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On the Relation between DP and TP. The Structure of Basque Infinitivals*

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Abstract

The most relevant facts concerning Basque infinitivals can be plausibly captured by assuming that they are headed by a determiner and they contain a tensed Infl. The presence of a determiner explains why some kinds of Basque infinitivals require a Case-marking and why they are allowed in some contexts where any other kind of clause is avoided, namely, subject positions. On the other hand, we account for the subcategorization requirements of some predicates and postpositions that take infinitival complements by postulating that they select T, or some kind of category inside Infl. We also relate the licensing of Ergative, Absolutive and Dative overt and *pro* arguments in infinitivals to the existence of T and Agr in Infl. Finally, we argue that anaphoric and arbitrary tenses are responsible for the impossibility of overt subjects in infinitivals with controlled and arbitrary subjects respectively and that both belong to the category *pro*.

Key words: infinitivals, functional categories, *pro*-drop, Control, arbitrary reading.

Resum. *Sobre la relació entre SDet i ST. L'estructura dels infinitius del basc*

Es pot donar compte de forma plausible dels fets més rellevants que afecten els infinitius del basc si assumim que van encapçalats per un determinant i que contenen un Infl amb propietats temporals. La presència d'un determinant explica per què alguns tipus d'infinitius del basc necessiten marcatge de cas i per què s'admeten en alguns contextos on s'evita qualsevol altre tipus de frase, especialment en les posicions de subjecte. D'altra banda, donem compte de les exigències de subcategorització d'alguns predicats i postposicions que agafen complement d'infinitiu postulant que seleccionen T o algun tipus de categoria de les que inclou Infl. També relacionem la legitimació dels arguments explícits i dels *pro* amb cas Ergatiu, Absolutiu i Datiu en les oracions d'infinitiu amb l'existència de T i Conc a Infl. Finalment, defensem que els temps arbitraris i els anafòrics són responsables de la impossibilitat de tenir subjectes explícits amb els infi-

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nitius amb subjectes arbitraris i subjectes controlats, respectivament, i que ambdós pertanyen a la categoria *pro*.

Paraules clau: infinitius, categories funcionals, *pro*-drop, Control, lectura arbitrària.

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1. Introduction

It is well known that some nonfinite constructions such as English gerunds and infinitivals or Spanish clausal infinitivals share certain characteristics with DPs and others with clauses. In this paper we explore the behaviour of Basque infinitivals which are unquestionably headed by a V. We will thus be concerned with non-controversially clausal infinitivals, leaving aside both nominal infinitivals, which clearly pattern with nouns, and infinitivals whose status is doubtful due to the presence of both nominal and clausal characteristics.

Basque has a number of affixes available for deriving deverbal nouns from verbs. For instance the affix *-keta* in (1a) derives the noun *apurketa* 'breaking' from the verb *apurtu* 'to break'. The affix *-tze* in (1b) is also a derivational affix which transforms verbs into deverbal nouns, for instance:

(1) a. [Negoziazioen bapateko apurketa] harrigarria
negotiation-GEN(pl.) sudden break-**KETA**-the amazing
izan zen.
been was

'The sudden break of the negotiations was amazing.'

b. [Gobernuaren bapateko erortzea] pentsaezina zen.
Government-the-GEN sudden fall-**TZE**-the unthinkable been was

'The sudden fall of the Government was unthinkable.'

However, the derivational affix *-tze* in (1b) has a remarkable characteristic: it is identical to the (inflectional) affix of both clausal infinitivals (3) and infinitivals with a doubtful status (2). Infinitivals in (2) pattern with (1b), and differ from clausal infi-

nitivals such as (3), in that they take genitive subjects, but they pattern with clearly clausal infinitivals in allowing mood and time adverbs such as *berandu* ('late') and *egunero* ('every day'). Nevertheless, both types of infinitivals (2, 3) and the DP in (1b) share both the affix *-tze* and the ending *-a*, which is adjoined to this affix and is currently identified as a determiner.

(2) [Zure egunero berandu heltzea] parkaezina da.
you-GEN every day late arrive-TZE-the unforgivable is
'Your arriving late every day is unforgivable.'

