Restricted number and stubborn dative

Long-distance agreement across Basque nominalised complement clauses

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In varieties of Basque, objects embedded into absolutive- and dative-marked nominalised complement clauses can enter a long-distance agreement relation with the matrix auxiliary. The observed patterns are derived from the featural specifications and probing characteristics of different types of matrix probes: absolutive clauses appear opaquer because they are targeted by a person and a number probe, the former restricting the range of possible goals for the latter, while dative clauses seem more transparent because they are targeted by an integral probe, which, as a consequence of its integrity, is 'stubborn', and able to penetrate domains inaccessible to single-feature absolutive probes.

1. Introduction

Among the strategies employed in Basque infinitival complementation, nominalisation figures very prominently. For a subset of Basque speakers, nominalised complement clauses that are headed by a definite determiner and marked for case show selective transparency for long-distance agreement (Etxepare 2006). Example (1) illustrates this for a dative-marked clause: the clause itself triggers dative agreement on the matrix auxiliary (indicated in boldface), and the embedded object contributes its number features (boxed).

(1) Uko egin d-i-e-Ø [kalteordainak] eska-tze-a-ri].
refusal do 3.ABS-AUX-3PL.DAT-3SG.ERG damage.PL.ABS ask.for-NMS-DET-DAT
'He/she refused to pay damages.' (Etxepare 2006:(2b))

As will be shown below, the extent to which long-distance agreement is possible depends on two main factors: the case of the nominalised clause and the case, structural position, and featural specifications of the embedded object. The present analysis derives the observed patterns from the interplay between the matrix probes and the structures involved. Taking as a starting point the assumption that probes can discriminate between their putative goals on the basis of

phi-features (Béjar 2003) and case (Preminger 2014), it is proposed that absolutive agreement in Basque is a result of separate probes for person and number, which are specified to look for participant and plural features, respectively (Béjar & Řezáč 2009; Preminger 2009, 2011), and that dative agreement arises by virtue of an integral probe lacking any featural specifications. In addition, the range of possible goals of the absolutive number probe is assumed to be restricted by the nature of the argument targeted by the person probe, and the dative probe, as a consequence of probing for both person and number at the same time, is suggested to be 'stubborn', and hence able to enter domains not accessible to a single-feature absolutive probe. These characteristics of matrix probes, in combination with independently motivated structural considerations, will be shown to adequately capture the data under scrutiny.

The paper is organised as follows: section 2 illustrates the long-distance agreement patterns, and extracts a generalisation from the presented data. Section 3 is dedicated to the analysis, where section 3.1 sets the stage with a discussion of the properties of different types of Agree probes and the theoretical implementation thereof, section 3.2 provides an account of long-distance agreement across absolutive clauses, and section 3.3 deals with dative clauses. Section 4 extends the analysis to another type of nominalised clause and presents an interesting twist as well as a possible way of incorporating it into the current proposal. Section 5 concludes.

2. Long-distance agreement: the generalisation

The properties of Basque nominalised clauses have been a topic of much recent work (see, i.a., San Martin & Uriagereka 2002; Etxepare 2006; Preminger 2009; Duguine 2012; San Martin 2012; Řezáč et al. 2014). The main empirical focus of this paper lies in the type of nominalised clause whose nominal part consists of the nominalising suffix -tze and the definite determiner -a. These clauses, which I will refer to as -tzea clauses, behave like arguments of the matrix verb: they appear in argument positions, are marked with absolutive, ergative, or dative case, and trigger third person singular agreement in the corresponding case (San Martin & Uriagereka 2002; Artiagoitia 2003; Duguine 2012). This is illustrated in (2) for a dative-marked -tzea clause.

(2) [Haurrek irakur-tze-a-**ri**] lehentasuna eman children.ERG read-NMS-DET-**DAT** priority give d-i-Ø-**o**-gu.

3.ABS-AUX-SG.ABS-**3SG.DAT**-1PL.ERG

'We gave the priority to the children's reading.' (Duguine 2012:(8a))

The point of interest for the present discussion is that, for some Basque speakers, these clauses allow long-distance agreement (hereinafter LDA) between an object they embed and the matrix auxiliary. Such long-distance dependencies are, however, not available in an unrestricted manner: they are only possible across complement clauses (i.e., absolutive and dative, but not ergative clauses), and, as will be shown, the degree to which they can be established varies de-

¹ In Basque finite clauses, the phi-features (person and number) of the absolutive, ergative, and dative arguments are typically reflected on the auxiliary, which also inflects for tense and mood; the main verb surfaces as a participle, providing aspectual information. Synthetic (i.e., inflecting) main verbs exist, but are very rare (Hualde et al. 2003; Laka 1993:28f.).

² Etxepare (2006:303, fn. 2) characterises LDA as a 'substandard phenomenon', not obtainable by many speakers and disapproved of in formal contexts, but one that can nevertheless be found in literary works.

pending on the case of the nominalised clause and the case and featural makeup of the embedded object.

To begin with, both absolutive and dative clauses allow LDA with an embedded third person absolutive object. This is illustrated in (3) for an absolutive clause and in (4) (repeated from (1)) for a dative clause. In both examples, the only possible source of the plural agreement on the matrix auxiliary is the embedded object. Interestingly, note that the choice of the agreement morpheme reflecting the plural features of the embedded object depends not on the case of the object, but on the case of the clause: if the clause is absolutive (3), the plural features are reflected by an absolutive plural affix; if, on the other hand, the clause is dative (4), then the plural features of the embedded object contribute to the form of the dative agreement morpheme, even though the object itself bears absolutive case. In particular, the latter example shows that, in LDA contexts, a single agreement morpheme on the matrix auxiliary (in this case, -e) may reflect two syntactic elements, the nominalised clause and the embedded object, at the same time. This points to the conclusion that LDA with the embedded object has to be in some way mediated by the clause itself — if LDA was an entirely direct relation between the matrix auxiliary and the embedded object, then we would expect the absolutive object in (4) to result in absolutive (not dative) plural agreement on the matrix auxiliary, contrary to fact.^{3,4}

- (3) [Liburuak irakur-tze-a-Ø] gustatzen Ø-zai-zki-t.

 | book.PL.ABS | read-NMS-DET-ABS | like | 3.ABS-AUX-PL.ABS | -1SG.DAT |

 'I like to read books.' (Etxepare 2006:(98))
- (4) Uko egin d-i-e-Ø [kalteordainak] eska-tze-a-ri].
 refusal do 3.ABS-AUX-3PL.DAT-3SG.ERG damage.PL.ABS ask.for-NMS-DET-DAT
 'He/she refused to pay damages.' (Etxepare 2006:(2b))

Importantly, LDA with an absolutive argument is only possible if the latter is an object; LDA with a subject, whether absolutive or ergative, is ruled out (5). Moreover, embedded subjects, either overt or pro, are not only themselves unable to agree with the matrix auxiliary, they also block LDA with embedded objects (6).

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(5) [Haurrak geldi ego-te-a] gustatzen
child.DET.PL.ABS quiet be-NMS-DET.ABS like
Ø-zai-(*zki-)t.
3.ABS-AUX-(*PL.ABS-)1SG.DAT
'I like that the children be quiet.' (Etxepare 2006:(98))
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(6) Jonek_i [pro_j / Mikelek nobela erromantikoak irakur-tze-a] Jon.ERG pro / Mikel.ERG novel romantic.DET.PL.ABS read-NMS-DET.ABS proposatu d-(*it-)u- \emptyset . proposed 3.ABS-(*pt-)AUX-3SG.ERG 'Jon proposed for Mikel to read romantic novels.' (after Etxepare 2006:(20))

I will not attempt to provide an explanation for examples such as (5) and (6), but only note that

³ As will be discussed in detail below, the exact implementation of the mediating role of the nominalised clause presents one of the crucial points of divergence between the analysis to be defended here and the ones that have hitherto been proposed (specifically by Etxepare 2006 and Preminger 2009).

