

# Licensing Objects With and Without Movement

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## 1. Introduction

The goal of this contribution is to determine whether object licensing requires movement or not. In a series of recent papers, Susi Wurmbrand 2001, 2003, 2004a, 2004b (see also Bobaljik & Wurmbrand 2003, 2004) has argued, mainly on the basis of German data, that we ought to reject the view that internal arguments universally move (either overtly or covertly) to SpecAgrOP (cf. Chomsky 1993, Adger 1994). Her proposal is that Agree (Chomsky 1998, 2000) is the optimal way of analysing accusative case licensing<sup>1</sup>. A large part of her argumentation consists in showing that German direct objects do not move for case reasons, not even at LF. Hence, it is necessary to have an operation like Agree, which does not require movement in and of itself.

This paper reaches a slightly different conclusion: I argue that Wurmbrand is right in suggesting that Agree is the way in which objects are licensed in West Germanic languages. However, I also argue that other languages require object movement to a VP external position. We compare two languages – namely, Basque and Dutch –, showing that a number of asymmetries between them fall out if object licensing involves movement in Basque, but not in Dutch. The choice between licensing objects via Agree or via movement is taken to be a point of parametric variation.

This paper is organised as follows: section 2 we introduce three object-related asymmetries between Dutch and Basque, with brief references to other languages. In section 3, we explore how these differences receive a uniform account under the hypothesis that Basque has obligatory object movement, but Dutch hasn't. Finally, in section 4, we explore some consequences of this hypothesis for the larger theory of word order and phrase structure.

## 2. Asymmetries between Dutch and Basque

### 2.1 *Asymmetry #1: adverb placement*

In Dutch, a manner adverb can appear either preceding both the object and the verb (1a), or sandwiched between the object and the verb (1b).

- 1) a. ✓ Jan heeft **langzaam** een boek gelezen  
J has slowly a book read  
b. ✓ Jan heeft een boek **langzaam** gelezen  
J has a book slowly read

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<sup>1</sup> For space reasons, I cannot go through Wurmbrand's arguments here. Interested readers are instead referred to her work listed above.

The Basque equivalent to (1a) is ungrammatical in Basque, though (2a). Manner adverbs in Basque can only appear sandwiched between the object and the verb (2b).

- 2) a. ✓ Jonek liburua **astiro** irakurri du  
       J      book slowly read AUX  
       b. # Jonek **astiro** liburua irakurri du  
           J      slowly book read AUX

A note of caution is in order here. The order in (2b) is admittedly grammatical, but only under very special circumstances. Specifically, it requires that *liburua* ‘book’ is interpreted as narrow focus, and that *astiro* ‘slowly’ and the subject receive a topic interpretation. Now, narrow focus in Basque correlates with movement to a left-peripheral position (cf. Ortiz de Urbina 1999, A. Elordieta 2001). This suggests that, in the grammatical reading, *liburua* ‘book’ has moved to the front of the sentence, which movement has been followed by topic fronting of both the subject and the adverb. The point here is that the grammaticality of (2b) requires heavy use of the left periphery of the sentence, irrespective of which theory of focus and topic fronting one may favour. It is not possible to generate that order in the lower part of the clause, as is in Dutch. Therefore, (2b) will be considered ungrammatical for the purposes of this paper.

Let us conclude this section by mentioning two languages showing a similar phenomenon to Basque. The first one is Navajo, where low adverbials (in this case, an instrumental phrase) necessarily appear between the object and the verb (data from Speas 1990).

- 3) a. ✓ Kin **tse bee** ‘iishlaa  
       house stone from built  
       b. \* **Tse bee** kin ‘iishlaa  
           stone from house built

The second language is Zarma (Nilo-Saharan). As opposed to Basque and Navajo, in Zarma low adverbs necessarily follow both the object and the verb (data from Koizumi 1995).

