

On Long-Distance Agree

Cedric Boeckx Cedric.Boeckx@uab.cat Institució Catalana de Recerca i Estudis Avançats & Universitat Autònoma de Barcelona

Abstract: The present work examines the empirical reach of the minimalist operation *Agree* responsible for feature-licensing. I focus on patterns of so-called long-distance agreement and show that although not all instances of long-distance agreement that have been identified in the literature are unambiguous instances of 'pure' Agree (at a distance), at least some are. For these, an operation like Agree appears empirically necessary.

Keywords: Agree, locality, long-distance agreement, minimalism, phase.

Resumen: El trabajo actual examina el alcance empírico de la operación minimalista de *Acuerdo*, responsable de la legitimación de rasgos. Para ello me centro en patrones de lo que se considera como acuerdo a larga distancia y muestro que, aunque no todos los casos de acuerdo a larga distancia que han sido identificados en la bibliografía especializada son casos inequívocos de Acuerdo 'puro' (a distancia), al menos algunos sí lo son. Para estos casos, una operación como el Acuerdo parece necesaria desde un punto de vista empírico.

Palabras clave: Acuerdo, localidad, acuerdo a larga distancia, minimalismo, fase.

Resumo: O presente trabalho examina a satisfação empírica da operação minimalista da *Concordância* responsável pelo licenciamento de propriedades. Concentro-me em padrões da tão denominada concordância a longa distância e demonstro que, embora nem todas as instâncias de concordância a longa distância que têm sido identificadas na literatura sejam instâncias inequívocas de «pura» Concordância (a uma distância), pelo menos algumas o são. Relativamente a estas, uma operação como a Concordância apresenta-se empiricamente necessária.

Palavras-chave: Concordância, localidade, concordância a longa distancia, minimalismo, fase.



1. Introduction¹

Agreement is such a pervasive phenomenon in natural language that any serious study of the core aspects of our language faculty must grapple with it. Within modern generative grammar (by which I mean the period covering the elaboration of the Principles-and-Parameters approach, the solidification of the model in the GB-era and the development of the minimalist program to the present; i.e., roughly, from Chomsky 1981 onwards), considerable attention has been paid to pairs of sentences like (1)-(2).

- (1) Three men seem to be likely to be here
- (2) There seem to be likely to be three men here

Whereas agreement between the subject and the finite verb is unexceptional in (1) – taking place very locally, like so many other relations in language, the agreement in (2) appears to take place at a considerable distance. The central question that preoccupied generative grammarians was whether the two patterns of agreement seen in (1) and (2) could be unified at a suitable level of analysis. Many linguists working in the 1980s were quick to point out that the sentence in (2) means roughly the same as the sentence in (1), and, quite plausibly, suggested that at the level of interpretation (Logical Form), (1) and (2) should be structurally identical. Given that expletive elements like there don't seem to have any semantic weight, it was proposed that three men covertly replaced there, re-enacting the movement that was (and still is) standardly assumed to take place in (1) (see Chomsky 1986). If this sort of analysis (schematized in (3)-(4)) is adopted, there is at least one relevant derivational stage (LF) at which the real (semantically non-empty) subject is close enough to the finite verb for the seemingly long-distance agreement relation in (2) to be licensed locally.

(3) Three men seem to be likely to be <three men> here. *overt movement*

(4) <three men> there seem to be likely to be three men here. *covert movement*

The difference between (1) and (2) thus boils down to an overt movement/covert movement distinction. But the key idea is that all agreement relations take place locally, specifically in a Spec-Head relation (matrix SpecIP in the case at hand).

In parallel to the issue of uniform agreement configuration just illustrated, generative linguists sought to find a uniform case-licensing configuration, once the relevance of (abstract) case for the distribution of

¹ For a more detailed overview of the historical development of case/agreement theory, see Boeckx (2008a: Introduction).

[©] *Iberia*: An International Journal of Theoretical Linguistics <u>http://www.siff.us.es/iberia/index.php/ij/index</u>



elements bearing it became established (an idea going back to Vergnaud 1977). It was observed that in nominative-accusative languages, nominative case tends to correlate with (and, by hypothesis, is licensed by) finiteness/agreement, and seems to require movement of the nominative-bearing element (finite/agreeing SpecIP) (cf. (3)-(4)), whereas accusative case appears to depend more on thematic information inside the verb phrase (think e.g., about Burzio's Generalization), and typically requires no movement of the relevant element (being assigned in the complement of V [Head-Complement] configuration. The question thus arose as to which of Spec-Head or Head-Complement is the 'right' (read: uniform/unique) configuration for case-licensing. The fact that nominative-bearing elements either never occupies a head-complement position in the first place (cf. the notion of external argument), or must vacate such a position if they happen to be base-generated there (cf. passive/unaccusative contexts), as well as the existence of 'exceptional case-marking' (ECM) (Postal 1974; Lasnik & Saito 1991), where accusative case cannot possibly be licensed in a head-complement relation, and the existence of (accusative) case-chains in some languages like Bambara (see Koopman 1992), tipped the balance fairly clearly toward the Spec-Head configuration.² Just like they had done in the case of (2), linguists posited a covert movement step in those situations where caselicensing did not appear on the surface to involve a spec-head relation (see, e.g., Chomsky 1991, 1993, among many others).

Thus, for both agreement and case, the Spec-head configuration emerged as the early winner in the attempt to establish a uniform licensing configuration. This conclusion played a very important role in the early days of the minimalist program (Chomsky 1993), as the establishment of the right Spec-head configuration was seen as the key motivation for movement. At that point, movement began to be seen as driven (by 'features' like case and agreement), and subject to Last Resort (movement taking place if and only if features like case and agreement were in need of licensing, aka 'checking', and checking in situ was impossible).

Things began to change in 1995, when Chomsky raised the possibility that if movement indeed takes place to 'check' features, then only the relevant features should move. The legitimacy of the concept of category movement was thus questioned, certainly in its covert implementation (overt category movement was seen as a brute-force fact). Chomsky's conceptual argument was the impetus for a number of works which pointed out empirical problems for alleged instances of covert movement – problems which disappeared if feature-

² The dependency of (past participle) agreement on (object) movement in languages like French (Kayne 1989) was interpreted in a similar light.



movement is adopted (see, e.g., Lasnik 1999, who reanalyzed data like (1)-(2), and Boeckx 2000, who reanalyzed Icelandic data originally due to Sigurðsson 1996).

The very idea of feature-movement was subsequently dropped (due in large part to the technical difficulties involved in making the notion of featurechain precise), but the key insight behind it remains to the present day in the form of *Agree*. Agree is a feature-checking mechanism put forth in Chomsky 2000. Its distinctive property is that it enables feature-checking at a distance. Just like feature movement, it dispenses with the need for category movement, but it goes one step further in eliminating the need for any movement altogether. Under Agree, checking can take place if the licensor (for case, say) is able to locate the licensee inside its complement domain. We have thus come full circle, as the head-complement relation is now seen as (much closer to) the unique/uniform licensing configuration.

Recently, the current, *Agree*-based model of agreement/case-licensing has been called into question, most carefully in Hornstein (2009) (see also Chandra 2007, Koopman 2006). I have examined (and called into question) the conceptual arguments raised by Hornstein in Boeckx (in press), and I will not rehearse them here. In this paper I will focus on the empirical evidence in favor of Agree.

Hornstein, correctly, takes the empirical signature of Agree to lie in longdistance (cross-clausal) agreement patterns, and I will therefore focus on these here.³

³ I should point out, though, that some patterns of long-distance agreement were analyzed in non-movement terms already in GB (see Burzio 1986; Raposo & Uriagereka 1990). So, interest in long-distance agreement certainly didn't emerge with Agree. It is also not the case that long-distance agreement is the only source of empirical evidence for Agree. As I discussed in Boeckx 2008a, arguments in favor or Agree could take any of the following (abstract) forms:

⁽i) situations where it is clear that the agreeing DP has not moved anywhere close to the domain of the agreeing functional head,

⁽ii) situations where it is clear that movement relations may feed agreement relations that are in fact not possible (and are correctly predicted to be impossible if agreement is determined prior to, or in the absence of movement), and

⁽iii) situations where a given functional head favors agreement with its complement over agreement with its specifier.

All types of arguments have been documented in the literature, and are reviewed in Boeckx (2008a). I will not discuss them here.