⁴ The reader might have noticed that the nominalised clause sometimes appears in the initial, and sometimes in the final position. According to Etxepare (2006:311, fn. 8), this has no influence on the availability of LDA.

the incompatibility of LDA with embedded subjects could be related to its incompatibility with embedded temporal adverbs anchored to utterance time (such as 'tomorrow'; see section 3.2.3). Both these properties may entail additional structure, which could then block a long-distance dependency (see Etxepare 2006 and Preminger 2009 for discussion).

Moving on to (third person) dative objects, they can only enter LDA if embedded into a dative clause (7). Etxepare (2006:340) notes that the result is 'not as natural' as with embedded absolutive objects, but that there is still a sharp contrast in comparison to LDA with dative objects embedded into an absolutive clause, which is entirely unacceptable (8).

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[ buruzagiei
(7)
      ?Uko
             egin d-i-Ø-e-Ø
      refusal done 3.ABS-AUX-SG.ABS-3PL.DAT-3SG.ERG chiefs.PL.DAT
      obedi-tze-a-ri].
      obey-NMS-DET-DAT
       'He/she refused to obey the chiefs.'
                                                                   (Etxepare 2006:(105))
     *Erabaki d-lit-u-Ø
(8)
                                            [ buruzagiei
                                                           obedi-tze-a].
      decided 3.ABS-PL.ABS-AUX-3SG.ERG chiefs.PL.DAT obey-NMS-DET.ABS
       'He/she decided to obey the chiefs.'
                                                                   (Etxepare 2006:(106))
```

As was the case with absolutive arguments, which could only enter LDA if they were objects, the structural position of the embedded dative argument is important as well. Even in dative clauses, LDA is only allowed if the embedded dative argument is a direct object, and is ruled out if it is an indirect object: compare the ungrammatical (9) with the only slightly unnatural (7). The reason for this restriction will be explored in more detail in section 3.3.3, making crucial use of the different structural positions of direct and indirect objects.

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(9) *Uko egin d-i-Ø-e-Ø [ lankideei opari refusal done 3.ABS-AUX-SG.ABS-3PL.DAT-3SG.ERG colleagues.PL.DAT present bat egi-te-a-ri].
one do-NMS-DET-DAT
'He/she refused to give a present to the colleagues.' (Etxepare 2006:(108))
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Finally, the person features of the embedded object play an important role in constraining LDA as well. Agreement with participant (first or second person) objects is impossible across absolutive clauses, regardless of whether the object is cross-referenced by both the person and the number agreement affix or only the number affix (10). In dative clauses, however, the person features of the object have no impact on the acceptability of LDA (11).⁵

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(10) *[Zu gonbida-tze-a-Ø] baztertu {za-it-u-zte / you.ABS invite-NMS-DET-ABS refused {2.ABS-PL.ABS-AUX-3PL.ERG / d-it-u-zte}.

3.ABS-PL.ABS-AUX-3PL.ERG}

'They have refused to invite you.' (Etxepare 2006: (117b))

(11) ?Arteak uko egin d-i-zue-Ø [ZUEI Artea.ERG refusal do 3.ABS-AUX-2PL.DAT-3SG.ERG you.PL.DAT]
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⁵ Capitalisation indicates that the pronoun is unpronounced.

obeditzea-**ri**]. obey.NMS.DET-**DAT** 'Artea refused to obey you.'

(R. Etxepare, p.c.)

To summarise, only embedded direct objects are capable of triggering LDA; neither subjects nor indirect objects may enter a long-distance dependency with the matrix auxiliary. Among direct objects, third person absolutive ones can always enter LDA, regardless of the case of the clause they are embedded into, and dative and participant direct objects may only enter LDA if embedded into a dative clause.⁶ The observed patterns are summarised in Table 1.

case of the clause	case of the object	person of the object
ABS	✓ ABS (3), *DAT (8)	√3, *1/2 (10)
DAT	✓ ABS (4), ?DAT (7)	any (11)

Table 1

An analysis of these patterns thus cannot rely (solely) on absolute restrictions, but has to take into account both the case of the clause and the case and featural specifications of the embedded object. In order to pinpoint the exact nature of these interactions, I will consider two guiding questions: firstly, why is LDA with dative and participant arguments impossible across an absolutive clause, but possible across a dative clause? In other words, why is a dative clause seemingly more transparent for LDA than an absolutive clause? Secondly, what yields the LDA hierarchy ABS > ?DAT_{direct} > *DAT_{indirect} across dative clauses? The task of the following section is to answer these questions.

3. The analysis

The answer to the first guiding question, namely, why dative clauses appear to be more transparent for LDA dependencies than absolutive clauses, forms the core of the analysis developed here. Briefly, the different degrees of LDA transparency of absolutive and dative clauses will be derived from the different properties of the probes underlying absolutive and dative agreement. I will therefore begin the discussion by outlining the basic properties of these probes in section 3.1, and then develop the proposal to provide an answer to the first guiding question, focusing first on (apparently) less transparent absolutive clauses in section 3.2, and then turning to (apparently) more transparent dative clauses in section 3.3. Finally, in section 3.3.3, I will address the second guiding question, concerning the LDA hierarchy ABS > ?DAT_{direct} > *DAT_{indirect} across dative clauses, and show that this hierarchy arises from the interaction of the dative probe with the syntactic structures entailed by these three different types of object.

⁶ The role of number is difficult to determine as LDA with a singular argument is in the majority of cases indistinguishable from a non-LDA pattern where the auxiliary only cross-references the whole clause. A context where the role of number for LDA could be investigated would be LDA with an embedded participant across a dative clause. While LDA is possible if the embedded object is plural (11), I unfortunately have no data to show if LDA is possible with an embedded singular participant object.

3.1. The probes

The present analysis is couched in the Obligatory-Operations Model of Preminger (2014). In this model, a probe instantiating a syntactic operation (e.g., Agree) is obligatorily launched as soon as an element that contains it (e.g., the Infl head) is merged into the structure. An operation is thus obligatory in and of itself, rather than indirectly (e.g., as a result of the need for uninterpretable features to be checked and deleted lest they cause a 'crash' at the interfaces; see Chomsky 2000, 2001). This has as a consequence that operations may fail: what is essential for the outcome of a derivation to be grammatical is not that the operation succeed, but only that it be triggered; once initiated, it can fail, leading not to ungrammaticality, but to the surfacing of default features (Preminger 2009, 2014:115).⁷ A context leading to failure of an operation arises if, for instance, the probe instantiating the operation finds no suitable goal, or if it encounters a phase, as we shall see will be the case in the Basque examples discussed here. There are two further properties that probes can have in the Obligatory-Operations Model, apart from being fallible, both of which are crucial for the proposal at hand: case-sensitivity and exact phi-featural specifications. I will first discuss the theoretical implementation of these two properties and then address the specifications of the Basque probes.

Beginning with case-sensitivity, Preminger (2014) shows that probes underlying Agree have to be capable of discriminating between goals with respect to the latter's case. This means that case assignment cannot be a reflex of agreement (as in Chomsky 2000, 2001), but rather has to be calculated before the operation Agree is initiated. This is done via a dependent case mechanism (Bobaljik 2008), which Preminger (2014) argues takes place in the syntax, rather than post-syntactically, thus allowing the probes responsible for the (syntactic) operation Agree to be sensitive to the case of their putative goals.