(3) [Zu egunero berandu heltzea] parkaezina da.
you(ABS) every day late arrive-TZE-the unforgivable is
'You arriving late every day is unforgivable.'

The infinitivals we are concerned with in this paper belong to the set exemplified in (3). They are unquestionably headed by V and differ from nominals such as those in (1) in a number of ways: they allow manner and time adverbs, subcategorized and secondary predicates, embedded clauses, negation and modal and aspectual variants. On the other hand, nominals are avoided with all the above-mentioned modifiers and they lack both aspectual and modal variants. Furthermore, nominals take adjectival and genitive modifiers, whereas clausal infinitivals are disallowed with adjectives and their arguments may be (canonical) Ergative, Absolutive and Dative. Let us illustrate the most relevant of the above-mentioned differences with two examples.

(4) a. Gobernuaren/*Gobernua bapateko erortzea
Government-the-GEN/*Government-the(A) sudden fall-TZE-the
nahi dute.
want AUX
'They want the sudden fall of the Government.'

b. *Gobernuaren/Gobernua bapatean erortzea
Government-the-GEN/Government-the(A) suddenly fall-TZE-the
nahi dute.
want AUX
'They want the Government to fall suddenly.'

(5) *Gobernuaren/Gobernua EZ erortzea lortu
*Government-the-GEN/Government-the(A) NOT fall-TZE-the achieve
behar dugu.
must AUX
'We must manage for the Government not to fall.'

Concerning clearly clausal infinitivals, in this paper we show that two major groups can be distinguished: on the one hand, there are infinitivals headed by a determiner and on the other, infinitivals lacking such a category.

This distinction is relevant for their distribution, since infinitivals lacking a determiner are restricted to the complement position of some predicates and to adjunct positions, while infinitivals headed by a determiner enjoy a wider distribution —i.e., they are also allowed in subject positions which are unavailable for every kind of finite clause in Basque. Furthermore, exceptional distribution co-occurs with another striking characteristic, e.g. the requirement of Case.

As for internal behaviour, most Basque infinitivals allow overt subjects (6a,b). However, exceptional Case marking must be discarded since the Case marking of these arguments (Ergative or Absolutive) is expected from the type of embedded predicate and is not necessarily the Absolutive Case corresponding to direct objects.

(6) a. Harrigarria da [Mirenek liburu bat idaztea]
strange is Miren-E book a(A) write-the(A)
'Miren writing a book is strange.'

b. Harrigarria da [Miren berandu heltzea]
strange is Miren(A) late arrive-the(A)
'Miren arriving late is strange.'

As can be seen in (7), Basque has an Ergative Case-marking system (Levin (1983), Laka (1993)). Therefore, subjects of transitive verbs are Case-marked Ergative (7a), whereas subjects of intransitive verbs are Case-marked Absolutive, just like objects of transitive verbs (7b).[1] This is exactly the same paradigm that appears in the above-mentioned kind of infinitivals (6).

(7) a. Mirenek liburu bat idatzi du.
Miren-E book a(A) written AUX-3sA-3sE
'Miren wrote a book.'

b. Miren berandu heldu da.
Miren(A) late arrived AUX-3sA
'Miren arrived late.'

However, there are some contexts in which the subject of the infinitival must necessarily be an empty category: on the one hand infinitivals with controlled subjects, for example clausal complements of verbs such as *ahaztu* ('forget') (8a) and, on the other hand, infinitivals behaving as subjects of adjectival predicates such as *kaltegarri* ('harmful') (8b), in which the empty subject has an arbitrary reference. Thus, these are contexts similar to those assumed to bear the category PRO in English.

1. The Basque case-marking system is not so clearly ergative as presented here. Actually, Basque has a split paradigm since unaccusative verbs case mark their subject absolutive as expected in an ergative case-marking system, but unergative verbs require ergative subjects. We assume here the view of Laka (1993, 1995) in which every verb requiring an ergative subject is actually a transitive verb. For another view see Ortiz de Urbina (1986) and Oyharçabal (1992).