2. Long-Distance Agreement and Agree

Patterns of long-distance agreement (hereafter, LDA) are intended to isolate Agree. Unlike some of the arguments in favor of Agree that can be found in the literature (see Boeckx 2008a), where the agreeing element often undergoes subsequent movement, LDA has been offered as evidence that at least some instances of Agreement must be dissociated from movement, and take place at a distance under 'pure' Agree. Like all scientific experiments trying to isolate a feature of the natural world, studies of LDA face a series of problems or unknowns that cannot always be controlled for, and as such potentially weaken the argument in favor of Agree. As we will see, several LDA-patterns advanced in the literature as genuine, and, as such, strong evidence for Agree, turn out to be subject to alternative analyses that are hard to exclude, given the present state of our knowledge of the languages involved. Nevertheless, I believe that some instances of LDA really do support the claim that agreement can take place at a distance. I say 'at a distance' because contrary to what Preminger (2009) appears to suggest when he argues against the existence of "true LDA", most arguments in favor of Agree based on LDA-data do not try to establish that LDA is "agreement that spans across the boundaries of established locality domains".4 Instead, studies of LDA seek to show that agreement can be established in the absence of movement (this is certainly the intent of the present paper). But it is expected that Agree will operate within the boundaries of established locality domains (e.g., some version of the Phase Impenetrability Condition). Indeed, some of the earliest studies of LDA (see, e.g., Boeckx 2000) crucially relied on the existence of locality conditions on LDA to support their proposals. In other words, the real question here is not how far away can the Probe and the Goal be, but rather, need the Probe and the Goal be adjacent to one another?

LDA has been claimed to exist in a variety of typologically diverse languages, such as Icelandic, Hindi, Tsez, Itelmen, Basque, etc. Abstractly, the phenomenon of LDA refers to a configuration like (5), where a finite verb in a superordinate clause bears agreement morphology that co-varies with the ϕ feature values of a nominal element in a subordinate clause.

(5) [... V ϕ_i ... [xp ... DP ϕ_i ...]]

An example of LDA from Icelandic is given in (6), with matrix verb agreement established with a downstairs nominative element.

(6) a. Mér virðast [þeir vera skemmtilegir]

⁴ Bošković (2007) is a notable exception.

[©] *Iberia*: An International Journal of Theoretical Linguistics <u>http://www.siff.us.es/iberia/index.php/ij/index</u>



Me.Dat seem3pl they.Nom be interesting 'It seems to me that they are interesting.'

b. Mér virðast [hafa verið seldir margir hestar]
 Me.Dat seem3pl have been sold many horses.Nom 'It seems to me that many horses have been sold.'

Considerable attention has been devoted in the literature on LDA to figuring out the range of clausal units allowing for LDA. The "XP" in (5) has been said to take on the following values: {VP, vP, TP}, but crucially not CP.

LDA has been said to come about via Agree (equivalently, feature movement), Spec-Head agreement, feature-percolation/cyclic Agree/transitive Spec-head, or via Prolepsis/"proxy" agreement/resumption (I will discuss each of these possibilities below). Among the recurring themes in the literature on LDA are: (i) the fact that LDA is typically optional (though not completely devoid of interpretive effects), (ii) the fact that LDA seems to interact with (non-) finiteness, (iii) the fact that the nominal triggering LDA may agree and/or have its case-feature checked inside the embedded clause, and (iv) the fact that LDA is subject to intervention effects (i.e., it is the highest nominal in the embedded clause that typically controls LDA.)

The instances of LDA that have been repeatedly brought to bear on these issues make the Icelandic example in (6a) somewhat atypical, as they involve the object (accusative/absolutive) nominals of the embedded clauses, not the (nominative) subject nominals. For this reason, I will set aside Icelandic until the end of the present discussion of LDA and focus primarily on instances of LDA in Hindi, Tsez, and Basque.

2.1. LDA in Hindi

As first discussed in detail by Mahajan (1990), Hindi exhibits constructions where the object of an embedded (non-finite) clause is able to enter into an agreement relationship (involving gender and number) with a superordinate verb.

As stressed by Boeckx (2004) and Bhatt (2005), a fair amount of evidence suggests that the agreeing DP has not moved to a relevant specifier position where local agreement could be established with the higher verb at any point in the derivation, making this an interesting source of evidence in favor of Agree.

A typical example of LDA in Hindi is given in (7). (Throughout, the reader should focus on feminine nouns, which trigger a type of agreement that is morphologically distinct from default agreement. Unless otherwise noted, data come from the papers whose proposals are under discussion.)

(7) Vivek-ne [kitaab parh-nii] chaah-ii.Vivek-erg book.f read-inf.f want-pfv.f'Vivek wants to read the book.'

LDA in Hindi has several interesting properties. First, note that the matrix verb *chaah-ii* does not agree with the matrix subject. This conforms to the general rule of agreement in Hindi according to which a subject triggers agreement on a verb if and only if the subject is not overtly Case-marked (see, for instance, (8)). If the subject is overtly Case-marked, the object may trigger agreement on the verb (9). If both arguments are overtly Case-marked, the verb bears default inflection (10).

- (8) Rahul kitaab parh-taa thaa.Rahul.M book.f read-hab.msg be.pst.msg 'Rahul used to read (a/the) book.'
- (9) Rahul-ne kitaab parh-ii thii.Rahul.erg book.f read-hab.pfv.f be.pst.msg'Rahul had read the book.'
- (10) Rahul-ne kitaab-ko parh-aa thaa.Rahul-erg book-Acc read-pfv.msg be.pst.msg'Rahul had read the book.'

A second property of LDA is that it is only possible with arguments of non-finite complements. Agreement across a finite clause boundary (indicated by the presence of an overt complementizer) is impossible (11).

```
(11)Firoz-ne soch-aa/*-ii ki [Mona ghazal gaa-tii hai]
Firoz-erg think-pfv.3msg/3fsg that Mona ghazal.f sing-hab.f be.prs
'Firoz thought that Mona sings ghazals.'
```

Third, LDA is not possible if the infinitival clause contains an overt subject (contrast (12) and (13)).

- (12)*Firoz-ne [Shabnam-kaa rotii khaa-nii] chaah-ii. Firoz-erg Shabnam-gen bread.f eat-inf want-pfv.3fsg 'Firoz wanted Shabnam to eat bread.'
- (13) Firoz-ne [rotii khaa-nii] chaah-ii Firoz-erg bread.f eat-inf want-pfv.3fsg 'Firoz wanted to eat bread.'

Fourth, LDA appears to be optional. Thus, (14) is as acceptable as (13).

(14) Firoz-ne [rotii khaa-naa] chaah-aa. Firoz-erg bread.f eat-inf.M want-pfv.M 'Firoz wanted to eat bread.'



Fifth, LDA (in Hindi)⁵ only proceeds from bottom to top. In other words, we do not find any instance of LDA where an argument of a matrix predicate triggers agreement on some embedded predicate.

(15)*Mona peR-ko dekh-nii chah-tii thii. Mona tree.masc.acc. see-inf-f.sg want-hab.f. be-pst.f 'Mona wanted to see the cat.'

Finally, for a vast majority of speakers,⁶ agreement on the infinitival predicate is 'parasitic' on agreement with the embedding predicate. That is, agreement with the infinitival verb fails if LDA fails (16b), and agreement with the infinitival verb must obtain if LDA obtains (16c).

(16) a. Shahrukh-ne tehnii kaat-nii chaah-ii.
Shahrukh-erg branch.f cut-inf.f want-pfv.f
b.*Shahrukh-ne tehnii kaat-nii chaah-aa.
Shahrukh-erg branch.f cut-inf.f want-pfv.M
c. *Shahrukh-ne tehnii kaat-naa chaah-ii.

Shahrukh-erg branch.f cut-inf.M want-pfv.f 'Shahruck wanted to cut the branch'

Many of the characteristics of Hindi LDA just reviewed strongly suggest an Agree-based analysis: the fact that it proceeds top-down, that local agreement is not primary, and that it is subject to intervention (finite C/overt subject) would all fall out from Agree. As a matter of fact, these characteristics are also found in the context of agreement in existential constructions, which played a significant role in the elaboration of the Agree-mechanism. Thus, Agree cannot reach across a finite CP boundary (17), and it is subject to intervention (18).⁷

⁵ Examples of upward LDA occurs in Chamorro (Chung 2004) and Serbo-Croatian (Baker 2008, citing work by Stjepanović). These are likely to be the result of agreement established under subject raising.

⁶ For some speakers, agreement with the infinitival clause may take place independently of LDA (i.e., for them (16b) is grammatical). This is also true for speakers of Kashmiri (Butt 1995). I will set the dialects that accept (16b) aside, and refer the reader to Boeckx 2004 for discussion.

⁷ For a detailed analysis of these, see Boeckx (2000), Boeckx & Jeong (2004), and Den Dikken (2001).



(17)*there seem that three men are in the room.

(18) there seems/*?seem to a woman to be three men in the room.

(cf. there *?seems/seem to be three men in the room)

Note that an Agree-analysis leaves open the possibility that the agreeing nominal moves. The example in (19) shows this to be the case for Hindi (I assume that something like scrambling is involved in this case), which I take to be on a par with (20) for existential constructions.

(19) Kitaabi Vivek-ne [t parh-nii] chaah-ii.

Book.f Vivek-erg read-inf.f want-pfv.f

'Vivek wants to read the book'

(20) the three men that there seem to be t in the garden are dressed in black

In Boeckx (2004) I spent some time showing that alternative analyses of Hindi LDA in terms of feature-movement, overt or covert Spec-head or lower pronunciation do not fare very well. In particular, I took the existence of data like (21) to suggest that the agreeing nominal can establish agreement without movement.