- 4) a. ✓ Zankaa na hansoo kar **gumo**  
       child ASP dog beat a lot  
       b. \* Zankaa na hansoo **gumo** kar  
           child ASP dog a lot beat  
       c. \* Zankaa na **gumo** hansoo kar  
           child ASP a lot dog beat

## 2.2 Asymmetry #2: extraction

In Dutch, wh- extraction out of an object is generally possible, as shown in (5a). The addition of a manner adverb –such as *maar al te graag* ‘happily’, lit. ‘but all to gladly’- does not block extraction, irrespective of whether the adverb precedes (5b) or follows (5c) the object. Interestingly, though, if the sentence contains a time adverb –such as *vandaag* ‘today’-, extraction out of the object is only possible in the non-scrambled order (5d). If the object scrambles across this type of adverb, extraction is blocked<sup>2</sup>.

- 5) a. ✓ [Over wie] heb jij [een gerucht *t*] gehoord?  
       about who have you a rumour heard  
       b. ✓ [Over wie] heb jij **maar al te graag** [een gerucht *t*] gehoord?  
           about who have you but all too gladly a rumour heard  
       c. ✓ [Over wie] heb jij [een gerucht *t*] **maar al te graag** gehoord?  
           about who have you a rumour but all too gladly heard

<sup>2</sup> I would like to thank Willemijn Sedee and Claartje van Swaaij for bearing with my first data questions on this topic, and Jeroen van Craenenbroeck for helping me construct the paradigm in (5).

- d. ✓ [Over wie] heb jij **vandaag** [een gerucht t] gehoord?  
 about who have you today a rumour heard
- e. \* [Over wie] heb jij [een gerucht t] **vandaag** gehoord?  
 about who have you a rumour today heard

In Basque, on the other hand, extraction is blocked across the board, irrespective of the presence or absence of an adverb, or its position with respect to the object<sup>3</sup>:

- 6) a. \* [Nori buruz] entzun dituzu [zurrumurrak t]?  
 who about hear AUX rumours
- b. \* [Nori buruz] entzun dituzu [zurrumurrak t] **pozez**?  
 who about hear AUX rumours happily
- c. \* [Nori buruz] entzun dituzu [zurrumurrak t] **gaur**?  
 who about hear AUX rumours today
- d. \* [Nori buruz] entzun dituzu **gaur** [zurrumurrak t]?  
 who about hear AUX today rumours

### 2.3 Asymmetry #3: scope

Although the judgements in this area tend to be quite shaky<sup>4</sup>, Dutch speakers generally agree in assigning only surface scope to the following sentences, containing a manner adverb

- 7) a. Ik heb [met twee appels][vier appeltaarten] gekokt [✓2 > 4 / ?\*4 > 2]  
 I have with two apples four apple pies cooked
- b. Ik heb [vier appeltaarten][met twee appels] gekokt [\*?2 > 4 / ✓4 > 2]  
 I have four apple pies with two apples cooked

Example (7a) is felicitous in a situation in which a grand total of only two apples have been used in the cooking of four apple pies (i.e., it averages half an apple per pie). On the other hand, example (7b) describes a situation in which two apples have been used for each of the four apple pies (so a total of eight apples have been employed). However, the judgements vary if the sentence contains a time adverb instead:

- 8) a. Ik heb [in twee minuten][vier appeltaarten] gekokt [✓2 > 4 / ?\*4 > 2]  
 I have in two minutes four apple pies cooked
- b. Ik heb [vier appeltaarten][in twee minuten] gekokt [✓2 > 4 / ✓4 > 2]  
 I have four apple pies in two minutes cooked

Example (8a) is unambiguous, and can be used in a situation in which the total amount of time spent in cooking all four apple pies equals two minutes. Surprisingly, though, (8b) is ambiguous. It allows a surface scope reading (in which the cooking of each separate pie took two minutes) as well as an inverse scope reading synonymous with (8a).

The situation is different in Basque. The equivalent to (7), with a manner adverb, allows for both surface and inverse scope.