(8) a. Mirenek$_i$ ahaztu du [e$_i$ liburua ekartzea].
Miren-E forgotten has book-the(A) bring-the(A)
'Miren forgot to bring the book.'

b. [e$_{arb}$ erretzea] kaltegarria da.
smoke-the(A) harmful is
'Smoking is harmful.'

The inflected verb of finite clauses agrees with Ergative, Absolutive and Dative arguments (9a) in Basque. Furthermore, Agr in Infl is rich enough to license a *pro* corresponding to each of the mentioned arguments (9b) (Ortiz de Urbina (1986), Eguzkitza (1986)).

(9) a. Zuk niri liburu batzuk eman dizkidazu.
you-E I-D book some(A) given AUX-3pA-1sD-3sE
'You gave me some books.'

b. *pro*$_E$ *pro*$_D$ *pro*$_A$ eman dizkidazu.
_ _ _ given AUX-3pA-1sD-3sE
'You gave them to me.'

Ergative, Absolutive and Dative overt arguments may also appear in clausal infinitivals (10a). Furthermore, although infinitivals lack any kind of overt agreement with their own arguments, the three mentioned kinds of arguments can also be dropped as in finite constructions (10b) (Ortiz de Urbina (1992), Oyharçabal (1991)). This fact is problematic for the 'Identification Hypothesis' of Jaeggli (1982).

(10) a. [Jonek zuri liburua ematea] harrigarria litzateke.
Jon-E you-D book-the(A) give-the strange would be
'It would be strange for Jon to give you a book.'

b. [*pro*$_E$ *pro*$_D$ proA ematea] harrigarria litzateke.
_ _ _ give-the strange would be
'It would be strange for him to give it to you.'

This paper claims that Basque infinitivals bear an Infl similar to that of finite clauses, that is they bear some kind of Tense and Agreement. However, most of them are headed by a determiner. Our main claim is that most clausal infinitivals combine a Determiner with an Infl, accounting in this way for the distribution of these non-finite clauses. We also explain the licensing of the different arguments and modifiers inside them. The paper is arranged as follows:

Section 2 describes the distribution of the different kinds of Basque infinitivals.

Section 3 compares the behaviour of clausal infinitivals and deverbal nominals with regard to aspectual instantiation, and concludes that the affix *-tze* in clausal infinitivals is one of the values of the functional head Asp, whereas the affix of deverbal nouns is a derivational affix.

In section 4 we look at the internal behaviour of Basque infinitivals from a minimalist point of view, concluding that, in addition to the category V, they require both some AgrP nodes and a TP. We also explore the consequences of identifying the empty categories in infinitivals as members of the category *pro*. Specifically, we attempt to contribute to the characterization of the *Pro*-drop Parameter in the light of Basque infinitivals.

Section 5 claims that some infinitivals are headed by a Determiner whereas others lack such a category. Furthermore, from among the infinitivals headed by a Determiner, two groups can be distinguished since some of them allow two values for the head D, i.e. the affix *-a* or a demonstrative, whereas others avoid a demonstrative. We claim that this difference is due to the nature of the two types of determiners: the former is an affix but the latter is an independent word. This difference would be relevant for the distribution of these non-finite clauses. In contexts requiring Tense features only the affix *-a* or infinitivals without a determiner would be allowed because only in those cases are the features of Tense available for selection. This provides us with additional evidence for the category Tense in infinitivals.

Section 6 is concerned with infinitivals that require an arbitrary or controlled empty subject. We examine the phenomena of Control from the view-point of the 'Ergativity Parameter' and claim that the requirement of a controlled subject results from the selection of a dependent or anaphoric Tense by some predicates. We also claim that controlled subjects, at least in Basque, belong to the category *pro* and that a category PRO is not required. Finally, we relate the behaviour of infinitivals with empty subjects bearing arbitrary reference to a generic Tense which is compatible only with an Agr bearing zero ϕ-features.

2. The Distribution of Basque Infinitivals

Basque infinitivals appear in different syntactic contexts. First of all, they can behave either as subject of the matrix clause or as subject of a nominal predicate in the matrix clause. In both of these cases the infinitival as a whole shows the determiner *-a* and the Case marking (Ergative (11a), Dative (11b) or Absolutive (11c)) required by the matrix verb. Furthermore, these infinitivals allow both overt and empty subjects.