(21) Vivek-ne [jaldise kitaab andhereme parh-nii] chaah-ii. Vivek-erg quickly book.f in-the-dark read-inf.f want-pfv.f 'Vivek wanted to read the book quickly in the dark'

I took the presence of adverbs modifying the lower clause and placed on either side of the agreeing nominal to suggest that the latter need not have to move out of the embedded clause to establish overt agreement.

The specific analysis I proposed in Boeckx (2004) was in terms of multiple Agree, according to which the matrix v entered into an agreement relation with the embedded object and (parasitically) the embedded verb, as schematized in (22).

(22)[v [V [vP V Obj]]] Multiple Agree (Boeckx 2004)

Crucial for this analysis to go through was the idea that LDA was made possible by restructuring, which I understood to mean that the complement clause was very small, not even containing a proper licenser for case for the object (see Wurmbrand 2001).

Bhatt 2005 formulates a similar restructuring analysis of LDA, but with one important difference. For Bhatt, the embedded clause is a bit bigger than I had assumed. In particular, Bhatt argues that the object can be case-licensed in the embedded clause and that case and agreement must be dissociated. To emphasize this distinction, Bhatt introduces a (capital) AGREE-mechanism that



allows for a case-marked nominal to enter into an agreement relation. (In so doing, Bhatt departs from Chomsky's 2000 hypothesis that once case-marked a nominal is deactivated and can no longer establish new syntactic relations, although Bhatt follows Chomsky in claiming that a case-marked nominal cannot undergo further A-movement. For a similar hypothesis, see Bošković 2007.)

Bhatt's analysis is schematized in (23).
(23) [Subject [
$$vP-2$$
 v [V [Inf [$vP-1$ v[V OBJ]]]]]] AGREE
(Bhatt 2005)

Chandra (2007) casts doubt on both Boeckx (2004) and Bhatt (2005) by observing that LDA has interpretive consequences that are not predicted under an Agree/AGREE-analysis (Chandra follows Lasnik 1999 in taking 'agreement at a distance' to be semantically inert.) Specifically, Chandra points out that agreeing embedded objects, unlike non-agreeing ones, can scope over matrix predicates. Witness (24)-(25).

(24) Naimne har kitaab parhnii chaah-ii. Naim-erg. every book-acc.sg.fem. read-inf.sg.fem. want.sg.fem.perf. 'Naim wanted to read every book.' Want > every book Every book > want
(25) Naimne har kitaab parhnaa chaah-aa. Naim-erg. every book-acc.sg.fem. read-inf.def. want.def.perf. 'Naim wanted to read every book.' Want > every book *Every book > want

Chandra takes the scope reversal possibility in (24) to suggest that the object raises to the matrix clause, and establishes agreement via a local Spechead relation.

Chandra follows Hornstein in taking control/restructuring clauses to involve movement of the controller. She also follows Bhatt (and Mahajan) in assuming that the object is case marked in the embedded clause, and raises solely for agreement purposes. In this she departs from Chomsky's activity condition even more than Bhatt did, as she does not assume that case-marking prevents further (A-)movement.

Chandra's analysis is schematized in (26).(26) [OBJ [Subject [vP-2 v [V [<Subj> [vP-1 v[V <OBJ>]]]]](Chandra 2007)

```
© Iberia: An International Journal of Theoretical Linguistics 
<u>http://www.siff.us.es/iberia/index.php/ij/index</u>
```

vol 1.1, 2009, 1-32 ISSN 1989-8525 With respect to the adverb data that I took to favor an Agree analysis, Chandra argues that these adverbs may have scrambled into the matrix clause along with movement of the object, or that a low copy of the agreeing nominal can be pronounced. I confess that since scrambling has been used as a cover term for a variety of operations that we do not yet understand very well, it is hard to exclude Chandra's first suggestion, although I cannot fail to note that opening the door to vacuous movement is never desirable. Likewise, although, as I already pointed out above, low copy pronunciation exists, one would like to find arguments to resort to it.

Although Chandra is right in stressing the relevance of the scope facts, she is wrong in taking them to argue against an Agree analysis. High scope of the agreeing object may be achieved independently of agreement, via a late (covert) QR process (as Bhatt points out in his 2005 paper). Alternatively, we could claim that agreement is sufficient to enlarge the scope domain of the agreeing element. The idea that agreement without overt movement correlates with narrow scope comes from English existential constructions (Lasnik 1999), but perhaps these are not as representative as they have been taken to be. There are now numerous analyses which take the expletive to be base-generative low, and to be responsible for agreement (see Hornstein & Witkos 2003, among many others).

Evidence that agreement might be sufficient to achieve new interpretive effects comes from clitic doubling data, e.g. in Greek (data from Alexiadou & Anagnostopoulou 1999). (27) indicates that clitic doubling can trigger cross-over effects, for example.

(27) a. ?*I	mitera tu	sinodepse	to	kathe pedhi sto sholio	(Greek)
the					

b. I mitera tu **to** sinodepse **to kathe pedhi** sto sholio the mother his cl-acc accompanied the every child at school 'His mother accompanied each child at school.'

If cliticization is feature-movement/Agree (see Roberts in press, Alexiadou & Anagnostopoulou 1999), then facts like (27) argue against a direct correlation between Agree and lack of interpretive effects.

Recently, scope data of the sort discussed by Chandra have gained in theoretical significance on the basis of a generalization put forth in Bobaljik & Wurmbrand (2005).

Bobaljik and Wurmbrand discuss LDA-data from German and Itelmen, and observe that, unlike what we find in Hindi, the agreeing element necessarily takes wide scope over matrix material (recall that in Hindi, wide scope was possible but not forced). Witness (28). (The German data involves a passivized object, but Bobaljik and Wurmbrand offer data in Itelmen and Japanese that do not involve passivization.)

(28) weil nur deutsche Autos zu reparieren versucht wurden since only German cars-nom to repair tried were 'since they only tried to repair German cars' *'since they tried to only repair German cars' only > try *try > only

Bobaljik and Wurmbrand also argue that the agreeing element in German and Itelmen obligatorily moves overtly into the matrix clause (evidence not reproduced here), and on the basis of this formulate the following generalization.⁸

(German)

(29) Case-Scope correlation

A DP may not be interpreted (for binding and scope) in a position lower than in the domain in which it undergoes Case/agreement-checking

Bobaljik and Wurmbrand use the generalization in (29) to argue that the complement clause in German, Itelmen, and Japanese lacks a case-checking functional head, which forces movement and high scope of the agreeing element. By the same reasoning, we may argue that since narrow scope of the agreeing object is possible in Hindi, case-checking takes place in the embedded clause (high scope being the result of either QR or movement of the sort explored by Chandra). If this is correct, this would support Bhatt's AGREE-approach over Boeckx's Agree-analysis. It may be worth mentioning at this point that German and Itelmen lack the sort of parasitic agreement on the embedded verb that we find in Hindi, which may be taken to suggest that complement clauses in German/Itelmen are indeed smaller than in Hindi: VP (or Wurmbrand's InfP), rather than vP (AGR_oP).⁹

Summing up, the Hindi data remain inconclusive when it comes to the superiority of Agree. All the known facts are compatible with an Agree analysis, but it is hard to exclude a local agreement/Spec-head alternative of the sort explored by Chandra.

© *Iberia*: An International Journal of Theoretical Linguistics <u>http://www.siff.us.es/iberia/index.php/ij/index</u>

⁸ On case and scope, see also Boeckx (2001).

⁹ For evidence in favor of LDA across *v*P-complements (as opposed to VP-complements), see Grosz & Patel (2006) on Kutchi-Gujarati.



2.2. LDA in Tsez

Since the Hindi facts have proven inconclusive, I turn to a different language, Tsez, and a different set of examples involving LDA, originally discussed in Polinsky & Potsdam (2001).

The agreement pattern we will be examining will be one crossing a finite clause boundary, but crucially a clause not headed by an overt complementizer.¹⁰

Like many other languages, Tsez has nominalized clauses triggering agreement on the embedding verb. A relevant example is given in (30).

(30) eni-r [uz-a magalu b-ac-ru-li] r-iy-xo.
 mother-dat. boy-erg bread.III.abs. III-eat-pstprt.nmlz] IV-know.pres
 'The mother knows the boy ate the bread.'

LDA takes place when the ϕ -feature values of the absolutive nominal inside the embedded clause (ergatives and datives don't trigger agreement in Tsez¹¹) occur on the embedding verb, as in (31) (minimally different from (30)).

(31) eni-r [uz-a magalu b-ac-ru-li] b-iy-xo.
mother-dat. boy-erg bread.III.abs. III-eat-pstprt.nmlz] III-know.pres
'The mother knows the bread, the boy ate.'

Note that the agreeing nominal need not be at the edge of embedded clause, although it can surface as the highest element in the clause, as in (32).

(32) eni-r [magalu uz-a b-ac-ru-li] b-iy-xo. mother-dat. bread.III.abs. boy-erg III-eat-pstprt.nmlz] III-know.pres 'The mother knows, the bread, the boy ate.'