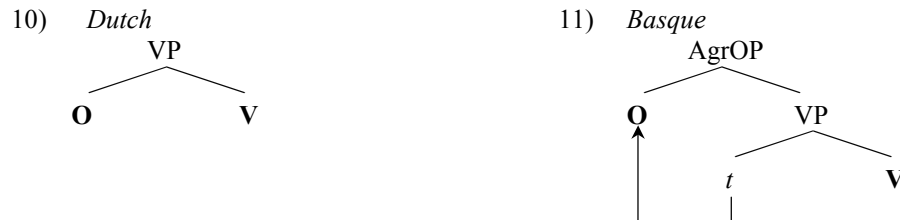
- 9) Jonek [bi sagarrez] [lau sagar tarta] prestatu ditu [✓2 > 4 / ✓4 > 2]  
 J two apple-INSTR four apple pies cooked AUX

<sup>3</sup> As will become clear throughout the paper, the prediction is that both Navajo and Zarma should pattern with Basque in this respect. Unfortunately, I haven't yet found any data that confirm or disconfirm this prediction, so I will simply leave it as something to be tested in the future. This disclaimer also applies to the data in section 2.3.

<sup>4</sup> See McNay (2004) for an investigation of how intonation and other non-syntactic factors may influence similar judgements in German.

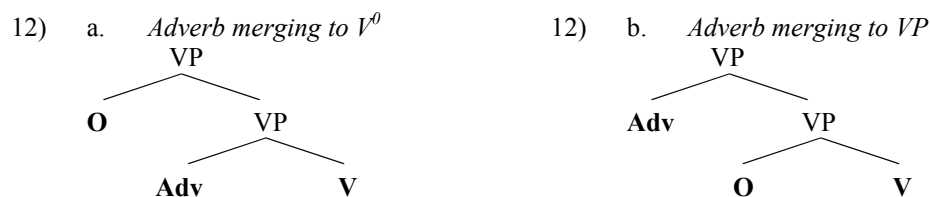
### 3. Parametrised object movement

The major premise of this article, already hinted at in the introduction, is that Basque and Dutch differ in the position in which their objects surface: while in Dutch it is possible for objects to check case and agreement features inside VP, in Basque they need to raise to a VP external licensing position<sup>56</sup>. These two options can be represented –in a somewhat simplified form– as below:



#### 3.1 Adverb placement

In order to account for the adverb placement paradigms of section 2.1, it is necessary to make one supplementary assumption, namely, that manner adverbs can adjoin to either  $V^0$  or VP (cf. Iatridou 1990, Neeleman & Weerman 1999, Yatsushiro 1999). Under this assumption, the two orders of Dutch are a consequence of this indeterminacy. If the adverb is merged to  $V^0$ , it will appear to the right of the object, deriving the [O Adv V] order. On the other hand, if it merges to VP, it will precede the object, and the order will be [Adv O V]. These two possibilities are represented below in (12a) and (12b). Note that in neither case has the object moved<sup>7</sup>. This feature of the analysis will be relevant in the next subsection.

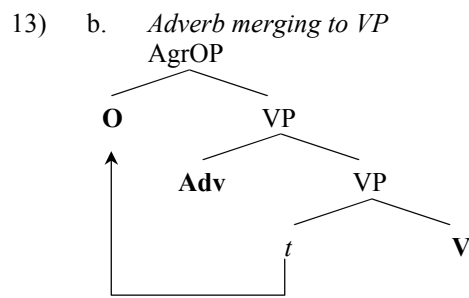
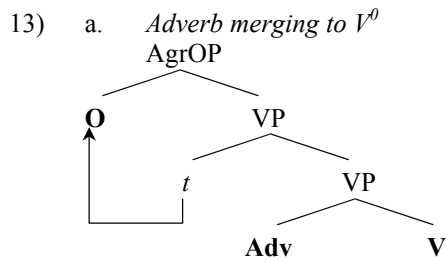


The same possibilities are available for Basque. However, they will not affect linear order in this language. As opposed to what happens in Dutch, Basque objects always move out of VP. Therefore, inasmuch as manner adverbs cannot adjoin higher than VP, we derive the obligatory [O Adv V] order of Basque.