As for featural specifications, Béjar (2003) proposed that probes can be specified to look for particular phi-features. Following Béjar (2003), Béjar & Řezáč (2009), and Preminger (2014), among many others, the phi-featural specifications of probes can be modelled as subsets of a hierarchical feature geometry (Harley & Ritter 2002). In a feature-geometrical framework, features are not binary, but are privative elements. They are organised into hierarchical structures, where feature geometries including marked features (e.g., plural or participant) entail (i.e., are supersets of) feature geometries that include unmarked features (e.g., singular or third person). The feature geometries corresponding to the featural specifications relevant for the present proposal are illustrated in (12). The root node of the feature geometry (labelled ϕ in the diagrams) is the default, and corresponds to third person features. The number node (#), which is the daughter of ϕ , corresponds to singular features. Both aspects can be further specified: a participant node can be added (since the distinction between first and second person is irrelevant here, I ignore this difference) and so can a plural node. The diagrams should make clear what is meant by entailment in a feature-geometrical framework: the feature geometry corresponding to third person plural, for instance, entails the feature geometry corresponding to third person singular because the latter is a proper subset of (i.e., necessarily included in) the former.

⁷ In a Chomskian Agree framework, failure is not an option because it would inevitably lead to unchecked and undeleted uninterpretable features and, as a consequence, a crash at the interfaces.

In essence, then, a feature hierarchy has two parts: a person and a number part. Applying these insights to the operation Agree as conceived in the Obligatory-Operations Model, in order for a goal to be able to value a probe, its feature geometry has to either match or be richer than the feature geometry on the probe. Put differently, the goal needs to be specified for either the features that the probe is looking for or for features that entail the features that the probe is looking for. Goals that only include a subset of the probe's feature geometry will lead to failure and, consequently, to default agreement. To illustrate, if a probe is specified to look for participant features (which entail third person features), then only goals bearing participant features will be able to value this probe; third person goals will lead to failure. This, as will be illustrated presently, will be the case for the Basque absolutive person probe. If, on the other hand, a probe is specified to look for third person features (which, third person being the default, corresponds to the probe not being specified to look for any particular features at all), then both third person and participant goals will be able to value it. Similar behaviour will be demonstrated to apply to the Basque dative probe.

We can draw conclusions about the specifications of Basque Agree probes with respect to both case and phi-features (as a shorthand for subsets of a feature geometry) from the agreement morphemes that surface on the matrix auxiliary. As can be seen in the auxiliary schema in (13), illustrated in (14), three types of arguments can be cross-referenced on the auxiliary: absolutive, dative, and ergative. It seems rather straightforward, then, to assume that Basque has absolutive, dative, and ergative probes. Given that LDA is only possible across absolutive and dative clauses, I will focus only on absolutive and dative probes, and will not comment on the nature of ergative probes.

$$\pi. ABS - root - \#. ABS - DAT - ERG \qquad (adapted from Laka 1993:(22))$$

Turning to the phi-featural specifications, note that the person and number features of the absolutive argument are reflected on the auxiliary by two separate agreement morphemes, while the dative argument is cross-referenced by a single morpheme containing all its phi-features (a property referred to by Preminger 2014:50-54 as 'featural coarseness'). This suggests that absolutive agreement on the one hand, and dative agreement on the other, may result from slightly different mechanisms. In fact, Béjar & Řezáč (2009) and Preminger (2009, 2011) propose that absolutive agreement in Basque arises through separate probes for person and number, and that these probes are specified to look for participant (15-a) and plural features (15-b), respectively. I adopt this proposal and, pursuing the same intuition, suggest that dative agreement arises by virtue of a combined probe for person and number, which looks for no particular features (15-c).

(15) a.
$$ABS\pi [1/2]$$
 b. $ABS\# [PL]$ c. DAT $[\phi]$

These specifications predict that the absolutive probes will succeed only if they encounter a goal that bears participant and plural features; goals with other specifications will lead to failure. The

dative probes, on the other hand, will be able to receive a value from arguments bearing any phifeatures. These differences between the absolutive and dative probes will play a crucial role in explaining the LDA patterns under scrutiny.

3.2. Absolutive clauses 3.2.1. Restricted number

As just outlined, I assume, with Béjar & Řezáč (2009) and Preminger (2009, 2011), that Basque has two separate absolutive probes for person and number, which are specified to look for participant and plural features, respectively. Therefore, only goals bearing participant features are able to value the person probe, and only those bearing plural features are able to value the number probe. Since third person and singular features are lower on the feature-geometrical hierarchy than participant and plural features, respectively, a person probe encountering a third person argument will fail, as will a number probe encountering a singular argument. Importantly, under the Obligatory-Operations Model adopted here, this will not result in an ungrammatical derivation, but in default agreement. Note that the same goal may yield a different outcome for the two probes: in a simple finite clause containing a first person singular absolutive argument, for instance, the person probe will succeed, and yield first person agreement, while the number probe will fail, resulting in default singular agreement. The inverse scenario, where the person probe fails and the number probe succeeds, is, naturally, possible as well.

I follow Preminger (2009, 2011) in assuming that these two probes are ordered: the person probe probes first, followed by the number probe. The person probe is additionally proposed, in a sense, to clear the way for the number probe, which is in turn then able to reach elements that are more deeply embedded (see section 3.2.2 below for the exact theoretical implementation of this proposal). This accounts for what Preminger (2011:922) terms the 'hierarchy of fragility' in agreement, found in a range of typologically diverse languages: person agreement at a distance is more likely to fail than number agreement at a distance. Recall that this is precisely the pattern we find in the Basque LDA examples: in consonance with the hierarchy of fragility, and as expected from the proposed ordering of the probes, the matrix number probe is able to agree with an object embedded into an absolutive clause ((16), repeated from (3)), but the matrix person probe is not ((17), repeated from (10)).

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(16)
        Liburuak
                      irakur-tze-a-Ø1
                                         gustatzen Ø-zai-zki-t.
        book.PL.ABS read-NMS-DET-ABS like
                                                  3.ABS-AUX-PL.ABS-1SG.DAT
        'I like to read books.'
                                                                    (Etxepare 2006:(98))
       *[Zu]
                                     baztertu {za-it-u-zte
(17)
                 gonbida-tze-a-Ø]
        you.ABS invite-NMS-DET-ABS refused {2.ABS-PL.ABS-AUX-3PL.ERG /
        d-it-u-zte}.
        3.ABS-PL.ABS-AUX-3PL.ERG
        'They have refused to invite you.'
                                                                 (Etxepare 2006: (117b))
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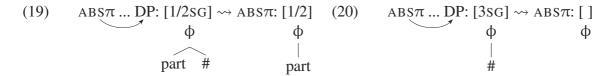
Still, as established in section 2, the ungrammaticality of *dituzte* in (17) shows that number LDA, too, is impossible if the embedded object is a participant. This cannot be derived solely from successive probing, but calls for an additional constraint, whose nature can be inferred from the Basque agreement morphemes for first and second person. The forms of these mor-

phemes depend not only on the person, but also on the number of the argument they reflect (e.g., in the present tense, 1sg yields na-, and 1PL yields ga- plus a plural morpheme), implying an interaction between the person and the number probe. I suggest that this interaction is not arbitrary, but that the range of possible goals for the number probe is restricted by the featural makeup of the goal encountered by the person probe:

(18) Restricted number (informal definition)

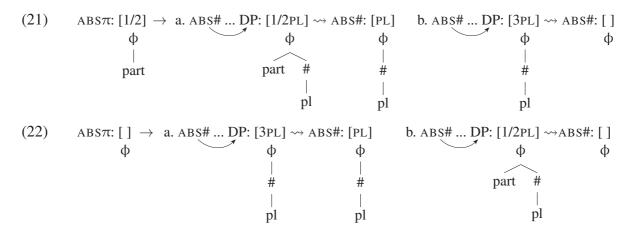
If the person probe targets a participant argument (i.e., if it succeeds), then the number probe has to target a participant argument as well. Conversely, if the person probe does not target a participant argument (i.e., if it fails), then the number probe cannot target a participant argument, either.

