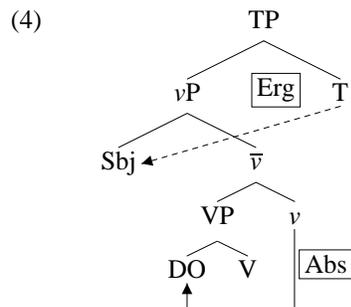


The basic facts to be explained are the following. Basque has three cases, ergative, absolutive, and dative, that trigger agreement on finite auxiliaries, as illustrated in the following examples:

- (3) a. Zuk liburua irakurri dozu.
 you.E book.A read AGR_A(3S).AGR_E(2S)
 ‘You read the book.’
- b. Zuk niri liburua emon daustazu.
 you.E me.D book.A given AGR_A(3S).AGR_D(1S).AGR_E(2S)
 ‘You gave me the book.’

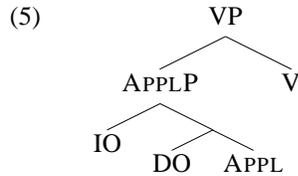
We assume, following Chomsky 1993, Bobaljik 1993 and Fernández 1997, that ergative case on (transitive) subjects is parallel to nominative case, and that absolutive case on objects is parallel to accusative case. This means that ergative is assigned by T, and absolutive by *v*:



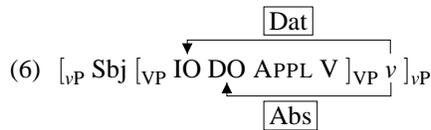
In ditransitive clauses, indirect objects are introduced by a ‘low’ applicative head APPL (see Pylkkänen 2002):⁴

4. According to Pylkkänen, there are two types of APPL heads: low APPL is merged below V, as in (5), and high APPL above V. She argues that indirect objects in English double object constructions are introduced by a low APPL head. Similar arguments show that dative objects in Basque are introduced by a low APPL head. For instance, for reasons given in Pylkkänen 2002, depictive secondary predicates cannot modify low applicative arguments (as opposed to high applicatives, subjects or direct objects). As expected, while subjects and direct objects can be modified by depictives in Basque, dative objects cannot:

- (i) Nik zuri umea mozkortuta emon dautsut.
 me.E you.D kid.A drunk given AGR_A(3S).AGR_D(2S).AGR_E(1S)
 ‘I gave you the kid drunk.’



Finally, ν licenses dative case on the indirect object (in addition to absolutive on the direct object; see Ormazabal and Romero 2003, Anagnostopoulou 2003, Bejar and Rezac 2003):⁵



All of these Agree operations satisfy Locality. This is clear in the case of the T-Sbj relation: the subject is the closest DP to T in (4). In (6), the ν -IO relation also satisfies Locality, but the ν -DO relation does not. We assume this is permitted due to Richards' (1997) *Principle of Minimal Compliance*: satisfaction of Locality by the ν -IO relation licenses violation of Locality by the ν -DO relation.

In the Unitary Theory, case assignment to DP by H implies agreement of H with DP.⁶ As can be seen in all the examples so far, all agreement morphemes in Basque cluster together on the tensed auxiliary. Thus, all heads involved in case/agreement, i.e. ν and T, must end up together to form the auxiliary. This is achieved by head movement of ν to T:



This imposes serious constraints on possible analyses of Basque case and agreement within the Unitary Theory. Specifically, all heads involved in case/agreement must be high enough in the clause to be able to end up in T,

In this example, the predicate *mozkortuta* 'drunk' can be predicated of the subject 'I' or the direct object 'the kid', but not of the dative object 'you'.

5. Note that, in this analysis, we must stipulate which DP is assigned which case by ν : the highest one dative, and the lowest one absolutive.

6. Fernández (1997, 1999) proposes an analysis of case and agreement in Basque essentially along the lines of the Unitary Theory, but which predicts that case and agreement can be split in certain well-defined cases (i.e. in so-called 'ergative displacement' contexts). These cases are not relevant for our purposes, so this analysis counts as belonging to the Unitary Theory.

i.e. as part of the auxiliary. For instance, an analysis in which dative case is assigned by APPL to the indirect object in its specifier is not possible. APPL would also then be the head realizing dative agreement, so that it would have to move to T (via v). This would result in a violation of the Head Movement Constraint (Travis 1984), due to the intervening V head:

$$(8) * [{}_{TP} [{}_{vP} \text{Sbj}_E [{}_{VP} \text{IO}_D \text{DO}_A t_{APPL} \text{V}]_{VP} t_v]_{VP} [v_A + \text{APPL}_D] + T_E]_{TP}$$