<sup>5</sup> I am identifying this licensing position with AgrOP. However, as pointed out by Ad Neeleman and an anonymous reviewer, it would also be plausible to assume adjunction to  $vP$ , as in, e.g., Torrego 1998. Under the hypothesis that objective case and agreement are licensed under Agree with  $v^0$ , the difference between Basque and Dutch would then boil down to the obligatory presence of an EPP feature on  $v^0$  in Basque versus its absence in Dutch. There would be no need to project an independent Agr layer. For exposition's sake, though, I will assume movement AgrOP rather than adjunction to  $vP$ , although either option is compatible with the argumentation presented here. See also the discussion in section 4.

<sup>6</sup> The hypothesis that objects in Basque move to a VP external position has been proposed a number of times in recent years, by Albizu 1994, Ormazabal *et al* 1994, G. Elordieta 1997, and Haddican 2004. Note, however, that all these analyses adopt Antisymmetry (Kayne 1994) as their framework of choice, therefore object movement is necessary to derive OV orders. This paper is, to my knowledge, the first one to provide independent empirical evidence for this movement.

<sup>7</sup> For lack of a better convention, I label all nodes in these trees as “VP”. No special theoretical implications should be attached to this nomenclature choice.

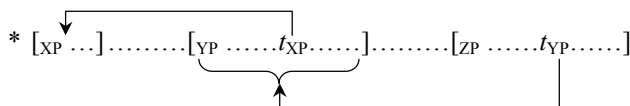


For Navajo (3), we can assume identical derivations. Zarma (4) requires an extra step. Since the obligatory order in this language is [O V Adv], we need to postulate verb movement out of VP past the adverb. The exact nature of the head the verb moves to is not relevant here, but given we are assuming an AgrOP projection anyway, we can identify it with AgrO<sup>0</sup>. If this analysis is to be recast in an Agr-less structure, the relevant head could be Voice (à la Kratzer 1996) or v<sup>0</sup>.

### 3.2 Sub-extraction

In order to account for the different patterns of sub-extraction presented in section 2.2, we will make use of the Freezing Principle, which states that it is not possible to move out of a constituent that has been previously moved (i.e., the moved constituent gets “frozen”)<sup>8</sup>:

#### 14) *The Freezing Principle*



From this assumption, the islandhood of Basque objects (6) follows. Since they have to move to an AgrOP position, subsequent extraction out of them is forbidden. The Dutch paradigm requires some more comment. Recall that extraction out of an object is possible in sentences without an adverb (5a), and in sentences with a manner adverb, irrespective of the position of the latter (5b, c). This also follows from the assumptions so far, since in none of these cases has the object moved out of its base position. Whenever the sentence contains a time adverb, extraction is possible only if the object follows the adverb (5d), not if it precedes the adverb (5e). The difference between manner and time adverbs is repeated below for convenience:

- 5) c. ✓ [Over wie] heb jij [een gerucht t] **maar al te graag** gehoord?  
 about who have you a rumour but all too gladly heard
- e. \* [Over wie] heb jij [een gerucht t] **vandaag** gehoord?  
 about who have you a rumour today heard

This asymmetry can be related the different structural height of manner and time adverbs. That is, time adverbs are taken to be adjoined higher than VP. In support of this claim, note that if a sentence contains both a manner and a time adverb, the only possible order is [*time* > *manner*]:

<sup>8</sup> For a recent discussion and references, see Stepanov 2001. Note also that the Freezing Principle is not absolute, there being a few exceptions to it. Thus, Ross 1967 provides the following example, featuring wh- extraction out of a passive subject:

- i) ✓ [Which car] was [the roof of t] damaged by the explosion?