The reason for this restriction can be found in the form of the hierarchical feature geometry. Béjar (2003) argues that valuation of a probe corresponds to copying the subset of the feature geometry (representing the featural specification) found on its goal. Applying this to the Basque absolutive person probe, which, recall, is specified to look for participant features, a successful probing cycle is illustrated in (19): the probe targets a participant DP (the featural specifications in square brackets are included only for legibility; the actual specifications are provided by the depicted feature geometries). For concreteness, I have chosen a singular DP, but a plural one would yield the same result: since the probe only probes for person, only the person part of the feature geometry of the goal is copied onto the probe, resulting in a valued probe on the right-hand side of the example. A situation where the person probe fails is illustrated in (20): in this case, the probe encounters a third person argument. Since the probe can only be valued by participant arguments, it fails, and receives no value. This results in the reduction of the probe to the root of the feature hierarchy (φ; see Béjar 2003) and the surfacing of default agreement.



With the valuation mechanism in place, we can now turn to the restriction that the person probe imposes on the number probe. Assuming that the number probe has access to the subset of the feature geometry recorded by the person probe, and that it is only able to add to this geometry the node representing number features, but not change the part of the tree corresponding to the person side, it will have to find a matching goal. In other words, the number probe looks for the missing piece of the jigsaw to complete the absolutive feature geometry. The possible probing sequences are illustrated in (21) and (22). In both examples, the left-hand side of the example represents the person probe after having probed, and is followed by two hypothetical subsequent probing steps by the number probe: a potentially successful one in (a), and an inevitably unsuccessful one in (b). In (21), the person probe has succeeded, meaning that it has been valued by the targeted argument: a person feature geometry containing a participant node has been copied onto the probe (as in (19) above). As a consequence, the number probe may target only an argument that contains the participant node as well. Bearing in mind that the number probe is specified to look for plural features, the step in (a), where the number probe in fact targets a participant argument, will be successful if the goal contains plural features (if the goal contains singular features, the number probe will fail). The step in (b), however, is doomed to fail,

since the goal of the number probe is not a participant, and hence does not match the feature geometry previously copied onto the person probe. Therefore, even if the goal bears plural features, as illustrated in the example, the number probe will not be able to agree with it, and will inevitably yield default agreement (as outlined above, I assume that failure results in the probe being reduced to the very root of the feature geometry). Example (22) can be explained in a parallel manner: since the person probe has failed (cf. (20) above), the number probe will only be able to target third person arguments, potentially agreeing with them for plural (a). It will not be able to successfully target a participant argument (b); such a configuration will inevitably lead to failure and default agreement, even if the targeted DP contains plural features.



The restriction in (18) can therefore be restated as follows:

(23) Restricted number (feature-geometrical definition)

The range of goals that the absolutive number probe can successfully agree with is restricted to those whose person side of the feature geometry corresponds to the subset of the feature geometry previously copied onto the absolutive person probe.

This restriction will be crucial for deriving the LDA patterns across absolutive clauses. In a simple finite clause with a single absolutive argument, it will have no effect since the number probe will inevitably target the same argument that the person probe has targeted, this argument being the only viable goal in the clause. Still, before turning to the analysis of Basque LDA, let us take a brief look at a phenomenon that lends independent support to the probe specifications and ordering, as well as the restriction proposed above: the Person-Case Constraint (PCC).

3.2.2. Person-Case Constraint

The PCC is a pervasive phenomenon in languages across the world, stating roughly that (phonologically weak) direct objects are restricted to third person in the presence of a (phonologically weak) indirect object (see, i.a., Bonet 1991; Anagnostopoulou 2003; Béjar & Řezáč 2003). In Basque, the PCC is reflected as a constraint on the form of the finite auxiliary: there exist no forms that cross-reference both a participant absolutive object and an indirect (dative) object. This is illustrated by the contrast below: an indirect (dative) object is only compatible with a third person direct (absolutive) object (the form of the auxiliary in (25) is only hypothetical, and does not in fact exist).

- Zuk niri liburuak saldu d-i-zki-da-zu.
 you.ERG I.DAT books.DET.ABS sold 3.ABS-AUX-PL.ABS-1SG.DAT-2PL.ERG
 'You have sold the books to me.' (M. Urquiza, p.c.; after Laka 1993:(7a))
- (25) *Zuk harakinari ni saldu na-i-o-zu.
 you.ERG butcher.DAT I.ABS sold 1.ABS-AUX-3SG.DAT-2PL.ERG
 'You have sold me to the butcher.' (Laka 1993:(7b))

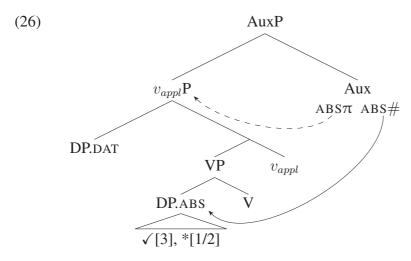
Note further that, while agreement for number (with third person absolutive objects) is possible in such configurations (24), agreement for person is not (25). The PCC in Basque, then, appears to adhere to the very same pattern as LDA across an absolutive clause, and, as already observed by Preminger (2011), can thus also be subsumed under the crosslinguistically valid hierarchy of fragility (number agreement at a distance is less prone to failure than person agreement at a distance). As outlined above, Preminger derives this hierarchy by imposing an ordering on the two probes — person before number — and by making it possible for the person probe to render an intervening element invisible to the number probe. One strategy that he employs to accomplish this is a phase-unlocking logic similar to the one proposed in Rackowski & Richards (2005), where a phase boundary targeted by a probe can be ignored by this probe for the rest of the derivation. Due to the tight connection between the person and number probes, Preminger proposes that the person probe can unlock a phase for subsequent probing by the number probe.

This proposal, combined with the probe specifications and the restriction on the number probe in (18), can successfully derive the data in (24)/(25).8 Assuming that an indirect object is introduced into the structure as the specifier of a high applicative head (Pylkkänen 2000), and that this head projects a phase (McGinnis 2001), a derivation of a sentence with a dative indirect object would proceed as shown in (26). After the applicative phrase has been completed, a head containing the absolutive person and number probes is merged. The label Aux is used only for expository purposes; I am not committed to any particular nature and location of this head, and also leave open the possibility that the person and number probes are triggered by separate heads (as in, e.g., Preminger 2011). The probing starts by the person probe, which encounters the phase constituted by $v_{appl}P$, and, since $v_{appl}P$ is, evidently, not a participant, the person probe fails (indicated by the dashed arrow in the tree diagram). As discussed above, this yields default (third person) agreement. However, by targeting the phasal v_{appl} P, the person probe has unlocked it, enabling the number probe to cross it and find the absolutive object. Crucially, given the restriction in (18), the number probe is then only able to target third person arguments, which explains the impossibility of a participant absolutive object in constructions including an indirect object: the person probe will inevitably target the phasal $v_{appl}P$ and thereby restrict the range of possible goals for the number probe to third person arguments. 10

⁸ Preminger himself also analyses the PCC in Basque, albeit in a manner which differs slightly from the analysis pursued here. The interested reader is referred to Preminger (2011), in particular p. 924.

⁹ Béjar & Řezáč (2009) situate the person probe on little *v*, while Arregi & Nevins (2008) argue that these probes have to be merged into a higher position.

¹⁰ Since probes are case-discriminating, I assume that the dative argument is ignored by the absolutive probes.



The hierarchy of fragility in general and the Basque PCC data in particular thus provide evidence for the person probe taking precedence over the number probe, since the inverse ordering would, all other things being equal, make the wrong predictions. If the number probe were to probe first, then we would expect it to encounter the phasal $v_{appl}P$ and fail, predicting plural agreement (as in (24)) to be impossible in such configurations. Moreover, applying the phase-unlocking logic would enable the person probe to successfully target the absolutive argument, regardless of the latter's person features, predicting examples like (25), once again incorrectly, to be grammatical.