The only way in which APPL could end up as part of the finite auxiliary would be to move APPL to V, and then the APPL-V complex to v :

$$(9) [{}_{TP} [{}_{vP} \dots [{}_{VP} \dots t_{APPL} \text{V}]_{VP} t_v]_{VP} [v_A + \text{V} + \text{APPL}_D] + T_E]_{TP}$$

This would imply that the main verb (V) and the auxiliary form a syntactic word, despite the fact that they are morphologically separate words. Even ignoring whatever problems this might pose for a restrictive theory of the syntax-morphology interface (see Arregi 2002 for discussion), this cannot be an essential part of the correct analysis of dative case and agreement in Basque. In negative sentences, the main verb and the auxiliary clearly do not form part of the same word. Typically, the auxiliary precedes the main verb, and they do not need to be adjacent:

$$(10) \text{Zuk niri ez daustazu liburua emon.}$$

you.E me.D not AGR_A(3S).AGR_D(1S).AGR_E(2S) book.A given
'You didn't give me the book.'

As can be seen in this example, the facts about dative case and agreement are exactly the same as in other sentences: dative agreement is realized in the auxiliary, even when the main verb clearly does not form a word with the auxiliary. In cases like this, movement of APPL to T would clearly violate the HMC. To conclude, in the Unitary Theory, APPL cannot be the head responsible for dative case and agreement.

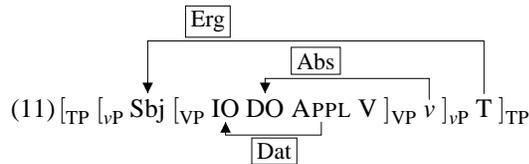
As we will see below, this property of the Unitary Theory will be in part responsible for its inability to account for the long distance agreement facts discussed in the introduction.

2.2. The Split Theory

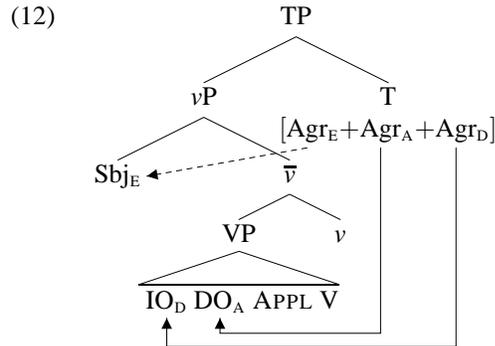
In a Split Theory of case and agreement, these are morphological realizations of separate operations. For instance, Marantz (1991) and Bittner and Hale (1996) provide different split analyses of case and agreement in different

languages. In this paper, we shall assume the Split Theory proposed in Bhatt 2003, which can be summarized as follows. Case and agreement are separate operations: case is assigned by a head to a DP in its c-command domain, and a (possibly different) head agrees with a DP with a particular case in its c-command domain (see below for details). As in the Unitary Theory, both case and agreement are constrained by Locality, but in the case of agreement, in a slightly different way that will be explained below.

With respect to case in Basque, as in the Unitary Theory, T assigns ergative to the subject, and v absolutive to the direct object. However, unlike the Unitary Theory, dative is assigned by APPL to the indirect object in its specifier:⁷



As stated above, agreement in this theory is a separate operation. Specifically, we assume that Basque has three agreement morphemes, Agr_E , Agr_A and Agr_D , each of which targets (agrees with) a DP with a specific case: ergative, absolutive, and dative, respectively. These morphemes are generated forming a complex head with T:⁸



7. We assume that dative case in Basque is inherent. That is why it is assigned by APPL to its specifier (and not by the case operation described in the previous paragraph). Furthermore, since DPs with inherent case are ignored by Locality, the dative DP does not intervene in the assignment of absolutive to the direct object by v .

8. Alternatively, they head their own Agr projections, or, following Chomsky 1995, they are features generated on certain functional heads. All that is needed for the analysis is that they are generated high enough in the structure to end up together with T to form the tensed auxiliary.