We will assume, nonetheless, that the Freezing Principle, as a generalisation, is robust enough for our purposes here (see again Stepanov 2001 for extensive evidence in this direction), and leave the nature of such exceptions to future work. For one, note that (i) is doubly exceptional in that it seems to require a definite NP, which normally blocks movement. Thus (ii) is unexpectedly considerably worse than (i) (Mark de Vos, p.c.):

- ii) ?? [Which car] was [a wheel of t] punctured by some punk?

- 15) a. ✓ Ik heb **vandaag langzaam** een boek gelezen  
 I have today slowly a book read  
 b. ?\* Ik heb **langzaam vandaag** een boek gelezen  
 I have slowly today a book read

This assumption implicates the following difference in scrambling: scrambling across a manner adverb is base generation, whereas scrambling across a time adverb is movement. As we hypothesised in the previous section, manner adverbs can be merged to  $V^0$ , in a position lower than the object. On the other hand, time adverbs cannot be merged that low –otherwise (15b) ought to be grammatical. Therefore, the only way to scramble an object across a time adverb is by moving it to a higher position. Thus, given that freezing effects are a consequence of movement, we derive the asymmetry above. Example (5c) is grammatical because the object has not moved, hence it is still transparent for extraction. Example (5e), on the other hand requires object movement, blocking subsequent movement.

### 3.3 More on sub-extraction

There are further data from both Basque and Dutch that reinforce the conclusions reached above. Let us begin with Basque. The relevant case involves embedded clauses, which normally appear to the right of the verb (16a). However, they can optionally precede the verb as well (16b).

- 16) a. ✓ Jonek ez du uste [Mirenek liburua irakurri duenik]  
 J no AUX think M book read AUX.C  
 ‘Jon doesn’t think that Miren has read the book’  
 b. ✓ Jonek ez du [Mirenek liburua irakurri duenik] uste  
 J no AUX M book read AUX.C think

These sentences are both acceptable. However, wh- movement out of the embedded clause is only possible if said clause is post-verbal. This asymmetry can be explained, by the same assumptions as above, if we assume that (16a) is the base position and that (16b) is derived via leftward movement<sup>9</sup>.

- 17) a. ✓ Zer ez du Jonek uste [Mirenek *t* irakurri duenik]?  
 what no AUX J think M read AUX.C  
 ‘What doesn’t Jon think that Miren has read?’  
 b. \* Zer ez du Jonek [Mirenek *t* irakurri duenik] uste?  
 what no AUX J M read AUX.C think

Turning now to Dutch, consider the following sentences involving the adverb *snel*<sup>10</sup>. This adverb is ambiguous between a manner and a time reading. The manner reading can be translated as ‘slowly’, whereas the time reading means ‘soon’. Declarative sentences containing this adverb admit both readings, irrespective of whether scrambling has taken place or not:

- 18) a. Ik heb **snel** een boek gelezen [*✓ manner/ ✓ time*]  
 I have SNEL a book read  
 b. Ik heb een boek **snel** gelezen [*✓ manner/ ✓ time*]  
 I have a book SNEL read

This ambiguity is consistent with everything said so far. In (18a), *snel* can be merged either in a low or in a high position, thus giving rise to both readings. In neither case would it be necessary to move the object. In (18b), the manner reading arises by merging *snel* below the object, as discussed in

<sup>9</sup> I’d like to thank Ricardo Etxepare and Gorka Elordieta for their judgements on this paradigm. Ormazabal *et al* 1994 make a parallel case with affirmative clauses (although, for independent reasons, they require sentences with three levels of embedding). See also Bayer 1996 and Muller 1998 for an alternative analysis of similar data in German and Bengali.