Polinsky & Potsdam (2001) note that LDA has the effect of forcing a topic interpretation on the agreeing nominal. Tsez also has a topic marker, which, if used in a context where LDA is possible, forces LDA, as shown in (33).

(33) enir [uz-a magalu-n/magalu-gon b-ac-ru-li] *r/b-iy-xo.
 Mother boy-erg. bread.III-abs-top III-eat-pstprt-nmzl] IV/III-know-pres
 'The mother knows that the bread, the boy ate.'

¹⁰ Unless otherwise noted, all the Tsez data come from Polinsky & Potsdam (2001).

¹¹ Hence the lack of LDA with datives, e.g.:

 ⁽i) *eni-r [uz-a kidbe-r magalu taλ-ru-li] y-iyxo.
 Mother-dat. boy-erg. girl.II-dat. bread.abs. give-pstprt-nmlz.] II.know
 'The mother knows that the boy gave the girl bread.'



As already alluded to, Tsez disallows LDA if the clause is headed by an overt complementizer (34), or if the left periphery of the clause has been activated (i.e., if some A-bar checking has taken place), as signaled by the presence of a *wh*-element (35) or a topicalized adverb (36).

(34) eni-r	[uz-a	magalu	b-ac-ru-	l]	r/*b-iy-x	0.		
Mothe	r-dat. boy-erg	g. bread.III	.abs. III-eat-p	st.evid-CC	MP IV/III-kno	ows		
'The m	other knows	the boy at	e the bread.'					
(35) enir	[lu mi	cxir	b-ok'ak'-ru	ı-li]	r/*b-iyxo.			
Mothe	Mother who-erg money.III.abs. III.steal-pstprt-nmlz.] IV/III-knows							
'The m	other knows	who stole	the money.'					
(36) eni-r	[hul	uz-a	magalu	b-ac-ru	·li]	r/*b-iy-xo.		
Mothe	r-dat. yesterd	lay boy-erg	g. bread.III.ab	s. III-eat-p	stprt-nmlz].	IV/III-knows pres		
'The m	other knows	the boy at	e bread yeste	rday.'				

From these data, Polinsky and Potsdam conclude that the embedded clause involved in LDA is a TP, not a CP.

Chandra (2007) reports that it is impossible for the agreeing nominal in Tsez to scope outside of its clause (possibly a reflex of the more general (finite) clause bounded character of QR), which suggests that the agreeing nominal does not raise out of its clause. The possibility of LDA in contexts where the agreeing nominal is pied-piped alongside its clause-mates (37) also suggests that no local Spec-head agreement is involved between the agreeing nominal and the matrix verb.

(37) [uza magalu bac'ruli] enir b-iyxo.boy bread.III. ate mother III-knows'The mother knows the boy ate the bread.'

Not surprisingly, an Agree-analysis for LDA in Tsez has been proposed, first by Polinsky & Potsdam (2001), and also by Bošković (2007). These two analyses differ in only one relevant respect. Polinksy and Potsdam seek to capture the fact that the presence of LDA correlates with topichood, and claim that when LDA takes place, the agreeing nominal has raised covertly to a high topic position (adjoined to, or in a second specifier position of TP) inside its own clause, as schematized in (38).

(38) [TP-1 mother-dat [T-1 [v-1 [V-1 knows [TopicP <bread>[TP-2 the boy-erg [T-2 [vP-2 [vP-2 eat bread]]

By contrast, Bošković assumes that LDA takes place with the relevant nominal *in situ*, largely because he does not want to follow Polinsky and Potsdam in assuming that a covert movement operation can feed an overt agreement pattern.

Although the overt/covert issue Bošković raises is interesting, it can

easily be avoided under Polinsky and Potsdam's analysis if we say that topicalization is overt, but the high copy of the moved element doesn't get pronounced (perhaps a general property of Tsez; as may be gathered from Potsdam and Polinsky's work on backward control in the language). Because it captures the link between LDA and topichood, I am tempted to favor the Polinsky and Potsdam analysis, although nothing I say about Tsez here depends on choosing between Polinsky and Potsdam and Bošković's.¹² The real issue, it seems to me, is whether agreement really takes place long distance in Tsez. Although we have seen evidence that the agreeing nominal appears to stay in its clause, the data in Tsez could be equally well-analyzed if we were to say that LDA is only apparent, and in fact consists of two local agreement steps: one involving a Spec-head relation between the agreeing nominal (raised to a topic position) and the embedded verb, and a second local agreement relation between the embedded clause itself and the matrix verb. Such a 'percolation'/'cyclic'/'mediated' agreement analysis has been suggested in Legate (2005), and explicitly defended at length in Koopman (2006) and Frank (2006). (Koopman in particular uses this theoretical possibility to argue against the Polinsky and Potsdam's claim that Tsez LDA provides an empirical argument in favor of Agree.)

In a footnote, Polinsky and Potsdam allude to such an analysis, and rejects it because according to them it would predict that if the embedded clause is pronominalized, the pronoun could trigger agreement on the matrix verb with the value of the nominal contained inside the clause that has been pronominalized. The data in (39) shows that this is not what we find in Tsez.

(39) a.	enir	uza	magalu	bac'ruli	b-iyxo.
	mother	boy	bread.III	ate	III-know
	'The me	other	knows tl	nat the b	oy ate the bread'
b.	nela	[za	r-igu/b-ig	gu	yol-hin] ehis.
	she-erg	this	IV-good	/III-good	l is-Comp said
	'She say	ys it ((= that the	e boy ate	the bread) is good

Though interesting, Polinsky and Potsdam's reasoning relies on the assumption that a pronoun replacing a clause would be able to retain all the relevant featural properties of that clause. This is, however, unlikely to be the case. After all, when an embedded interrogative clause is replaced by a pronoun, the pronoun used is not interrogative:

¹² Note, incidentally, that both Polinsky and Potsdam and Bošković rely on the assumption that agreement with a case-marked nominal is possible. So, to the extent their analysis go through, they favor Bhatt's AGREE-mechanism.



(40) John asked [whether Mary left], and Bill asked that/*what too.

Given that we do not understand the relationship between pronominalization and agreement, I consider Polinsky and Potsdam's rejection of a 'stacked' agreement analysis of LDA void. As a matter of fact, stacked agreement analysis of LDA in Tsez may be able to capture the fact that LDA cannot take place across two levels of embedding. Witness (40).

(41) babir [enir [uza magalu bac'ruli] b-iyxosi-li] r/*b-iyxo.Father mother boy bread-III.abs. ate III-know-nmlz. IV/*III.know'The father knows that the mother knows the boy ate bread.'

The unavailability of (41) is unexpected under Polinsky and Potsdam's (or Bošković's) analysis. For them, nothing ought to prevent successive cyclic topicalization with subsequent LDA (or truly long-distance Agree). ¹³ By contrast, if we assume (as many do; see, e.g., Pesetsky & Torrego 2001) that previously unvalued features (like the ϕ -features on a verb/clausal unit) are expunged at the end of a phase/cycle, it is plausible to claim that the features on the clausal head triggering the effect of LDA will have disappeared by the time the second level of embedding is built, hence the lack of LDA in (41).

All in all, the evidence in favor of Agree from Tsez is certainly as controversial as the evidence in Hindi, though for different reasons. In Hindi, it is not easy to exclude the possibility that the agreeing nominal has raised into the matrix clause. In Tsez, this is unlikely to be the case, but given that clauses trigger agreement on their selecting verb independently of LDA, it is at least plausible to consider the possibility that LDA is simply a surface phenomenon in the language, consisting of two very local agreement configuration, neither of which can be offered in favor of Agree, whose signature would require more distance between valuer and value.

2.3. LDA in Basque

Like in all empirical science, if one cannot control for all factors, experiments must be pursued until – to the best of the scientist's ability and judgment – all potentially interfering factors have been excluded. Since we haven't been able to find uncontroversial evidence for genuine LDA, we must keep looking for a language that would allow us to exclude alternative analyses of the sort we discussed for Hindi and Tsez. In this section I would like to examine the LDA pattern found in Basque and first discussed (in a generative

© *Iberia*: An International Journal of Theoretical Linguistics <u>http://www.siff.us.es/iberia/index.php/ij/index</u>

¹³ Bruening (2001) reports cases of LDA achieved by long-distance topicalization in Passamoquoddy.

setting) by Etxepare (2007) (see also Chandra 2007 and Preminger 2009).¹⁴ As we will see momentarily, some properties of Basque LDA will enable us to make a stronger case for Agree than we were able to do with Hindi or Tsez.

In many ways, Basque LDA is typologically in between Hindi-style LDA (involving restructuring) and Tsez (involving finite clause complements). Unlike Tsez-style LDA, Basque LDA involves a nominal inside a non-finite clause, but unlike in Hindi or German, there is evidence that restructuring is not involved, and that we are dealing with something like a non-finite/defective TP-domain (for a detailed discussion of the evidence, see Etxepare 2007 and also Preminger 2009). As a matter of fact, Etxepare claims that Basque LDA is confined to those environments that San Martin (2002) has classified as obligatory control (nominalized) complements. As in Hindi and Tsez, agreement obtains with the absolutive element (object), and it is optional, but unlike in Tsez, LDA triggers no topic-effect.