Ergative agreement clearly respects Locality, since Agr_E agrees with the closest DP (the subject). However, the subject seems to intervene in the Agr_D-IO relation, and both the subject and indirect object seem to intervene in the Agr_A-DO relation. However, these are not violations of Locality. Since each Agr morpheme targets a DP with a particular case, only DPs with the same case can intervene. This interpretation of Locality is in fact not different from the one needed in the Unitary Theory. In both theories, only elements with the relevant features can be interveners. In the Unitary Theory, the relevant feature is case, since agreeing heads look for elements with (unspecified) case. Thus, only elements with case features (i.e. DPs but not APs or VPs) can intervene. However, an agreeing head in this theory cannot target a DP with a particular case, since the case feature of that DP is valued precisely as a result of the Agree operation. Thus, Locality in the Unitary Theory cannot refer to the case value of the potential intervener. In the Split Theory, an agreeing head targets elements with a particular case, so only elements with that particular case can intervene.

To summarize so far, one of the main differences between the two theories is that Locality in agreement is relativized to case in the Split Theory, but it is not in the Unitary Theory. As we will see in the following sections, restructuring contexts in Basque show that Locality in agreement must in fact be relativized to case, which will thus provide evidence for the Split Theory.

3. Restructuring in Basque

In restructuring contexts, a non-finite embedded clause and a main clause behave as if they were only one clause. In Basque, this can be seen in long distance dative agreement (LDA_D), which is allowed with certain matrix verbs, such as *hasi* ‘begin’ and *amaitu* ‘finish’. As illustrated in the following examples, in LDA_D, the matrix auxiliary agrees with an embedded dative argument:

(13) Bera [**zuri** liburua irakurten] hasi **jatzu**.
 he.A [**you.D** book.A read.NF] begun AGR_A(3S).AGR_D(2S)
 ‘He began reading the book to you.’

(14) Nik [**zuri** liburua irakurten] amaitu **dautsut**.
 I.E [**you.D** book.A read.NF] finished AGR_A(3S).AGR_D(2S).AGR_E(1S)
 ‘I finished reading the book to you.’

We adopt a monoclausal theory of restructuring. Following Cinque 2002 and Wurmbrand 2001, we assume that a sentence with a restructuring verb only adds one projection to what a simple clause would have (as opposed to all the projections associated with a clause, as in true sentence embedding). Therefore, in this account, there is not really such a thing as restructuring or long distance agreement. The facts are straightforward consequences of there being only one clause.

Even though all restructuring verbs in Basque behave the same way with respect to LDA_D, there are two separate types of restructuring verbs with respect to long distance absolutive agreement (LDA_A) between the matrix auxiliary and the embedded direct object. The verbs *hasi* ‘begin’ and *amaitu* ‘finish’ are representative of these two types. With the former, LDA_A is possible, but it is not with the latter:

- (15) *Bera [**liburuak** irakurten] hasi **dira**.
 he.A [**books.A** read.NF] begun AGR_A(3P)
 ‘He began reading books.’

- (16) Berak [**liburuak** irakurten] amaitu **dauz**.
 he.E [**books.A** read.NF] finished AGR_A(3P).AGR_E(3S)
 ‘He finished reading books.’

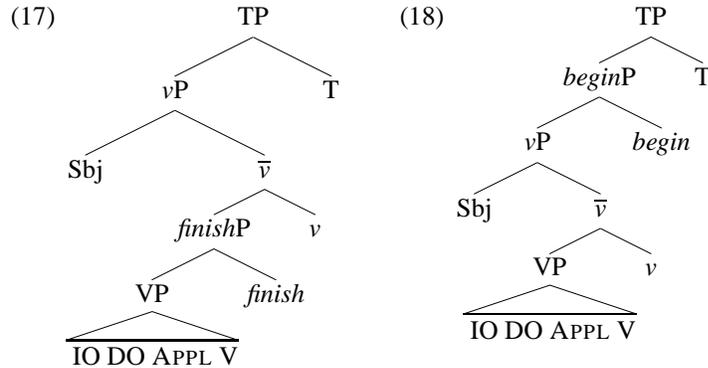
This fact can easily be derived from other properties of these verbs. With *begin*, the subject is absolutive (see (13)); no LDA_A is possible with the direct object because absolutive agreement is ‘used up’ by the subject. With *finish*, the subject has to be ergative (see (14, 16)). Thus, unlike *begin*, absolutive agreement is not used up by the subject, the consequence being that matrix absolutive agreement is free to agree with the embedded object. That is, LDA_A is possible with *finish*, but not with *begin*.

A crucial ingredient in this explanation is that only an absolutive subject can intervene in LDA_A; an ergative subject does not. This shows that Locality in agreement is relativized to case. We saw in the previous section that this is predicted by the Split Theory, but not by the Unitary Theory. As explained in more detail in the following sections, this provides an argument for the Split Theory.