<sup>10</sup> I am grateful to Gertjan Postma for making me aware of this paradigm. To my knowledge, these sentences have not been discussed previously in the literature on Dutch, although Mahajan 1990 presents a similar case in Hindi.

section 2.2. The time reading, on the other hand, requires a high adjunction site for *snel*, plus object movement to its left. Given this, consider now the sentences in (19):

- 19) a. [Van welke schrijver] heb jij **snel** [een boek *t*] gelezen? [✓ *manner* / ✓ *time*]  
of which writer haveyou SNEL a book read  
b. [Van welke schrijver] heb jij [een boek *t*] **snel** gelezen? [✓ *manner* / \* *time*]  
of which writer haveyou a book SNEL read

As we can see, (19a), with a non-scrambled order, is still ambiguous between the manner and the time readings of *snel*. Interestingly, the scrambled counterpart (19b) only allows the manner reading. As is the case with (18b), the time reading of (19b) requires a high adjunction site for *snel* plus object movement. However, once the object has moved, it becomes frozen, and sub-extraction is banned. Hence, it is not possible to derive a time reading for (19b). The manner reading is still available, since it does not require movement. As discussed earlier, scrambling across manner adverbs is base generation, hence the Freezing Principle does not apply in this case. Example (19a) allows both readings because in neither case it is necessary to move the object, as we discussed in relation to (18a).

### 3.4 Scope

Let us finally discuss the scope asymmetries in section 2.3. The generalisation made there is that sentences containing a manner adverbial have surface scope only in both the scrambled and non-scrambled orders. Sentences with a time adverbial have surface scope only in the non-scrambled order. The scrambled order allows both surface and inverse scope. These data can be made sense of through the same assumptions made so far, namely, that scrambling across a time adverb is the only case in which object movement is necessary. In this case, movement creates two copies of the object, one above and one below the adverbial. Assuming that one can resort to either copy for the computation of scope, the asymmetry is derived. The surface scope reading targets the higher copy of the object, whereas the inverse scope reading targets the lower one (the trace)<sup>11</sup>. In the other three cases, though, no movement has taken place. Consequently, there is only one copy of the object that can be used for scope assignment, which derives the scope rigidity of these sentences.

Basque, unsurprisingly, allows both surface and inverse scope in sentences with a manner adverb. We have argued repeatedly that these sentences involve object movement past the adverbial, thus creating a copy of the object below the adverbial, in the same way as in the Dutch case discussed above. Therefore, also as happens in the Dutch case, it is possible to target that lower copy for scope assignment purposes, thus deriving the inverse scope reading.

## 4. Outlook

On the empirical side, this paper has argued that a number of asymmetries between Dutch and Basque fall out from the assumption that object licensing requires movement to a VP external position in Basque, but not in Dutch. In this section, let us explore a bit further the theoretical implications of this analysis.

### 4.1 The theory of case and agreement

This paper opened with the question of what the mechanism is for licensing objects. Is movement necessary, or can it be done *in situ*? The answer seems to be that both options are possible, and that languages choose either one or the other. Thus, Dutch can license its objects in their merge position, maybe through an Agree relation with  $v^0$ . Basque, on the other hand, requires objects to move to an AgrP position, and establish a spec-head relation with an appropriate head.

In footnote 6, we hinted at the possibility that both languages license objects via Agree with  $v^0$ , in which case the difference would reside in the obligatory presence of an EPP feature on  $v^0$  in Basque,

<sup>11</sup> See Soh 1998 and Yatsushiro 1999 for a similar reasoning for Chinese and Japanese, respectively.

but not in Dutch. While either option is consistent with the general claims made so far, I would still like to make a case for the existence of Agr projections. For one, there are data suggesting that Dutch, even though it lacks an AgrO layer, has an AgrSP projection separate from TP. In his work on Dutch ellipsis, van Craenenbroeck 2004 gives the following sentence from the dialect of Wambeek:

- 20) A: Marie zie Pierre geirn  
 M sees P gladly  
 'Marie loves Pierre'  
 B: Z'en duut  
 she.NEG does  
 'No, she doesn't'

