, such as serial verb to complementizer *in*, do not modify the argument structure of the main or first serial verb in the input pattern; nor, strictly speaking, do they change the complementation structure of the verb ‘say’ reanalyzed as a complementizer, since it continues to select a propositional complement. The same kind of thinking can be applied to the case of *have* perfects in 2.2. Reanalysis of a structure where *have* takes an NP complement to a structure where *have* is an auxiliary taking a clausal or propositional complement presupposes a major modification of the argument structure in the input. De Acosta’s source for periphrastic perfects from “attained state” complements asserts that the complement in the source for this construction was clausal or propositional all along.

It is not clear, however, that the accuracy of the acquisition of argument structure accounts for the absence of all kind of rebracketings argued for in this paper. If I am correct in arguing for example, as in 2.1 that dislocations are not misparsed as underlying argument positions, some other factors must be at work. This is because an alleged reanalysis like (4) posits no change in argument structure. The conclusion would appear to be rather that children are very good at acquiring basic syntactic structure, and do not allow occasional misparses of syntactic structure feed language change.

This conclusion suggests a reconsideration of the superficial analogy between phonetic misparsing in Ohala’s sense, and the kind of syntactic misparsing required by rebracketing. Phonetic information is arbitrary in the classical Saussurean sense: it makes no difference to the larger grammar whether the word for ‘five’ begins with /kw/ or /k/. In generative theory, this is reflected by the fact that phonetic form is an interpretive level: it feeds no further levels of representation.

Syntactic representations, in contrast, are interface levels of representation: they must feed semantic and phonological interpretation. In concrete terms, a representation for Right Dislocation like (5) involves not just a permutation of constituents; it involves a semantic representation utterly different from a simple SOV clause. A possible general conclusion is that the imbrication of syntactic representations with phonological and semantic interpretation prevents rebracketing-type misparsings from becoming the input to syntactic change.

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