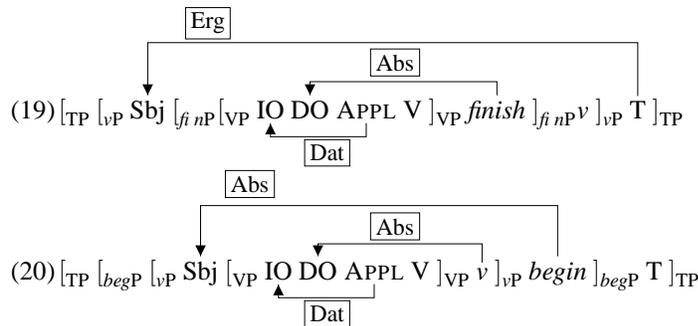
4. Restructuring and the Split Theory

The Split Theory can provide a straightforward account for the differences between *finish* and *begin* described in the previous section. Within a

monoclausal theory of restructuring (see Cinque 2002, Wurmbrand 2001), we need to make two assumptions: (i) both *finish* and *begin* are functional heads that, like *v*, assign absolutive case; and (ii) *finish* is generated below *v*, and *begin* above *v*:



Case assignment with both restructuring verbs works as follows:



Case assignment with *finish* is essentially as in simple clauses (see (19)): the subject is assigned ergative by T, the indirect object dative by APPL, and the direct object absolutive by *finish*.⁹ Recall that, with *begin*, the subject is absolutive, not ergative. This is a direct consequence of the structure in (18). Since *begin* is above the base position of the subject, the latter is assigned case by *begin*, not by T. Otherwise, case is as in simple clauses (see (20)).

This difference in case in turn explains the difference in LDA between the two classes of restructuring verbs described in the previous section. Recall

9. Alternatively, the direct object is assigned absolutive by *v*. Nothing hinges on this detail.

that LDA_D is possible with both *finish* and *begin*, but LDA_A is only possible with *finish*. In the case of *finish*, the sentence contains a finite T with three Agr morphemes (Agr_A, Agr_D and Agr_E) and an absolutive, a dative, and an ergative DP (see (17, 19)). Each Agr morpheme targets the corresponding DP, the result being a finite auxiliary agreeing with three DPs. Locality, which is relativized to case in the Split Theory, is respected by all these agreement relations: for each Agr morpheme, there is only one potential target (i.e. a DP with the relevant case), so there are no potential interveners.

However, Locality *is* an issue with *begin*. In sentences with this verb, both the subject and the direct object are absolutive (see (18, 20)), but there is only one Agr_A morpheme in T. Because of Locality, this Agr_A targets only the highest DP. The result is that there is absolutive agreement with the subject, but not with the direct object. In other words, LDA_A is not possible with *begin*. The crucial difference with respect to *finish* is that the subject of the latter is ergative; since Locality in the Split Theory is relativized to case, Agr_A in T does not agree with the subject and is free to agree with the absolutive direct object.

Thus, the Split Theory is able to incorporate in a very natural way the relation between the case of the subject and the presence or absence of LDA_A in restructuring contexts in Basque. The crucial aspect of the theory that allows it to account for the facts is the hypothesis that Locality in agreement is relativized to case. As we argue in the next section, the Unitary Theory cannot explain the facts precisely because it cannot adopt this hypothesis.

5. Restructuring and the Unitary Theory

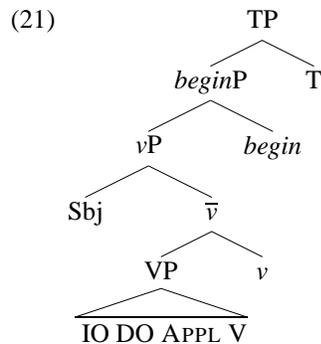
In this section, we argue that the Unitary Theory cannot explain the differences between *begin* and *finish* described in previous sections. In particular, although this theory can account for the restructuring properties of *finish*, it cannot explain all the relevant facts about case and agreement in sentences with *begin*.

As described in previous sections, case and agreement in sentences with *finish* work in essentially the same way as in simple clauses without restructuring verbs: the subject, indirect object and direct object have ergative, dative, and absolutive case, respectively, and the finite auxiliary agrees with all three arguments. As the reader can easily check, the Unitary Theory can account for this by simply assuming the structure in (17) and the analysis of case and agreement in Basque sketched in section 2.1.