In B's reply, we see the verb *duun* 'to do', which functions as a dummy much as its English counterpart. The interesting observation van Craenenbroeck makes is that, in this context, *duun* shows subject agreement, but cannot be inflected for tense at all. Ignoring the fine details of his analysis, he explains this property by claiming that Dutch has an AgrSP > TP hierarchy, and that this type of ellipsis targets TP, leaving AgrSP intact. Thus, tense features are lost and cannot be expressed, whereas agreement features are preserved. If both tense and agreement features were conflated in one single head, such as T<sup>0</sup>, it would be a mystery why ellipsis can preserve some of them but not others. Thus, we can make a case for having separate Agr projections.

Pushing the reasoning a bit further, we can try to reconcile the Agree and the spec-head approaches by claiming that Case is uniformly checked under Agree in both Dutch and Basque, whereas Agr projections are only responsible for Agreement morphology. As Ricardo Etxepare (p.c.) points out, in negative sentences in Basque, indefinite objects surface with partitive case, rather than absolutive. Interestingly, partitive case triggers default 3<sup>rd</sup> person singular agreement. On top of that, we find that partitive objects tend to *follow* manner adverbs:

- 21) Jonek ez du astiro libururik irakurri  
 J no AUX.3S.3S slowly book.PART read  
 'Jon hasn't read any books slowly'

We can explain (21) by saying that, since partitive objects do not trigger agreement, they don't move to AgrOP, hence their default position to the right of manner adverbs. Furthermore, if it is true that (21) does not involve movement, then partitive case has to be checked via Agree.

#### 4.2 The theory of phrase structure and word order

An interesting aspect of the discussion in the previous paragraphs is that can link variations in phrase structure to visible differences between both languages. That is, Basque verbs show object agreement, but Dutch verbs do not. Hence, insofar as agreement morphology correlates with the presence of Agr layers, we have a well-founded reason to postulate an AgrO layer in Basque but not in Dutch. This proposal would be parallel to Bobaljik & Thrainsson's discussion of English and Icelandic. They claim that Icelandic has an AgrSP projection separate from TP, whereas in English both agreement and tense are conflated in TP. The difference, according to them, can be traced to Icelandic, but not English, having rich subject agreement, and it also derives some more asymmetries between the two languages.

Obviously enough, if this proposal is correct, it entails that phrase structure is not universal, contrary to the claims of the so-called Italian school (Rizzi 1997, Cinque 1999). Rather, functional projections have to be acquired on a language-specific basis, as argued by Bobaljik & Thrainsson themselves, and also by Iatridou 1990 or Bury 2003. It also entails that the trigger for acquiring a certain functional projection should be easily isolatable from the input children receive. Here I have argued that agreement morphology is relevant in this respect, but other factors may play a role as well. For instance, Zarma has no visible agreement morphology. However, the fact that objects in this language appear consistently to the left of low adverbs may be enough for children to infer that there is an AgrOP layer.

Finally, note that, if the conclusions reached here are correct, this paper provides a solid argument against Antisymmetry (Kayne 1994), at least in its original formulation. Specifically, if it is

true that some OV orders can be base generated in a right-headed VP, then it is obviously not true that phrase markers are universally left-headed. One can still retain a slightly weaker version of Antisymmetry, such as the ones developed by Haider 1992, 2000, Takano 1996, or Barbiers 2000. These formulations follow Kayne's main insights (such as the ban against rightward movement or right adjunction), but they also allow for right-headed projections in some well-defined cases. The (in)adequacy of these analysis to deal with a larger sample of OV languages is, however, something I must leave for the future.