(11) a. Harritu gaitu [Miren/__ berandu heltzeak].
surprised AUX-1pA-3sE Miren(A)/__ late arrive-the-E
'That Miren arrived late surprised us.'

b. Harrigarri deritzot [Miren/__ berandu heltzeari].
strange find-3sD-1sE Miren(A)/__ late arrive-the-D
'I find strange Miren arriving late.'

c. Pentsaezina da [Miren/__ berandu heltzea].
inconceivable is Miren(A)/__late arrive-the(A)
'Miren arriving late is inconceivable.'

Secondly, Basque infinitivals may fill the complement position of both factive predicates such as *sentitu* ('regret') and *gorroto izan* ('hate'), and desiderative verbs such as *nahi* ('want') and *espero* ('hope'). In these contexts they always take a determiner, and Ergative or Dative Case-markings never appear. These infinitivals always allow both overt and covert subjects.

(12) a. Gorroto dut [Miren/__ berandu etortzea].
hate AUX-3sA-1sE Miren(A)/__ late arrive-the(A)
'I hate Miren arriving late.'

b. Espero dut [Miren/__ garaiz heltzea]
hope AUX-3sA-1sE Miren(A)/__ in time arrive-the(A)
'I hope Miren will arrive in time.'

Infinitivals may also appear as complement of Control predicates. Nevertheless, these infinitivals do not always require a determiner. For example, the verb *ahaztu* ('forget') may appear both with determined and with determinerless infinitivals, resulting in two different readings (13a, b), but verbs such as *hasi* ('start') and *ikasi* ('learn') lack the former possibility (14a, b). Overt subjects are avoided in both cases.

(13) a. Mirenek$_i$ ahaztu du [e$_i$ liburua ekartzea].
Miren$_i$-E forgotten AUX-3sA-3sE e$_i$ book-the(A) bring-the(A)
'Miren forgot to bring the book.'

b. Mirenek$_i$ ahaztu du [e$_i$ bizikletaz ibiltzen].
Miren$_i$-E forgotten AUX-3sA-3sE e$_i$ bicycle-by riding
'Miren forgot how to ride a bicycle.'

(14) a. Miren$_i$ [e$_i$ liburua irakurtzen] hasi da.
Miren(A) e$_i$ book-the(A) reading started is
'Miren has started reading the book.'

b. * Miren$_i$ [e$_i$ liburua irakurtzea] hasi da.
Miren(A) book-the(A) read-the(A) started is

Infinitival subjects of some adjectival predicates such as *kaltegarri izan* ('to be harmful') or *zilegi izan* ('to be legal') also require empty subjects, but, without being controlled like those in (13) and (14), they take arbitrary reference.

(15) [e$_{arb}$ erretzea] kaltegarria da.
smoke-the(A) harmful is
'Smoking is harmful.'

Finally, Basque infinitivals are also allowed as adjunct adverbial clauses with a temporal, causal, concessive or final reading, depending on the type of postposi-

tion that adjoins to the embedded verb. Both overt and covert subjects are allowed in adjunct infinitivals.

(16) a. [Miren/__ gelara sartzean], guztiak isildu ziren.
Miren(A)/__ room-the-into enter-the-on all(A) silent fallen
'When Miren entered the room everybody fell silent.'

b. [Miren/__ berandu heltzeagatik], inor ere ez zen haserretu.
Miren(A)/__ late arrive-the-because nobody got angry
'Nobody got angry because Miren arrived late.'

c. [Ikasleek/__ beren liburua ekartzeko], aldez aurretik
Ikasle-the-E/__ their book-the bring-to, previously
agindu behar diezu.
command must AUX-3sA-3pD-2sE
'In order for the students to bring their books, you must tell them to previously.'

Recapitulating, Basque clausal infinitivals can be inserted either as subject or as complement of a matrix verb and they are also allowed as complement of some postpositions.