Having said all this, let me now turn to relevant examples. Consider (42)-(43). Basque has a very rich agreement system, with ergatives, datives and absolutives registering agreement on the finite verb/auxiliary. Clauses enter into agreement relations as well. As (42) shows, the absolutive clause triggers 3rd person singular agreement on the matrix auxiliary. (Dative agreement is with the phonetically null matrix subject, which controls 'PRO' in the embedded clause.)

(42) [nobela erromantikoak irakurtzea] gustatzen zaio.

novel romantic-pl.A read-N-det.A like-hab aux-3singA-3singD 'He/she likes to read romantic novels.'

The example in (43) minimally differs from the one in (42). The only significant difference is the number value of the absolutive agreement marker on the finite auxiliary, which co-varies with the embedded absolutive element.

(43) [nobela erromantikoak irakurtzea] gustatzen zaizko.

novel romantic-pl.A read-N-det.A like-hab aux-3pl.A-3singD 'He/she likes to read romantic novels.'

Another pair illustrating LDA is given in (44a,b), where this time, the clause is marked dative. As in (43), the number value on the agreement marker associated with the clause can co-vary with the value of the absolutive element inside the clause.

(44) a. Uko egin dio [kakteordainak eskatzeari] refusal do Aux(3sE-3sD-3sA) damage-A-pl ask-for-N-Det-D

¹⁴ Unless otherwise noted, all the Basque data come from Etxepare (2007).

© <i>Iberia</i> : An International Journal of Theoretical Linguistics	
http://www.siff.us.es/iberia/index.php/ij/index	

vol 1.1, 2009, 1-32 ISSN 1989-8525



b. Uko egin die [4 refusal do Aux(3sE-3pD-3sA) o 'He refused to pay damages.'

[kakteordainak eskatzeari] damage-A-pl ask-for-N-Det-D

The examples in (44) are revealing, as it shows that LDA in part relies on the structure created by independent clausal agreement. Since both the clause and the embedded nominal in (42)-(43) were absolutive, it wasn't clear which element the agreement marker on the finite auxiliary was associated to. As the examples (44) indicate, the agreement marker is determined by the case-value of the clausal complement, but the number value of that marker can refer to either the clause (necessarily singular), or the absolutive object inside that clause.

The agreement-marker facts just discussed provides a very clear way of showing that Basque LDA is not dependent on restructuring. As Etxepare 2007 points out, restructuring exists in Basque, and agreement can take place out of restructuring complement, but if such is the case, there will be an extra agreement marker on the finite auxiliary, as (45) reveals.

$t_{\rm m}$ fut $\Lambda_{\rm m}$ (1pE) and 2c among the people find N Les	
try-fut Aux(1pE) you-2s among-the-people ind-N-Loc	
b. Saiatuko zaitugu [(?zu) jendartean aurkit:	zen]
try-fut Aux(1pE-2sA) you-2s among-the-people find-N	-Loc

'We will try to find you in the multitude.'

Unlike what we found in Tsez (and Hindi, see Chandra 2007), a dative element c-commanding the agreeing nominal in the embedded clause blocks LDA:

(46)*Jonek [Mireni liburu batzuk erostea] erabaki ditu.John-E Miren-dat book some-abs-pl. buy-nmlz-D decided aux-3sE-3pA 'John decided to buy Miren some books.'

The fact that LDA becomes possible again if the absolutive element scrambles past the dative element (47) suggests that we are dealing with an intervention effect, not present in Tsez because, unlike Basque datives, Tsez (and Hindi) datives do not enter into agreement relations.

(47) Jonek [liburu batzuk Mireni erostea] erabaki ditu. John-E book some-abs-pl. Miren-dat buy-nmlz-D decided aux-3sE-3pA 'John decided to buy Miren some books.'

Like in Tsez and Hindi, Basque LDA is impossible if the clausal complement is introduced by a complementizer.

(48)*Jonek pentsatu ditu [bizilagunak kontra dituela]



Jon-E thought aux-3sE-3pA neighbor-det-p-A against has-comp. 'John thinks that he has the neighbors against him.'

As in Tsez, the presence of an A-bar checking relation at the left periphery of the complement clause blocks LDA (49), although, interestingly, this time even the very element at the edge of the clause (*wh*-argument) cannot trigger agreement, which indicates that being at the edge of the clause cannot be a requirement for successful LDA in Basque. (In this, Basque differs from Passamaquoddy,¹⁵ where LDA implicates an A-bar element at the edge of the complement clause; see Bruening 2001.)

(49) a. Badakigu zein(tzu) erosi.
We-know(3sA) which(pl) to-buy
b. *Badakizkigu zein(tzu) erosi.
We-know(3plA) which(pl) to-buy
'We know which ones to buy.'

As in Hindi, LDA in Basque allows for the nominal controlling agreement to take wide-scope over matrix material (but unlike German/Itelmen, high scope is not forced). This patterns according to Bobaljik and Wurmbrand's case-scope correlation discussed above, as there is every reason to believe that the absolutive element triggering agreement is case-marked inside the embedded clause. (Basque's agreement morphology is so rich and systematic that we can be sure that case on the absolutive nominal does not come from the matrix clause.)

(50) Leiho guziak ixtea ahaztu zaizkio. window all-D-pl close-Nom-D forgot aux-3sD-3pA

'He forgot to close all the doors.' (all >> forget; forget >> all)

To sum up so far, the peculiarity of Basque LDA is that agreement is

¹⁵ I believe that the pattern found in Passamoquoddy extends to the one discussed in Branigan & McKenzie (2002) for Innu-Aimun. Only a few examples provided by Branigan and McKenzie have LDA obtain with an element not visibly at the edge of the clause. Unlike what Polinsky and Potsdam document for Tsez, LDA in Passamoquoddy and Innu-Aimun is possible with a topic immediately above a wh-phrase that makes the embdded clause interrogative. This suggests that in Passamoquoddy and Inna-Aimun, the necessary condition of LDA is presence of an element at the very edge of what looks like a CP-domain. This sort of LDA seems tailored for a Phase-based approach that relies on the Phase Impenetrability Condition. If it can be shown that the agreeing nominal stays at the edge of the embedded clause, then such examples militate in favor of Agree, as the agreement relation cannot be reduced to adjacency.



independently established by the clause and only the number value (not the case value) on the agreement can be overridden.¹⁶ Because the case-value of the agreement marker is dependent on the case that the clause bears, it is safe to assume that the head of the clause (perhaps, Kase^o) always enters into an agreement relationship with the matrix finite auxiliary. Number-agreement appears to be a secondary process.¹⁷ Perhaps for this reason, Etxepare (2007) and Preminger (2009) (and also Chandra 2007, although she does not rely on Agree¹⁸) have proposed that LDA in Basque takes place in two steps: an agreement relation between the nominal element and the head of the clause, followed by agreement between the head of the clause and the finite auxiliary an instance of stacked agreement relations not unlike what has been suggested above for Tsez. The interesting difference between Tsez and Basque is that no topic-effect arises in the latter. As a result, it may well be that the agreement relation between the head of the clause and the nominal controlling LDA takes place at a distance (supporting Agree). As we saw, LDA is impossible if the nominal is at the edge of the clause. (Presumably because such movement would be of the A-bar kind and would require a CP/Force layer, which in turn would block LDA.)

Etxepare and Preminger both pursue this route. Both assume a structure for the nominalized clause that is as in (51) (labels differ across proposals).

$(51) \left[\mathsf{K}^{\mathrm{o}} \left[n^{\mathrm{o}} \left[\mathsf{T}^{\mathrm{o}} \left[v^{\mathrm{o}} \left[\mathsf{V}^{\mathrm{o}} \right] \right] \right] \right] \right]$

Preminger in particular claims that number agreement in LDA is determined by the first nominal in the c-command domain of the Probe (head of the clause; K° , say). This generalization, however, fails to take into account the fact that we are dealing with obligatory control clauses, which I assume requires the presence of syntactic element responsible for the control reading (especially since we are not dealing with a restructuring context): PRO (under standard assumptions), or a copy of the controller (under Hornstein's 1999 movement analysis of control). Given that all arguments are capable of entering into agreement relations (including PRO, according to San Martin 2002), either

¹⁶ Evidence for this dependence of LDA on clausal agreement comes from the fact that although a dative element can control LDA, it can only do so across a Dative marked clause. It cannot control agreement if the agreement marker is associated with a clause bearing absolutive case (see Etxepare 2007).

¹⁷ The 'first case-agreement, then number-agreement' is reminiscent of A-over-A/Person-Case-Constraint configurations.