## References

- Adger, David (1994), *Functional heads and interpretation*, PhD dissertation, University of Edinburgh
- Albizu, Pablo (1994), "Word order in Basque and its implications for a theory of focus", ms., University of Southern California
- Barbiers, Sjef (2000), "The right periphery of OV languages", in Svenonius (ed.)
- Bayer, Josef (1996), *Directionality and logical form*, Kluwer, Dordrecht
- Bobaljik, Jonathan, and Susi Wurmbrand (2004), "The domain of agreement", ms., University of Connecticut, to appear in *Natural Language and Linguistic Theory*
- Bobaljik, Jonathan, and Hoskuldur Thrainsson (1998), "Two heads aren't always better than one", *Syntax* ??, ??-??
- Bury, Dirk (2003), *Phrase structure and derived heads*, PhD dissertation, University College London
- Cinque, Guglielmo (1999), *Adverbs and functional heads: a cross-linguistic perspective*, Oxford University Press, Oxford
- van Craenenbroeck, Jeroen (2004), *Ellipsis in Dutch dialects*, PhD dissertation, Leiden University
- Elordieta, Gorka (1997), *Morphosyntactic feature chains and phonological domains*, PhD dissertation, University of Southern California
- van Gelderen, Veronique (2003), *Scrambling unscrambled*, PhD dissertation, Leiden University
- Haddican, William (2004), "Word order and polarity in Basque", *The Linguistic Review* ??, ??-??
- Haider, Hubert (1992), "Branching and discharge", Arbeitspapier ??, Stuttgart
- Haider, Hubert (2000), "OV is more basic than VO", in Svenonius (ed.)
- Iatridou, Sabine (1990), "On Agr(P)", *Linguistic Inquiry* ??, ??-??
- Kayne, Richard, (1994), *The antisymmetry of syntax*, MIT Press, Massachusetts
- Koizumi, Masatoshi (1995), *Phrase structure in minimalist syntax*, PhD dissertation, MIT
- Kratzer, Angelika (1996), "Severing the external argument from its verb", in Rooryck & Zaenen (eds.), *Phrase structure and the lexicon*, Kluwer, Dordrecht, ??-??
- Mahajan, Anoop (1990), *The A/A-bar distinction and movement theory*, PhD dissertation, MIT
- McNay, Anna (2004), *Information structure and quantifier scope in German*, MA thesis, University of Oxford
- Muller, Gereon (1998), *Incomplete category fronting*, Mouton de Gruyter, Berlin
- Neeleman, Ad (1994), *Complex predicates*, PhD dissertation, Utrecht University
- Neeleman, Ad, and Fred Weerman (1999), *Flexible syntax*, Kluwer, Dordrecht
- Ormazabal, Javier, Juan Uriagereka, and Myriam Uribe-Etxebarria (1994), "Word order and wh- movement: a parametric account", talk at GLOW 17, Vienna
- Reinhart, Tanya (1995), "Interface strategies", ms., Utrecht University
- Rizzi, Luigi (1997), "The fine structure of the left periphery", in Haegeman (ed.), *Elements of grammar*, Kluwer, Dordrecht, ??-??
- Soh, Hooi-Ling (1998), *Object scrambling in Chinese*, PhD dissertation, MIT
- Speas, Margaret (1990), *Phrase structure in natural language*, Kluwer, Dordrecht
- Svenonius, Peter (2000), *The derivation of VO and OV*, John Benjamins, Amsterdam
- Takano, Yuji (1996), *Movement and parametric variation in syntax*, PhD dissertation University of California, Irvine
- Torrego, Esther (1998), *The dependencies of objects*, MIT Press, Massachusetts
- Wurmbrand, Susi (2001), *Infinitives*, Mouton de Gruyter, Berlin
- Wurmbrand, Susi (2004a), "On case licensing", ms., University of Connecticut
- Wurmbrand, Susi (2004b), "How complex are complex predicates", ms., University of Connecticut
- Yatsushiro, Kazuko (1999), *Case licensing and VP structure*, PhD dissertation, University of Connecticut
- Zwart, Jan-Wouter (1993), *Dutch syntax, a minimalist approach*, PhD dissertation, University of Groningen