3.2.3. LDA across absolutive clauses

Having shown that the ordering of the probes and the restriction on the number probe in (18) are needed independently of LDA, let us finally turn to absolutive -tzea clauses and tackle the mechanism behind LDA. The underlying structure of -tzea clauses may, rather uncontroversially, be divided into a verbal and a nominal domain. As outlined in section 2, their nominal domain consists of the nominaliser -tze and the (clausal) definite determiner -a, which, following Preminger (2009), may be analysed as realising an n and a D_c head, respectively (the subscript c stands for 'clausal', leaving open the possibility that the definite determiner heading -tzea clauses is not the same element as a regular nominal determiner). As for their verbal domain, -tzea clauses normally allow overt subjects and may be modified by temporal adverbs anchored to utterance time (such as 'in two days from now' or 'tomorrow'). Interestingly, these attributes change if LDA between the embedded object and the matrix auxiliary is established (Etxepare 2006; San Martin 2012). Example (27) (repeated from (6)) shows that LDA — evident from the plural agreement affix -it corresponding to the plural embedded object — is impossible if the nominalised clause includes a subject, either overt or pro. Example (28) shows the same for configurations in which the nominalised clause is modified by an adverb such as bihar 'tomorrow'. 11 This change in the temporal properties and the unavailability of a subject in the context of LDA points to a significantly reduced verbal part of the nominalised clause, specifically a VP (or vP), following Preminger (2009).

¹¹ The different ordering of agreement morphemes on the auxiliary in (28) is due to a phenomenon called ergative displacement (see, i.a., Laka 1993; Béjar & Řezáč 2009; Keine 2010: chapter 4, as well as section 4.2 below).

- Jonek_i [pro_j / Mikelek nobela erromantikoak irakur-tze-a] Jon.ERG pro / Mikel.ERG novel romantic.DET.PL.ABS read-NMS-DET.ABS proposatu d-(*it-)u- \emptyset . proposed 3.ABS-(*proposed for Mikel to read romantic novels.' (after Etxepare 2006:(20))
- [Bihar liburu batzuk sal-tze-a] pentsatu tomorrow book[s] some sell-NMS-DET.ABS plan gen-(*[it]-)u-en.

 1PL.ERG-(*[PL.ABS]-)AUX-PST

'We planned to sell some books tomorrow.' (Etxepare 2006:(27b))

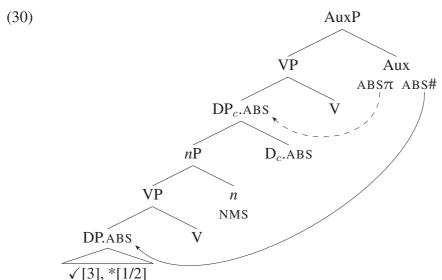
With all the necessary components in place, we are now in a position to consider the derivation of LDA itself. The underlying structure of an example such as (29) (repeated from (3)) is depicted in (30). After the clausal DP_c has been constructed, it is merged first with the matrix verb, and then with a head containing the absolutive probes (once again, the label Aux is used only as a placeholder for the head or heads hosting these probes). As outlined above, the person probe probes first and encounters DP_c , which, being a clause, does not bear participant features. The person probe therefore fails (indicated by a dashed arrow), yielding default third person agreement. Similarly to what we have seen in the PCC example in (26) above, by targeting DP_c , which constitutes a phase (see McGinnis 2001; also Preminger 2009), the person probe renders it permeable for subsequent probing by the number probe. The number probe can then find the embedded absolutive object, but, due to the restriction in (18), it will only be able to target a third person argument: the failure by the person probe will result in its reduction to the root of the feature geometry ($[\phi]$), so the number probe will only be able to target arguments with a matching person-portion of the feature geometry, i.e., third person arguments (as illustrated by the schema in (22) above).

[Liburuak irakur-tze-a-Ø] gustatzen Ø-zai-zki-t.

books.PL.ABS read-NMS-DET-ABS like
3.ABS-AUX-PL.ABS-1SG.DAT

'I like to read books.'

(Etxepare 2006:(98))



There is one important difference between the LDA and the PCC examples: while the failure

of the absolutive probe(s) in LDA results in default agreement, it leads to an ungrammatical outcome in a PCC context. This can be explained by the Person Licensing Condition axiom (Béjar & Řezáč 2003:53) which, in its modified version (Preminger 2011), states that an argument bearing participant features has to agree with a person probe if the two are part of the same clause. Since the participant argument and the absolutive probe are indeed part of the same clause in PCC contexts, but not in LDA contexts, failure to agree will lead to an ungrammatical result in the former case, but to default agreement in the latter. Crucially, the ungrammaticality of the PCC examples is not a direct consequence of the failure of the probes, but arises by virtue of an independent constraint — the Person Licensing Condition.

The availability of LDA across absolutive clauses thus arises from an interplay between the featural specifications of the absolutive person and number probes (15), the restriction in (18), and the possibility of phase-unlocking. Returning to the guiding questions posed at the end of section 2, the unavailability of LDA with participant objects across absolutive clauses is accounted for by the restriction in (18): the person probe will always target the DP_c , restricting the range of possible goals for the number probe to third person arguments. As for the unavailability of LDA with dative arguments, this can be explained simply through the case-discriminating property of probes: an absolutive probe cannot target a dative argument, and hence absolutive agreement morphemes will not be able to reflect the phi-features of a dative argument. Furthermore, if, as suggested by Etxepare (2006), the number and nature of probes in a finite clause reflect the number and nature of the arguments taken by the main verb, then no dative probe will be available in the examples under scrutiny, and no dative agreement will be able to take place.

3.2.4. Previous proposals

Before closing this section and turning to dative clauses, a juxtaposition of the current proposal with those previously put forward, notably by Etxepare (2006) and Preminger (2009), is in order. A comparison with the latter can be drawn rather straightforwardly, since several of its components (viz., the structure of *-tzea* clauses, the fallibility of agreement, and the phi-featural specifications of the Basque absolutive probes) have been adopted here. Both Preminger's and the present analysis exclude LDA with dative objects by limiting the goals of the probes involved to absolutive arguments, and explain the impossibility of person LDA by proposing that the matrix person probe targets the DP_c and fails, inducing default agreement. The two diverge, however, in their ability to capture the remaining empirical point — the impossibility of number LDA with participant objects, illustrated in (31) (partially repeated from (10)).

The decisive difference between the two proposals concerns the way in which the number features of the embedded object end up on the matrix auxiliary: while Preminger proposes that D_c itself has a (case-discriminating) number probe, agrees with the embedded object, and then transfers its number features to the matrix auxiliary, I have argued that the embedded object agrees with the matrix number probe directly. For Preminger, then, (number) LDA is appar-

¹² Preminger does not use phase-unlocking here, ergo the matrix number probe targets the DP_c as well.

ent; it takes place indirectly and is actively mediated by D_c , whereas under the present analysis LDA is real, happens directly, and the role of D_c is a passive one: it merely causes the matrix person probe to fail and prevents it from targeting the embedded object. This is nevertheless vital since, as a consequence, due to the restriction in (18), the matrix number probe may only agree with third person objects, and the ungrammaticality of (31) follows. Preminger leaves such examples unaddressed, and, since it remains unclear why the number probe on D_c should be unable to target participant objects, they raise an issue for his proposal. A possible solution would be to extend his proposal with a more general version of the restriction in (18), limiting the range of viable goals for a number probe to third person ones not only if an associated person probe fails, but also if there is no such person probe to begin with. If, as Preminger argues, D_c only has a number probe, then this modification would achieve the desired result.