 $^{^{18}}$ Chandra takes the ϕ -features on the clause to raise, in a clitic-like fashion, from the agreeing DP to the head of the clause.

we must assume that the element effectively controlling agreement moves past PRO, or else we rely on the fact that traces/copies of moved elements do not intervene, which would make it possible for the head of the clause to agree (long-distance) with the absolutive element across the trace/copy of the controller. If such a movement analysis of control is adopted, agreement cannot percolate 'strictly' cyclically, from *v*P to KP (the controllee would interfere). It must be established at the phase-level (K^Q), once the 'controller' has evacuated the c-command domain of the phase head heading the clause.¹⁹ This reasoning parallels the argument I presented in Boeckx (2008a) to the effect that Agree can operate long-distance if potential interveners evacuate positions that stand in between the Probe from the Goal.

To sum up, although the Basque data indicate that LDA does not involve the establishment of a direct Agree-relation between a nominal inside a clause and a matrix verb across a clausal boundary, it suggests that agreement can take place across several phrases (specifically, an object in vP and the head of the clause, K° , with projections like nP and TP in between; cf. (50)).

Thus, the configuration I take to underlie Basque LDA is as in (51).

The stacked agreement analysis makes it clear that high scope of the absolutive object cannot depend on movement (for purposes of agreement or case) of the latter (as Chandra had suggested for Hindi), for if the object were allowed to move outside the clause for agreement purposes, we would not be able to explain why only the number value, and not the case value of agreement marker can be affected under LDA. If movement of the object happens, it must be solely for scope purposes (QR), or else the idea that agreement/phi-feature values are sufficient to extend scope must be adopted.

The picture that emerges is that movement/adjacency is not required for agreement. Agree suffices, but like all operations in the grammar, Agree will be bounded – confined to operate within a search domain, such as a phase (cf. Chomsky's 2001 version of the Phase Impenetrability Condition.)

¹⁹ Note, incidentally, that Basque LDA seems to provide an empirical argument against Landau's (2000) analysis of Obligatory Control, since the latter requires PRO to be licensed via long-distance Agree. Since Basque LDA is confined to OC contexts, this would mean that two distinct instances of LDA would have to take place, targeting the same domain (the head of the embedded clause). It take it that the logic of relativized minimality would disallow this, leaving no way for PRO to be licensed other than by movement into the matrix clause (along the lines of Hornstein 1999).



2.4. LDA in Icelandic

Having discussed instances of LDA in Hindi, Tsez, and Basque, let me turn to LDA in Icelandic, where patterns of LDA emerge in the context of nominative 'objects'.

The syntax of nominative objects in Icelandic has been the subject of intensive research within the minimalist program in recent years (see Boeckx 2008a for review). Nominative objects refer to nominative Case-marked elements found in the context of Quirky subject constructions.

(53) Henni voru gefnar bækurnar. she.DAT were.PL given.PL books.NOM.PL 'She was given the books.'

(54) Við kusum *hún/hana. we.NOM elected she.NOM/her.ACC 'We elected her.'

(55) Mér virðast þeir vera skemmtilegir. me.DAT seem.3PL they.NOM be interesting 'It seems to me that they are interesting.'

In Icelandic, only nominative Case-marked elements can trigger overt agreement on the finite verb. In particular, Quirky subjects don't trigger morphological agreement on the finite verb.

(56)Stelpunum var hjálpað.The girls.Dat.pl.fem was.3sg helped.sg'The girls were helped.'

Perhaps the most discussed aspect of nominative objects in Icelandic is the fact that agreeing nominative objects are limited to 3rd person. That is, 1st and 2rd person nominative objects are excluded when agreement obtains (as in mono-clausal contexts). Compare (54) and (55).

(57)*Henni leiddumst við.

Her.Dat bored.1pl us.Nom

'They were bored with us.'

Boeckx (2000) took the latter fact to mean that nominative objects can only trigger number agreement (compatible with 3rd person, but not with 1st and

I NAKLACIDA V

2nd person elements), and that pronominal nominative objects require verbal agreement for (case-)licensing.²⁰ Hence the unacceptability of (57).

Boeckx (2000) (and much subsequent work, especially by Anagnostopoulou and Rezac) argued that the person/number restriction on nominative objects could be accounted for if it were taken to be a special case of the more general Person-Case Constraint (Bonet 1994), which states that in the presence of dative agreement on a verbal form/dative clitic, accusative agreement with that verb/accusative clitic is confined to 3rd person.

On the basis of this PCC-oriented approach, I argued that Quirky subjects do trigger (covert) person agreement on T, which only leaves number agreement available for nominative objects. I took this mean that nominative objects are licensed by (finite) T° .

The approach immediately explained why agreement with an embedded nominative object is banned if there is a Quirky element intervening between the finite verb in T° and the nominative object, as in (58).²¹

(58) Mér fannst/*fundust [henni leiðast þeir]. me.dat seemed.3SG/3PL her.DAT bore they.NOM

'I thought she was bored with them.'

But my 2000 analysis left unexplained how nominative case is licensed in (57). It also left unexplained why agreement between the finite verb and the nominative object is obligatory²² in mono-clausal contexts, but optional across clausal boundaries:

- (59) a. Henni leiddust strákarnir. her.dat bored.3PL the.boys.NOM 'She found the boys boring.'
 - b. ??*Henni leiddist strákarnir. her.DAT bored.3SG the.boys.NOM

²¹ Sigurðsson & Holmberg (2008) report a dialect where this generalization is sometimes violated. I assume that in these cases the lack of blocking effect of the quirky subject is due to the fact that the raise has raised after the establishment of the relevant Agree relation to a position above the quirky subject.

²² I should perhaps say, virtually obligatory. For discussion of the variation found in this domain, see Sigurðsson (1996) and Sigurðsson & Holmberg (2008), among others.

²⁰ Roberts's (in press) framework would nicely capture this, as for him pronouns are the phi-features of the verb. If the phi-features on the verb can't be specified for +person, +person pronouns will be ruled out.

'She found the boys boring.'

(60) Mér virðist/virðast þeir vera skemmtilegir.me.DAT seem.3SG/3PL they.NOM be interesting'It seems to me that they are interesting.'

Interestingly, a non-nominative (ECM) object can be 1st or 2nd person if agreement does not obtain with the finite verb (61), unless in those cases where the embedded clause also contains a dative subject.

(61) Þeim hefur/*höfum/*hafa alltaf fundist [við vinna vel] Them.Dat have3sg/1pl/3pl always found we.Nom work well 'They have always thought that we worked well.'

(62)*Jóni virtist [Bjarna hafa líkað ég/við/þið] John.Dat seemed Bjarni.Dat have liked INom/weNom/youNom 'It seems to John that Bjarni likes me/us/you.'

The very last example clearly indicates that whatever PCC effects obtain in Icelandic, they must be dissociated from Agreement with finite T. Boeckx 2008a concluded from this that nominative objects are elements licensed by v^0 , not (finite) T^o (see Alexiadou 2003 for a similar proposal; see also Taraldsen 1995). I argued that the number restriction on agreement with nominative objects is shown to follow from restrictions on VP-level agreement (i.e., object agreement) in general. Let me briefly sketch the argument here.

That v^0 may enter into Φ -feature checking is now standardly assumed for object agreement languages. It is also reasonable to assume that v^0 is the locus of past participle agreement in Icelandic. Consider (63).

```
(63) Við virðumst hafa verið kosnar.
```

We seemed.1pl have been elected.Nom.pl

'We seemed to have been elected.'

The idea that nominative Case on objects is licensed by the verbal head introducing the Quirky subject (v°) means that nominative case licensing (on objects, at least) must be divorced from (finite) T^o. It does not mean that nominative case licensing on objects has nothing to do with the presence of Quirky subjects. Recall that objects will surface with nominative case in Icelandic only in the presence of quirky subjects.

At a general level, we are here facing a situation in which the availability of a given structural Case (Nominative) is tied to the presence of thematic information (thematic/Quirky Case). The situation is strongly reminiscent of Burzio's Generalization (Burzio 1986). The latter expresses the idea that (structural) accusative Case is available only in the presence of an element

I NAKINA V

bearing the external theta-role assignment. Chomsky 1995 captures the correlation by position that both external theta-role assignment and (structural) accusative Case are properties of one and the same head: v^0 . Recast in Chomsky's terms, Burzio's Generalization expresses the idea that theta-role assignment by v^0 determines the latter's Case-licensing property.

In a similar vein, I would like to propose that a verbal head v^0 is endowed with the option of nominative Case licensing only if it assigns a thetarole realized as Quirky Case to an NP in its specifier. Several studies have now appeared (Svenonius 2002, Eythórsson 2000, Jónsson 2001) that indicate that the thematic nature of elements bearing Quirky Case is not as random as one might have thought. Most Quirky NPs are experiencers, goals, or beneficiaries; crucially, non-agents (see already Maling, Yip, and Jackendoff 1987). For the sake of concreteness, I will assume that Quirky-Case-marked elements are introduced as specifiers of v[non-agentive] (on flavors of v° , including nonagentive v° , see Pylkkänen 2002, Folli & Harley 2005, among others).