The fact that case and agreement are part of the same operation in the Unitary Theory poses severe restrictions on possible analyses of restructuring with *begin*. In this theory, whatever head assigns case to a DP also agrees with it. Thus, for every DP with case, there must be a head that agrees with it.

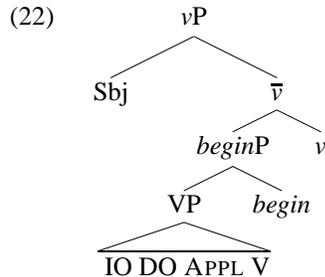
However, with *begin*, both the subject and direct object are absolutive, and the finite auxiliary agrees with the dative indirect object and with the absolutive subject, but, crucially, not with the absolutive direct object (i.e. there is no LDA_A). This seems problematic, since the direct object has (absolutive) case, but there is no apparent head that agrees with it. This can be solved easily by assuming that agreement on a head H is realized morphologically iff H ends up forming a complex head with finite T (by head movement). Thus, we can assume that there *is* a head that agrees with the direct object, and that assigns absolutive case to it.

Therefore, whatever head or heads assign case to the subject and indirect object must end up adjoined to finite T by head movement, and whatever head assigns case to the direct object must *not* end up as part of T. Because of the HMC, this means that the former must be higher in the structure than the latter. This means that the Unitary Theory cannot assume the structure for *begin* proposed in the previous section, repeated below:

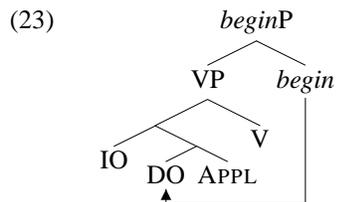


In the unitary analysis sketched in section 2.1, both absolutive and dative are assigned by *v*. Furthermore, we can also assume that *begin* is a *v*-like head that can assign absolutive and dative cases. However, in this structure, neither heads can assign case to the subject or the indirect object. Whatever head or heads assign case to them must end up as part of the auxiliary in T. This head cannot be *begin*, since it is not part of the finite auxiliary; it cannot be *v* either, since it would have to move to T, crossing *begin* in violation of the HMC. In other words, whatever head or heads assign case to the subject and indirect object must be higher in the structure than *begin*.

In order to solve this problem, we could assume that *begin* involves the same structure as *finish*, with the restructuring verb generated below *v*:



Let us assume that, with *begin*, *v* can exceptionally assign absolutive case to the subject in its specifier. Furthermore, as assumed in section 2.1, *v* also assigns dative to the indirect object. Since *v* is above *begin*, it can move to T, so that absolutive and dative agreement with the subject and indirect object is realized morphologically on the finite auxiliary. However, this raises a problem with case assignment to the direct object. The only head that could assign it absolutive case is *begin* (since this head does not end up as part of the finite auxiliary, its agreement features would not be realized morphologically):



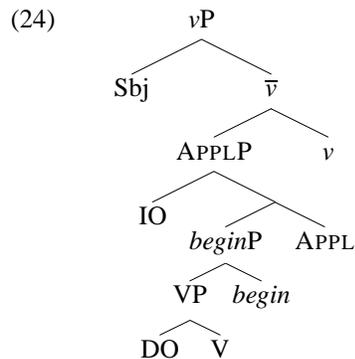
The problem is that this would constitute a violation of Locality, due to the intervening indirect object. Since Locality is not relativized to case in the Unitary Theory, any intervening DP, including an indirect object, can cause a Locality violation. Thus, this structure cannot account for restructuring with *begin* either.

Alternatively, we could assume the structure in (21), with *begin* above *v*, but with the addition of some head X above *begin* that would assign case to the subject and the indirect object. This would not solve the problem either: the indirect object would still block the Agree relation between *begin* and the direct object.

To summarize so far, given the restrictions that were imposed on the Unitary Theory in section 2.1, this theory has no way of accounting for the restructuring properties of *begin* in Basque. In order to save the Unitary Theory, we would need to abandon at least one of these restrictions. For instance, we could abandon Locality as a condition on agreement and case assignment. This would obviously remove the Locality problem with (22–23). However,

there would be no natural way of ensuring that the right DPs get the right cases. In particular, the only thing that ensures that v in (22) assigns dative to the indirect object is Locality; if this principle is abandoned, it should be possible to have sentences in which v assigns dative to the direct object and *begin* assigns absolutive to the indirect object. As might be expected, this is not possible. For instance, in (13), the indirect object must be dative, and the direct object must be absolutive.