Etxepare's analysis is couched in a framework different from the one adopted by Preminger and embraced here. Etxepare proposes that agreement operates on a phase-by-phase basis and takes place by means of multiple feature valuation upon completion of a phase. He further assumes that there is a feature value identity constraint at PF requiring the values of all corresponding features shared by the elements which participate in agreement to be identical at spell-out. Concretely, in the Basque examples under scrutiny, the three key elements participating in agreement are the embedded object, the complex head of the clause consisting of T and D_c , and a matrix head (labelled Asp by Etxepare) assigning case to the clause, which is also the relevant phasal head. The features involved in multiple valuation are person, number, and case, and their distribution is schematised in (32), with the valued features boxed (the unvalued case and number features on the complex $T+D_c$ head are contributed by T, and the third person feature by D_c).

(32) DP:[
$$\pi$$
:1/2/3], #:SG/PL, ABS/DAT] T+D_c:[π :3], #, CASE] Asp:[π , #, ABS]

The only element with variable feature values, and hence the only one whose featural makeup influences the end result, is the embedded object. Given that it also contains the sole valued number feature, this value is copied onto the other two heads and poses no problem for the PF constraint. However, only a configuration containing an absolutive object is allowed to converge, since dative case would be in conflict with the absolutive case on the Asp head. Finally, a first or second person feature borne by an embedded object is ruled out by the PF constraint as well, due to its clash with the third person feature on T+D_c. Under Etxepare's analysis, then, the contrast between (licit) LDA with third person absolutive objects and (illicit) LDA with dative or participant ones does not arise due to the (un-)availability of an agreement relation itself, but is, essentially, a PF phenomenon, whereas in the analysis proposed here it is a fundamentally syntactic one. Note further that excluding dative and participant objects via a feature value mismatch with the absolutive on Asp and the third person features on the T+D_c complex predicts that an absolutive-marked -tzea clause should never be able to contain a dative or participant object, regardless of LDA. The fact that such configurations are not ruled out in general, but only in LDA contexts, remains in need of an explanation.

To conclude, if this last issue with Etxepare's analysis is set aside, and Preminger's proposal

 $^{^{13}}$ Etxepare assumes that *-tzea* clauses are TPs embedding a projection headed by the clausal determiner, and that the determiner head (which Etxepare labels as Zeit, but which, for ease of exposition, I will refer to as D_c) adjoins to the T head, forming a T+D_c complex. For reasons of space, I will forego the comparison of the structure proposed by Etxepare with the one adopted here.

is extended to include a version of the constraint in (18), then both are also able to provide the first part of an answer to the first guiding question from section 2 — why LDA with participant and dative objects is impossible across an absolutive clause. However, we will see presently that matters become complicated once dative clauses are taken into account.

3.3. Dative clauses

In order to account for the (apparent) higher permeability of dative clauses for LDA, and thereby provide the second part of the answer to the first guiding question from section 2, I will follow the same line of reasoning that I have applied to absolutive clauses, and propose that this is in fact a consequence of the nature of the dative Agree probe. I will also address the second guiding question in this section, showing that the LDA hierarchy ABS >?DAT_{direct} > *DAT_{indirect} results from an interplay between the dative probe and the structure required by the three different kinds of arguments.

3.3.1. Stubborn dative

In section 3.1, I proposed that dative agreement results from a single probe which probes simultaneously for person and number and has no particular feature specifications. This is in accordance with morphological facts: in contrast to absolutive agreement, which leads to two separate morphemes for person and number, dative agreement is reflected on the auxiliary by a single morpheme comprising both person and number features.

This observation led Arregi & Nevins (2008) and Preminger (2009) to the conclusion that the morpheme cross-referencing a dative argument in Basque is actually a clitic rather than a regular agreement morpheme. Applying the tense-invariance diagnostic formulated by Nevins (2011) yields the same result: the form of the dative morpheme remains the same across agreement paradigms for tense and mood, suggesting that we are in fact looking at clitic doubling rather than run-of-the-mill agreement (see also Arregi & Nevins 2012). Nevertheless, since Preminger (2009, 2019) argues that clitic doubling arises as a consequence of an Agree probe, I will set this distinction aside for the purposes of this paper.¹⁴

3.3.2. LDA across dative clauses

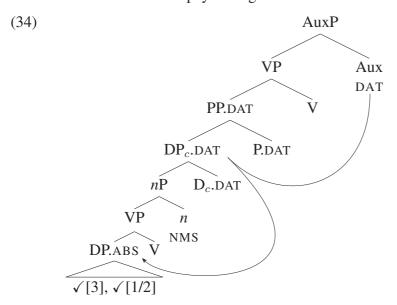
Following Řezáč (2008), I assume that dative arguments, and hence also the dative clause, are embedded under a PP (or an equivalent projection). This is the only structural difference between a dative and an absolutive clause. Contrary to what one might expect given the higher permeability of dative clauses to LDA, then, the dative clauses comprise more, rather than less, structure when compared to their absolutive counterparts. The crucial difference between the two is the probe(s) involved: whereas an absolutive clause, as shown above, is targeted by two single-feature absolutive probes (for person and number), a dative clause is targeted by an integral dative probe, which looks for no particular phi-features.

I propose the derivation in (34) for an example such as (33) (repeated from (1)). Let us assume that the featural specification of the DP_c consists of only the root of the feature geometry

¹⁴ I refer the reader to Preminger (2019) for an account of clitic doubling in Basque with an underlying Agree operation (for an approach to clitic doubling without Agree, see Arregi & Nevins 2008, 2012: chapter 2).

 $([\phi])$. The difference between a regular (third person singular) DP and a nominalised clause will then only lie in the presence vs. absence of the number node, respectively. This, in turn, means that, when the dative probe encounters the DP_c, only its person part will be valued, resulting in what we might call partially successful Agree (hence a full line in (34)). In order to capture the ability of the dative probe to look beyond the DP_c in search of a more fully specified goal, I propose that this probe has a special 'stubbornness' property, which enables it to inspect the argument it has targeted if this argument is only able to partially value it. While this property is, admittedly, specifically tailored to account for the possibility of LDA, it may be connected to the fact that the dative probe is an integral probe for both person and number: as a consequence, it is more robust than a single absolutive probe, and can therefore perform the two steps taken by the person and number absolutive probes — unlocking a phase and inspecting it — in the same step. Note that this property is also needed in PCC contexts, where the dative probe needs to penetrate $v_{appl}P$ and agree with the indirect object. Returning to the derivation in (34), since the dative probe probes for both person and number, it will agree with the embedded object for both these features; in other words, the subset of the feature geometry found on the embedded object will overwrite the subset initially copied from the DP_c. Importantly, this is only possible because the dative probe simultaneously probes for both person and number; as I argued extensively in section 3.2.1 for absolutive probes, a probe looking only for number features cannot change anything about the person side of the hierarchy.

(33) Uko egin d-i-e-Ø [kalteordainak]
refusal do 3.ABS-AUX-3PL.DAT-3SG.ERG damage.PL.ABS
eska-tze-a-ri].
ask.for-NMS-DET-DAT
'He/she refused to pay damages.' (Etxepare 2006:(2b))



3.3.3. The LDA hierarchy

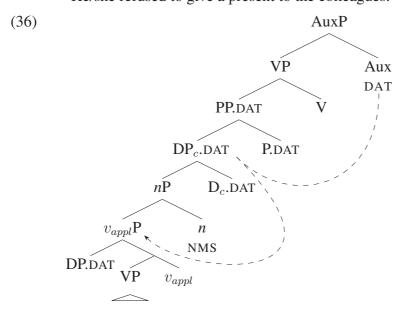
This section is dedicated to accounting for the ABS > ?DAT_{direct} > *DAT_{indirect} LDA hierarchy across dative clauses, and in this way completing the answers to the guiding questions from section 2. I propose that this hierarchy emerges as a consequence of the different degrees of