By hypothesis, v° , especially $v^{\circ}[non-agentive]$, lacks person phi-features. The number-restriction on nominative objects (the PCC effect found in Icelandic) would then follow not from an intervention effect on Probing (by T°), but by the fact that the Probe that unambiguously licenses nominative objects, with no intervening element along the checking path, is of a special kind, a kind that licenses inherently case marked experiencer (non-agentive) elements. The interfering effect by the dative element would then be established upon First Merge (of the Quirky subject), not under Agree (between T° and the Quirky subject).²³

The idea that nominative objects are licensed by v° has important consequences for the nature of Agree, not so much in the mono-clausal contexts, but in the long-distance cases. If agreement with the nominative objects is licensed by v° , not T^o, it enables long-distance agreement to be established under Agree. If agreement was with (matrix) T^o, by the PIC, the nominative Goal would have to raise to the edge of (matrix) v to be accessible. If agreement is with v° , the nominative element need only be at the edge of the lower phase. Assuming that there is no embedded C^o in the cases at issue, this means that the nominative object would still be accessible to matrix v° if it were at the edge of the embedded v-phase. (See Nomura 2005 for empirical evidence that the nominate object need not move to the matrix clause to establish agreement, unlike what Bobaljik and Wurmbrand discuss for German/Itelmen.)

²³ The situation can still be unified with classic PCC-examples, as I discuss in Boeckx (2008b). See also Adger & Harbour (2007) and Ormazabal & Romero (2007).



This is consistent with Nomura's 2005 claim that the optionality of agreement in long-distance contexts boils down to the optionality of restructuring. According to Nomura, LDA arises in restructuring environments. For Nomura, nominative case is licensed by the matrix clause²⁴ when agreement obtains, but by the embedded/non-finite T (or perhaps the C_{null} –T complex) when agreement fails. In other words, nominative in Icelandic cannot be associated one to one with agreement (which is another way of saying that nominative case can be default). But when agreement obtains, the person/number restriction emerges.

All in all, Icelandic may well provide another piece of evidence in favor of long-distance Agree, especially if agreement with nominative objects is assumed to involve v° , not T^o.

2.5. LDA cross-linguistically

Surface similarity is a poor guide to theoretical analysis, and rarely entails structural uniformity. LDA is no exception. The more instances of LDA one finds, the more diverse the phenomenon appears. This conclusion was already reached by Polinsky (2003), who looked at LDA patterns across languages from the perspective of a typologist. Polinsky concludes that surface LDA may be achieved by various means, such as (i) prolepsis, where the agreeing nominal is base-generated in the matrix clause and linked to the embedded verb by a rule of construal (Polinsky argues that Algonquian languages like Blackfoot and Fox display this pattern), (ii) raising a la ECM (as Quechua and Kipsigis), (iii) restructuring (as in German), and (iv) agreement from the edge of the embedded clause (as in Tsez). Polinsky thereby claimed that most instances of LDA actually reduce to "canonical" (i.e., clause-internal) agreement (Tsez being the only pattern requiring Agree, in her view).

Our investigation of LDA pattern in this paper has further refined the formal typology of LDA. It has confirmed Polinsky's claim that few LDA patterns are established at a very long distance. As a matter of fact, I have argued that no Agree relation can cross a phase-boundary (in accordance with Chomsky's 2001 PIC). But I have argued against the conclusion that Agree should therefore be dispensed with and replaced with an adjacency condition on Agreement. In particular, I have argued that Basque shows that, even if agreement between an embedded nominal element and a matrix verb is

²⁴ Nomura takes T^{\circ} to be the licenser, not v° . By arguing that T, regardless of finiteness, always licenses nominative, Nomura achieves a uniform licensing configuration for nominative, but he fails to explain why the presence of a Quirky subject imposes a person/number restriction on nominative even in non-finite contexts.

mediated by the head of the embedded clause, Agree is necessary to capture the long-distance (i.e., non-adjacent) relation between the ultimate controller of agreement (the nominal argument) and the agreement-mediator. In Basque we have seen that Agree can relate a Probe and a goal that are not adjacent so long as no phase boundary is found. A similar conclusion has been reached for Icelandic, and may also be valid for languages like Passamaquoddy and Innu-Aimun, where the controller of agreement visibly occupies the edge of the embedded clause (C-phase). The strength of the evidence from Passamaquoddy and Innu-Aimun boils down to whether the entire embedded clause is taken to agree with the matrix verb. If clausal agreement is assumed, Passamaquoddy and Innu-Aimun are on a par with Tsez, where all agreement is local. If clausal agreement isn't assumed (as Bruening 2001 and Branigan and MacKenzie 2002 do), then agreement will be long-distance.

Setting aside instances of prolepsis and ECM, we have seen cases of restructuring *cum* raising (German/Itelmen) (raising before by the presence of a phase boundary between the target and the controller of agreement), restructuring without raising (Icelandic, and maybe²⁵ Hindi), and mediated agreement (Tsez, where all instances of agreement could be established under adjacency; and Basque, where Agree is involved) giving rise to LDA. At least the data gathered from some of these languages enable me to claim with some confidence that agreement is not phrase-bounded, i.e. (long-distance) Agree exists. At the same time, none of the languages examined show evidence that agreement can cross phase-boundaries²⁶ (the lack of LDA involving multiple

The absence of agreement on the clause in German would remove the possibility of mediated agreement, which fits very well with Bobaljik & Wurmbrand's (2005) claim that raising is forced in such cases.

²⁵ I say 'maybe Hindi' because perhaps Hindi LDA is much closer to Basque, with agreement between the embedded nominal and the matrix verb mediated by the head of the embedded clause. This would account for why agreement must show up on the embedded verb when LDA explains, which is otherwise puzzling if Boeckx's (2004) multiple-Agree analysis is replaced by Bhatt's 2005 AGREE-account. The mediated-agreement hypothesis for Hindi would account for the lack of LDA in situations where more than one level of embedding must be crossed (see Chandra 2007), which also holds in Basque. Bhatt's (2005: 783) observation that LDA in Hindi is blocked if the embedded clause is introduced by a Case-marker would also be explained under the mediated-agreement hypothesis, as case-marked elements in Hindi do not participate in agreement.

Bošković (2007) provides an isolated example from Chukchee, where he claims Agree crosses a strong CP-phase. Bobaljik (2008) casts doubt on Bošković's interpretation of this example.



levels of embedding is highly relevant here), which can be interpreted as evidence for phase-based derivations.

3. Concluding remarks

The present work has examined the empirical reach of the minimalist operation *Agree* responsible for feature-licensing. I have concentrated on patterns of so-called long-distance agreement and shown that although not all instances of long-distance agreement that have been identified in the literature are unambiguous instances of 'pure' Agree (at a distance), at least some are. For these, an operation like Agree appears empirically necessary. We have seen evidence that Agree can relate items across phrase-boundaries (contrary to what a generalized Spec-head theory of agreement predicts), but no evidence that Agree can cross phase-boundaries. I take this to be an empirical argument in favor of Chomsky's phase-based derivation, especially his 2001 version of the Phase Impenetrability Condition.

REFERENCES

- Adger, David & Daniel Harbour. 2007. The syntax and syncretisms of the Person Case Constraint. *Syntax* 10, 2-37.
- Alexiadou, Artemis. 2003. On nominative Case features and split agreement. In Ellen Brandner & Heike Zinnsmeister (eds), New Perspectives on Case Theory. 23-52. Stanford: CLSI.
- Alexiadou, Artemis & Elena Anagnostopoulou (1999) Raising without infinitives and the nature of agreement. *Proceedings of WCCFL 18*, 14-26. Somerville: Cascadilla Press.
- Baker, Mark. 2008. *The syntax of agreement and concord*. Cambridge: Cambridge University Press.
- Bhatt, Rajesh. 2005. Long-distance agreement in Hindi-Urdu. *Natural Language and Linguistic Theory* 23, 757-807.

Bobaljik, Jonathan David. 2008. Where's phi? Agreement as a post-syntactic operation. In Daniel Harbour, David Adger & Susana Béjar (eds), *Phi Theory: Phi-features across interfaces and modules*. 295-328. Oxford: Oxford University Press.

Bobaljik, Jonathan David & Wurmbrand, Susanne. 2005. The domain of

© *Iberia*: An International Journal of Theoretical Linguistics <u>http://www.siff.us.es/iberia/index.php/ij/index</u> vol 1.1, 2009, 1-32 ISSN 1989-8525



agreement. Natural Language and Linguistic Theory 23, 809-865.