Another way of solving the problem would be to adopt a different analysis of indirect objects in Basque. The Locality problem discussed above could be solved if we assumed the structure in (22), but with APPL and the indirect object generated between v and *begin*:



In this structure, case assignment to the direct object by *begin* would not be blocked by the indirect object. However, this would imply that, in general, indirect objects are generated in the specifier of a head that is higher than VP. That is, they would be ‘high applicatives’, in Pykkänen’s (2002) sense. As argued in footnote 4, this is not correct: dative objects in Basque are introduced by a low applicative head.

To conclude this section, the Unitary Theory cannot account in a satisfactory way for the differences between the two classes of restructuring verbs in Basque.

6. Conclusion

In this paper, we have provided evidence for a theory of case and agreement in which these morphological phenomena are the result of separate operations, as proposed in Bhatt 2003, Marantz 1991 and Bittner and Hale 1996. In the specific implementation of this theory discussed in section 2.2, Locality in agreement is relativized to case: an agreement head targets a DP with a particular case, and only DPs with this case can block agreement. As was

shown in sections 3–4, restructuring in Basque provides evidence for this aspect of the theory. On the other hand, in a theory in which case and agreement are part of the same operation, Locality cannot be relativized to case, and as shown in section 5, this theory fails to account for the relevant facts.

References

- Anagnostopoulou, Elena. 2003. *The syntax of ditransitives: Evidence from clitics*. Berlin: Mouton de Gruyter.
- Arregi, Karlos. 2002. Focus on Basque movements. Doctoral Dissertation, MIT, Cambridge, MA.
- Bejar, Susana, and Milan Rezac. 2003. Person licensing and the derivation of PCC effects. In *Romance linguistics: Theory and acquisition*, ed. Ana Teresa Pérez-Leroux and Yves Roberge, 49–62. Amsterdam: John Benjamins.
- Bhatt, Rajesh. 2003. Long distance agreement in Hindi-Urdu. Ms., University of Texas, Austin. To appear in *Natural Language and Linguistic Theory*.
- Bittner, Maria, and Ken Hale. 1996. The structural determination of case and agreement. *Linguistic Inquiry* 27:1–68.
- Bobaljik, Jonathan D. 1993. On ergativity and ergative unergatives. In *MIT working papers in linguistics* 19, 45–88. MIT Working Papers in Linguistics, MIT, Cambridge, MA.
- Chomsky, Noam. 1993. A minimalist program for linguistic theory. In *The view from Building 20: Essays in honor of Sylvain Bromberger*, ed. Kenneth Hale and Samuel Jay Keyser, 1–52. Cambridge, MA: MIT Press.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. Roger Martin, David Michaels, and Juan Uriagereka, 89–155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, 1–52. Cambridge, MA: MIT Press.
- Cinque, Guglielmo. 2002. Adverbs and functional projections: A cross-linguistic perspective. In *University of Venice working papers in linguistics* 11, 45–127. Department of Linguistics, University of Venice.
- Fernández, Beatriz. 1997. Egiturazko kasuaren erkaketa euskaraz. Doctoral Dissertation, Euskal Herriko Unibertsitatea, Vitoria-Gasteiz.
- Fernández, Beatriz. 1999. Case-agreement configurations: Evidence from Basque. In *MIT working papers in linguistics* 34. MIT Working Papers in Linguistics, MIT, Cambridge, MA.
- Marantz, Alec. 1991. Case and licensing. In *Proceedings of the Eighth Eastern States Conference on Linguistics*, 234–253. Department of Linguistics, Ohio State University, Columbus.
- Ormazabal, Javier, and Juan Romero. 2003. Agreement restrictions. Ms., Euskal Herriko Unibertsitatea, Vitoria-Gasteiz, and Universidad de Alcalá.
- Pylkkänen, Liina. 2002. Introducing arguments. Doctoral Dissertation, MIT, Cambridge, MA.
- Richards, Norvin. 1997. What moves where when in which language. Doctoral Dissertation, MIT, Cambridge, MA.
- Travis, Lisa deMena. 1984. Parameters and effects of word order variation. Doctoral Dissertation, MIT, Cambridge, MA.
- Wurmbrand, Susanne. 2001. *Infinitives: Restructuring and clause structure*. Berlin: Mouton de Gruyter.