embedding of the three objects involved and the way the dative probe interacts with the resulting structures. An absolutive object, as illustrated in (34) above, is a simple DP merged as a complement to V, and is the most easily accessible of the three. I suggest that the reason why a dative probe can (exceptionally) target an absolutive argument in this context is that the latter is embedded into a dative phrase, which the probe had encountered in the course of its search, and that this is enough to satisfy the requirement that the probe target a goal bearing the case it is specified to look for. 15 Concerning the difference between dative-marked direct and indirect objects, I make use of the distinction between lexical and inherent case argued for by Woolford (2006). A dative direct object bears dative case due to the lexical properties of the selecting verb, and can hence be classified as bearing lexical case in Woolford's sense. As such, it is merged as a complement to V, just like a regular absolutive object, but includes a PP layer (Řezáč 2008), rendering it slightly less accessible to the matrix dative probe. This is reflected by the somewhat less natural outcome of LDA with a dative direct object. Finally, a dative indirect object bears inherent case in Woolford's terminology, and is introduced into the structure by an applicative phrase (Pylkkänen 2000). As already mentioned in connection to the PCC (see section 3.2.2), v_{appl} P constitutes a phase (McGinnis 2001), which makes it impossible for the matrix dative probe to access the embedded indirect object. While I have proposed that the dative probe is 'stubborn', and is hence able to penetrate a phase and target an argument that this phase contains, I suggest that it can do so only once. Therefore, as illustrated in (36) for an example such as (35) (repeated from (9)), $v_{appl}P$ will prevent the dative probe from targeting an embedded indirect object, making LDA impossible.

*Uko egin d-i-Ø-e-Ø [lankideei opari refusal done 3.ABS-AUX-SG.ABS-3PL.DAT-3SG.ERG colleagues.PL.DAT present bat egi-te-a-ri].

one do-NMS-DET-DAT

'He/she refused to give a present to the colleagues.' (Etxepare 2006:(108))



¹⁵ Note that this changes nothing about the inability of the absolutive number probe to target an embedded dative object, since it will not interact with the absolutive clause on its way to the object.

As indicated in the previous section, LDA patterns across dative clauses present a challenge for both Etxepare's (2006) and Preminger's (2009) analysis. Recall that, in both approaches, D_c plays a vital role in accounting for the LDA patterns across absolutive clauses: Etxepare proposes that its third person feature blocks LDA with a participant argument by causing a violation of the feature value identity constraint holding at PF (LDA with a dative argument is ruled out due to its case value being at odds with the absolutive assigned to the clause), and Preminger excludes LDA with dative arguments due to D_c 's number probe being restricted to absolutive arguments. It is precisely this direct mediating role ascribed to D_c which causes both said approaches to run into difficulties when faced with the difference in LDA patterns attested across absolutive and dative clauses: unless it is assumed that the properties of D_c change depending on the case of the clause, which appears to be unmotivated, the divergent behaviour of the two clauses with respect to LDA cannot be captured.

Addressing each of the analyses in turn, if Etxepare's PF feature value identity constraint rules out LDA with a participant object across absolutive clauses due to a clash between its participant features and the third person feature of D_c, and excludes LDA with a dative object due to its case value being in conflict with the absolutive assigned to the clause, then, everything else being equal, a discrepancy in person and case values should prevent LDA across dative clauses as well. Etxepare provides a solution for LDA with absolutive objects across a dative clause: somewhat simplified, he posits that the clause only gets assigned dative after the phase containing it has been spelled out. The case of the clause therefore does not participate in the evaluation of feature values at PF, and an absolutive object, being the only element with a case value, causes no problem for the feature value identity constraint. LDA with an indirect dative object is nevertheless correctly ruled out: since an indirect object in Basque invariably entails the presence of an absolutive direct object, the conflicting case values of these two objects already violate the PF constraint, and the fact that the clause acquires its case later plays no role. However, Etxepare is not able to account for the ABS > ?DAT_{direct} > *DAT_{indirect} hierarchy: since a dative direct object, just like a single absolutive object, is the only case-bearing element at spell-out, LDA is predicted to be just as natural as with an absolutive object. But even if this shortcoming is disregarded as a minor one, Etxepare's analysis fails to explain the availability of LDA with participant objects across a dative clause: if the clash between participant features borne by an object and the third person feature on D_c induces a violation of the PF feature value identity constraint in absolutive clauses, the same is predicted to happen in dative clauses.

Preminger's analysis faces a similar challenge: if the number probe on D_c is unable to target dative objects in an absolutive clause, then the same restriction should be at work in a dative clause, wrongly predicting that LDA with dative objects, whether direct or indirect, should be impossible across the board. Similarly, the number probe should either be able to target participant arguments (as in Preminger's original proposal) or be unable to do so (if a version of the restriction in (18) along the lines sketched above is included), predicting LDA with participant arguments to be either possible or impossible for both absolutive and dative clauses, and leaving the observed contrast unexplained.

3.4. Summary of the main proposal

This section has presented an account of the LDA patterns observed in section 2. I have argued that the different patterns result mainly from the different properties of the absolutive and dative

probes: while absolutive agreement arises through two separate probes for person (looking for participant features) and number (looking for plural features), dative agreement arises through a single probe for both person and number features, without particular feature specifications. I have proposed that the absolutive number probe is restricted by the person probe in the choice of its goal, and have shown that this restriction is needed independently of LDA to derive the Person-Case Constraint. This restriction on the number probe, in combination with a phaseunlocking logic, yields the LDA patterns attested across absolutive clauses: the person probe probes first, encounters the DP_c, and fails. By doing so, it unlocks the phasal DP_c for the number probe, and restricts the range of the latter's possible goals to third person arguments. The number probe can then agree with an embedded object, but only if the latter is third person. Turning to dative clauses, I have proposed to tie their apparently higher degree of permeability for LDA to a 'stubbornness' property of the dative probe: since the dative probe looks for person and number features at the same time, it can undertake the two steps of unlocking and inspecting a phase in one go and agree with the embedded object for both person and number. This answers, in part, the first guiding question posed at the end of section 2: why LDA across dative clauses is, and LDA across absolutive clauses is not, able to target participant arguments. As for the inability of LDA with dative objects across absolutive clauses, I have suggested that this is a consequence of the absence of a matrix dative probe in these contexts. Turning to the second question, which concerns the $ABS > ?DAT_{direct} > *DAT_{indirect}$ LDA hierarchy across dative clauses, I have proposed that the underlying reason for this hierarchy is tied to the structure required by these three different arguments: an absolutive object is a bare DP merged as a complement of the embedded verb, and, as such, is most accessible to the matrix dative probe; a dative direct object, bearing lexical case, is additionally embedded under a PP, making it slightly more difficult to reach, and resulting in a less natural outcome; finally, a dative indirect object is embedded under a phasal applicative phase, which renders it entirely inaccessible to the matrix dative probe.

4. Extensions

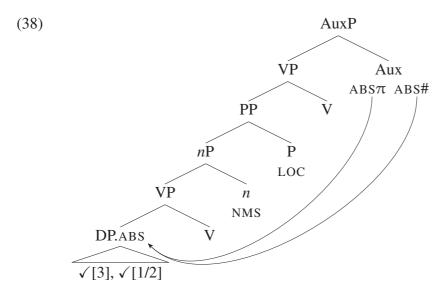
Before closing the paper, I would like to extend the analysis developed here along two lines. First, I will discuss LDA across another type of nominalised clause in Basque, and show that the current proposal readily captures these LDA patterns as well. In the second part of this section, I will introduce a piece of data that is puzzling under the analysis so far, and suggest a possible direction for capturing it.

4.1. -tzen clauses

LDA in Basque is not limited to -tzea clauses, but is also attested across another type of nominalised clause, which I will refer to as -tzen clauses. These clauses share with the -tzea clauses the nominaliser -tze, but, unlike the latter, do not act as arguments of the matrix verb: they are not marked with any of the three argumental cases (absolutive, dative, or ergative) and do not agree with the auxiliary. They also do not include the definite article, but are rather embedded under the morpheme -n, which has been analysed as a marker of locative case (San Martin & Uriagereka 2002) or a postposition (Etxepare 2006; Preminger 2009). For the