- Boeckx, Cedric. 2000. Quirky agreement. Studia Linguistica 54: 354-380.
- Boeckx, Cedric. 2001. Scope Reconstruction and A-movement. *Natural Language and Linguistic Theory* 19, 503-548.
- Boeckx, Cedric. 2004. Long-distance agreement in Hindi: theoretical implications. *Studia Linguistica* 58, 23-36.
- Boeckx, C. 2008a. *Aspects of the syntax of agreement*. London: Routledge.
- Boeckx, C. 2008b. The Person Case Constraint and Patterns of Exclusivity. In R.D'Alessandro, S. Fischer & G. Hrafnbjargarson (eds), Agreement restrictions. 87-101. Berlin: de Gruyter.
- Boeckx, Cedric & Youngmi Jeong. 2004. The fine structure of intervention in syntax In Chungja Kwon & Wonbin Lee (eds), *Issues in Current Linguistic Theory: A Festschrift for Hong Bae Lee*. 83-116. Seoul: Kyungchin.
- Bonet, Eulalia. 1994. The Person-Case Constraint: a morphological approach. *MIT Working Papers in Linguistics* 22, 33-52.
- Bošković, Željko. 2007. On the locality and motivation of move and Agree: An even more minimal theory. *Linguistic Inquiry* 38, 589-644.
- Branigan, Philip & Marguerite MacKenzie. 2002. Altruism, A-Movement, and Object Agreement in Innu-aimûn. *Linguistic Inquiry* 33,385-407.
- Bruening, Benjamin. 2001. Syntax at the Edge. Ph.D. dissertation, MIT.
- Burzio, Luigi. 1986. Italian syntax. Dordrecht: Reidel.
- Butt, Miriam. 1995. The structure of complex predicates in Urdu. Stanford, Calif.: CSLI.
- Chandra, Pritha. 2007. (Dis)agree: movement and agreement reconsidered. Ph.D. dissertation, University of Maryland.
- Chomsky, Noam. 1981. Lectures on Government and Binding. Dordrecht: Foris.
- Chomsky, Noam. 1986. Knowledge of Language. Its nature, origin, and use. New York: Praeger.
- Chomsky, Noam. 1991. Some notes on economy of derivation and representation. In Robert Freidin (ed), *Principles and parameters in comparative grammar*. 417-454. Cambridge, Mass.: MIT Press. [Reprinted in Chomsky, Noam. 1995. The minimalist program, 129-166. Cambridge, Mass.: MIT Press.]
- Chomsky, Noam. 1993. A minimalist program for linguistic theory. In Ken Hale & Samuel Jay Keyser (eds), *The view from Building* 20. 1-52. Cambridge,



Mass.: MIT Press. [Reprinted in Chomsky, Noam. 1995. The Minimalist Program, 167-217.]

- Chomsky, Noam. 1995. Categories and transformations. In Chomsky, N. 1995, *The minimalist program*, 219-394. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In Robert Martin, David Michaels & Juan Uriagereka (eds), *Step by step*. 89-155. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowic (ed), *Ken Hale: a life in language*. 1-50. Cambridge, Mass.: MIT Press.
- Chung, Sandra. 2004. Restructuring and Verb-Initial Order in Chamorro. *Syntax* 7, 199-233.
- Dikken, Marcel den. 2001. Pluringulars, pronouns, and Quirky agreement. *The Linguistic Review* 18, 19-41.
- Etxepare, Ricardo. 2007. Number long distance agreement in (substandard) Basque. In Joseba A. Lakarra & Jose Ignacio Hualde (eds), Studies in Basque and historical linguistics in memory of R. L. Trask. Supplements of the Anuario del Seminario de Filologia Vasca "Julio de Urquijo" XL:1-2. 303-350.
- Eythórsson, Thórhallur. 2000. Dative vs. Nominative: changes in quirky subjects in Icelandic. In *Leeds Working Papers in Linguistics* 8, 1-28.
- Folli, Rafaella & Heidi Harley. 2005. Flavors of v: Consuming results in Italian and English. In Paula Kempchinsky & Roumyana Slabakova, Aspectual Inquires. 95-120. Dordrecht: Springer.
- Frank, Robert. 2006. Phase theory and tree adjoining grammar. *Lingua* 116, 145-202.
- Grosz, Patrick & Pritty Patel. 2006. Long-distance agreement and restructuring predicates in Kutchi-Gujarati. Ms., University of Vienna and UC London.
- Hornstein, Norbert. 1999. Control and movement. Linguistic Inquiry 30, 69-96.
- Hornstein, Norbert. 2009. *A theory of syntax*. Cambridge: Cambridge University Press.
- Hornstein, Norbert & Jacek Witkos. 2003. Yet Another Approach to Existential Constructions. In Lars-Olof Delsing, Cecilia Falk, Gunlög Josefsson & Halldór Á. Sigurðsson (eds), *Grammar in Focus: Festschrift for Christer Platzack*. 167-184. Lund University: Department of Scandinavian Languages.
- Jónsson, Jóhannes Gísli. 2001. Not so quirky: on subject case in Icelandic. Ms., University of Iceland.

[©] *Iberia*: An International Journal of Theoretical Linguistics <u>http://www.siff.us.es/iberia/index.php/ij/index</u>

I NUKLYUD V

- Kayne, Richard S. 1989. Facets of Romance Past Participle Agreement. In Paola Beninca' (ed), *Dialect Variation and the Theory of Grammar*. 85-103. Dordrecht: Foris.
- Koopman, Hilda. 1992. On the absence of case chains in Bambara. *Natural Language and Linguistic Theory* 10, 555-594.
- Koopman, Hilda. 2006. Agreement configurations. In Cedric Boeckx (ed), *Agreement systems*. 159-199. Amsterdam: John Benjamins.
- Landau, Idan. 2000. *Elements of Control: Structure and Meaning in Infinitival Constructions*. Dordrecht: Kluwer.
- Lasnik, Howard. 1999. Minimalist analysis. Oxford: Blackwell.
- Lasnik, Howard & Mamoru Saito. 1991. On the Subject of Infinitives. In *Papers* from the 27th Regional Meeting of CLS, 324-343.
- Legate, Julie. 2005. Phases and Cyclic Agreement. *MIT Working Papers in Linguistics* 49, 147-156.
- Mahajan, Anoop. 1989. Agreement and Agreement Phrases. *MIT Working Papers in Linguistics 10: Functional heads and clause structure*, 217-252.
- Nomura, Masashi. 2005. Nominative case and AGREE(ment). Ph.D. dissertation, University of Connecticut.
- Ormazabal, Javier & Juan Romero. 2007. The Object Agreement Constraint. *Natural Language and Linguistic Theory* 25, 315-347.
- Pesetsky, David & Esther Torrego. 2001. T-to-C Movement: Causes and Consequences. In Michael Kenstowicz (ed), *Ken Hale: A Life in Language*. 355-426. Cambridge, Mass: MIT Press.
- Polinsky, Maria. 2003. Non-canonical agreement is canonical. *Transactions of the philological society* 101, 279-312.
- Polinsky, Maria & Eric Potsdam. 2001. Long-distance agreement and topic in Tsez. *Natural Language and Linguistic Theory* 19, 583-646.
- Postal, Paul M. 1974. On raising. Cambridge, Mass.: MIT Press.
- Preminger, Omer. 2009. Breaking Agreements: Distinguishing Agreement and Clitic-Doubling by Their Failures. *Linguistic Inquiry* 40, 619–666.
- Pylkkänen, Lina. 2002. Introducing Arguments. Ph.D. dissertation, MIT.
- Raposo, Eduardo & Juan Uriagereka. 1990. Long Distance Case Assignment. *Linguistic Inquiry* 21, 505.537.
- Roberts, Ian. In press. Agreement and Head movement: Clitics, incorporation

© *Iberia*: An International Journal of Theoretical Linguistics <u>http://www.siff.us.es/iberia/index.php/ij/index</u>



and defective goals. Cambridge, Mass: MIT Press.

- Sigurðsson, Halldór Ármann. 1996. Icelandic finite verb agreement. Working Papers in Scandinavian Syntax 57, 1-46.
- Sigurðsson, Halldór Ármann & Anders Holmberg. 2008. Icelandic Dative Intervention: Person and Number as separate probes. In Roberta D'Alessandro (ed), *Agreement Restrictions*. 251-280. Berlin: Mouton de Gruyter.
- San Martin, Itziar. 2002. Subordination and the distribution of PRO. Ph.D. dissertation, University of Maryland.
- Svenonius, Peter. 2002. Icelandic Case and the structure of events. *Journal of Comparative Germanic Linguistics* 5, 97-225.
- Taraldsen, Knut Tarald. 1995. On agreement and nominative objects in Icelandic. In Hubert Haider, Susan Olsen & Sten Vikner (eds), *Studies in Comparative Germanic Syntax*. 307-327. Dordrecht: Kluwer.
- Vergnaud, Jean-Roger. 1977. Personal letter to Noam Chomsky and Howard Lasnik (April 17, 1977). [Reprinted in Robert Freidin, Carlos Otero & Maria Luisa Zubizarreta (eds), *Foundational issues in linguistic theory*. 3-15. Cambridge, Mass.: MIT Press.]
- Wurmbrand, Susi. 2001. *Infinitives: Restructuring and clause structure*. Berlin: Mouton de Gruyter.

Cedric Boeckx

Cedric.Boeckx@uab.cat

Author's institutional data: Institució Catalana de Recerca i Estudis Avançats & Centre de Lingüística Teòrica – Universitat Autònoma de Barcelona