sake of concreteness, I will analyse this morpheme as a P head. What is important is that this morpheme, unlike the determiner, does not head a phasal projection (Preminger 2009). The account developed here thus predicts that the absolutive person and number probes will both be able to target the embedded object directly, since there is no intervening projection that would stop the person probe from accessing the embedded argument. This, in turn, means that participant objects should be able to enter an LDA relation with the matrix auxiliary, which is exactly what we find:

I propose the following derivation for this example, with both the person and the number probe targeting the embedded object:¹⁶



Just like absolutive -tzea clauses, -tzen clauses do not normally allow LDA with an embedded dative object (39). I suggest that the reason for this is the same: since the number and nature of the probes is linked to the number and nature of the arguments that the verb takes (Etxepare 2006), there is simply no dative probe in the matrix clause which could target a dative argument.

Still, under special circumstances, an embedded dative object may be cross-referenced on the matrix auxiliary, and the same is true of dative objects embedded into absolutive-marked *-tzea* clauses. It is this puzzle to which I now turn.

¹⁶ The derivation is basically equivalent to the one advanced by Preminger (2009). Etxepare (2006) follows a similar line of reasoning, and draws on the absence of D_c (along with its third person feature) in *-tzen* clauses to capture these clauses' transparency for LDA with participant objects.

4.2. Dative participants

As established above, dative arguments embedded into absolutive *-tzea* clauses and into *-tzen* clauses are, as a rule, not able to enter LDA with the matrix auxiliary. While the surfacing of dative agreement seems in fact to be entirely excluded, dative arguments may be cross-referenced by absolutive agreement morphemes if (and only if) they bear participant features. Moreover, such LDA works better if the embedded dative participant object is also plural (R. Etxepare, p.c.). In this light, consider the contrast between the ungrammatical (40) (repeated from (8)) where a third person dative object cannot agree with the matrix auxiliary, with the acceptable (41), where a participant dative object is reflected on the auxiliary by absolutive agreement morphemes. The same contrast can be observed in *-tzen* clauses, as can be seen by comparing the ungrammatical (42) with the acceptable (43).

- (40) *Erabaki d-<u>it</u>-u-Ø [<u>buruzagiei</u> obedi-tze-a].

 decided 3.ABS-<u>PL.ABS</u>-AUX-3SG.ERG <u>chiefs.PL.DAT</u> obey-NMS-DET-DAT

 'He/she decided to obey the chiefs.' (Etxepare 2006:(106))
- (41) ?Arteak erabaki ga-iti-u-ø [GURI Artea.ERG decided 1.ABS-PL.ABS-AUX-3SG.ERG we.PL.DAT obedi-tze-a].
 obey-NMS-DET.ABS
 'Artea decided to obey us.' (R. Etxepare, p.c.)
- (42) *Arteak probatu z-it-u-en [buruzagiei] obeditzen].

 Artea.ERG attempted 3SG.ERG-PL.ABS-AUX-PST orders.PL.DAT obey.NMS.LOC

 'Artea attempted to obey the orders.' (R. Etxepare, p.c.)
- (43) ?Arteak probatu gin-tu-ø-en [GURI obeditzen].

 Artea.ERG attempted 1PL.ABS-AUX-3SG.ERG-PST we.PL.DAT obey.NMS.LOC

 'Artea attempted to obey us.' (R. Etxepare, p.c.)

The present proposal does not so far account for these contrasts: there seems to be no reason why an absolutive probe could all of a sudden agree with an embedded dative argument. However, these data can be accommodated by including a mechanism similar to the one that underlies the phenomenon in Basque called ergative displacement (Laka 1993; Béjar & Řezáč 2009; Keine 2010; Arregi & Nevins 2008; some dialects also allow dative displacement, see Řezáč 2008). In short, some finite clauses containing a third person absolutive argument and a participant ergative (or dative) argument give rise to a special inflectional pattern: in such cases, the ergative (or dative) argument is reflected by an agreement morpheme which surfaces in the slot normally dedicated to absolutive person agreement, and the absolutive argument is only reflected by a number morpheme: compare the present tense (44-a), where ergative displacement does not happen, to the past tense (44-b), where it does.

Since developing a full-fledged account of ergative displacement is beyond the scope of this paper, given that it only occurs if the absolutive argument is third person, I assume that this phenomenon could be connected to the failure of the absolutive person probe. Transposing this

to the puzzle at hand, I tentatively suggest that, in LDA contexts, the matrix absolutive probes may agree with a dative object embedded into a nominalised clause if both the person and the number probe fail. In such a scenario, a second, non-case-discriminating probing cycle is attempted, and the probes can detect a dative object. If, and only if, the person probe succeeds (i.e., if the dative argument is a participant), the number probe probes as well, resulting in the ergative/dative-displacement-like phenomenon described above. The extra derivational step then yields a less natural outcome, reflected by the '?'-judgement.

5. Summary and conclusion

The aim of this paper was to account for the long-distance agreement (LDA) patterns attested across nominalised clauses in varieties of Basque. I have shown that it is only embedded objects that may enter an LDA dependency with the matrix auxiliary, and that the extent of the availability of LDA depends on the case of the nominalised clause and the case and featural specifications of the embedded object: absolutive clauses only allow LDA with third person absolutive objects, and dative clauses allow LDA with both absolutive and dative objects bearing any person value.

In order to derive the observed patterns, I have capitalised on the different properties of absolutive and dative probes and the implications that these properties have for the probes' interaction with the syntactic structure involved. Following Béjar & Řezáč (2009) and Preminger (2009, 2011), I have assumed that absolutive agreement arises from separate probes for person and number that look for participant and plural features, respectively, and proposed that dative agreement results from a single integral probe for both person and number looking for no particular features. Adopting the Obligatory-Operations Model (Preminger 2014), where operations can fail, and making use of the phase-unlocking possibility of Rackowski & Richards (2005), I have argued that an LDA derivation takes on a slightly different form in configurations including absolutive and dative clauses, which explains the different patterns that arise. In absolutive clauses, the person probe, looking for participant features, targets the (phasal) clausal DP. Since the clause is, evidently, not a participant, the person probe fails, yielding default agreement. At the same time, it unlocks the clausal DP for subsequent probing by the number probe, and, as a consequence of failing, restricts the range of possible goals of the number probe to third person arguments. I have motivated this restriction by the feature-geometrical approach to probe specifications (Harley & Ritter 2002; Béjar 2003) and have shown that it is needed independently of LDA. In dative clauses, the dative probe also targets the phasal clausal DP, but, having no specification for particular features, it does not fail. Still, it probes for both person and number, and, under the assumption that the clause has no specification for number, it gets only partially valued. However, its being an integral probe has two further effects: the dative probe is 'stubborn', meaning that it is able to both unlock a phase and inspect it in the same step, and it can agree with the embedded object for both person and number. The ABS > ?DAT_{direct} > *DAT_{indirect} LDA hierarchy across dative clauses is an outcome of the structures that these three types of object entail, the absolutive object being the most accessible, and the dative indirect object entirely inaccessible to probes from outside the clause.

To conclude, note that LDA is optional. I suggest that this may be linked to the optionality of phase-unlocking, the latter being the crucial ingredient for penetrating the clausal DP. As for the speakers for whom LDA is impossible, since phase-unlocking is needed independently

of LDA under the present analysis (to derive the Person-Case Constraint), the unavailability of LDA cannot be tied to a general absence of the phase-unlocking option for such speakers. Nevertheless, comparing the two configurations which require phase-unlocking, we can see that in the PCC examples a probe unlocks a phase contained within the same extended projection (in the sense of Grimshaw 1991), while in LDA, it needs to unlock a phase heading the next extended projection. I leave a thorough investigation of these differences for future work.

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Abbreviations

1,2,3	1st, 2nd, 3rd person	LOC	locative
ABS	absolutive	NMS	nominaliser
AUX	auxiliary root	PL	plural
DAT	dative	PST	past
DET	(definite) determiner	SG	singular
ERG	ergative		

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