3. The Affix *-TZE* in Clausal and Nominal Infinitivals

One of the possibilities of Basque verbs is the syntactic instantiation of two values of the aspectual feature [± perfective] via two different periphrastical variants which share the same auxiliary but differ in the aspectual affix attached to the verbal root. The so-called habitual present is characterized by the aspectual affix *-tzen*, and the so-called present perfect bears a participle which is traditionally interpreted as the verbal root attached to a perfective affix, i.e. *-tu, -i* or Ø.[2] Laka (1989) identified these affixes as different values of the functional category Asp.

(17) a. Miren berandu etortzen da beti.
Miren-A late come-[-pf.]ASP AUX always
'Miren always comes late.'

b. Miren berandu etorri da gaur.
Miren-A late come-[+pf.]ASP AUX today
'Today Miren came late.'

2. This view is defended in Laka (1989). From another viewpoint Ortiz de Urbina (1992) argues that the root form of the verb in Basque corresponds to the so-called bare participle, that is to the verb form containing the *-tu, -i* or *ø* ending. The perfective and imperfective verbal variants would be obtained by adding respectively the aspectual affix Ø or *-tzen* after head to head movement of V to Asp. In this analysis a morphological rearrangement rule would be required in order to eliminate the participial ending in non-perfective variants.

Most infinitivals bear the affix *-tze*, which is morphologically related to the imperfective aspectual affix *-tzen* (18a). Furthermore, most infinitivals allow a counterpart which instead of the ending *-tze* bears a participial ending. Infinitivals bearing a participle are necessarily interpreted as perfective whereas infinitivals with the affix *-tze* are ambiguous and their aspectual interpretation depends on both adverbial modifiers and the time instantiation of the matrix verb.

The examples in (18) illustrate the behaviour of clausal infinitivals with the affix *-tze*. (18a) is two ways ambiguous: we may understand either that Jon frequently arrives late or that Jon has arrived late once. In (18b) and (18c), however, only one reading is possible due to the presence of the time adverbs: in the first example we understand that Jon has come late once but in the second, we must necessarily conclude that coming late is a habit for Jon. Therefore, unambiguous perfective and imperfective readings are respectively forced by the adverbs *atzo* ('yesterday') and *beti* ('always').

(18) a. Sentitzen dut Jon berandu heltzea.
regret AUX Jon late come-TZE-the
'I regret Jon arriving late.'

b. Sentitzen dut Jon atzo berandu heltzea.
regret AUX Jon yesterday late come-TZE-the
'I regret Jon's arriving late yesterday.'

c. Sentitzen dut Jon beti berandu heltzea.
regret AUX Jon always late come-TZE-the
'I regret Jon arriving late always.'

Infinitivals with the participial counterpart of the affix *-tze* are always interpreted as perfective.[3] For instance, (19) lacks any kind of ambiguity, because it bears the perfective participle and not the ambiguous affix *-tze*.

(19) Sentitzen dut Jon berandu heldua.
regret AUX Jon late arrived-the(A)
'I regret Jon having arrived late.'

So the participial affix in (19) behaves just like the perfective affix (*-tu, -i , Ø*) in finite clauses (17b) and we conclude that it is one of the values of the head Asp proposed

3. Frequently perfective infinitival constructions are strengthened by the auxiliary *izan* 'to be'. Furthermore, the counterparts with *izan* (i) are more natural than those in (19) with bare participles.

(i) Sentitzen dut Miren berandu etorri izana.
regret AUX Mary-A late come been-the
'I regret Mary having come late.'

This could be due to the morphological coincidence between perfective infinitivals and inflected participles with number agreement such as *Miren eta Jon helduak dira* ('Mary and John arrived-pl. are').

by Laka (1989). Nevertheless, the status of the affix *-tze* is more problematic, since it doesn't force an aspectual reading. Let us now look at the behaviour of nominal infinitivals. First of all, the affix *-tze* lacks a participial counterpart (20b).

(20) a. [Gobernuaren bapateko erortzea] harrigarria izan da.
Government-the-GEN sudden fall-TZE-the surprising been is
'The sudden fall of the Government was surprising.'

b. *[Gobernuaren bapateko eroria] harrigarria izan da.
Government-the-GEN sudden fallen-the surprising been is

Secondly, the aspectual reading of the noun results from the lexical aspectual features of the verb from which the event or result nominal has been derived. For example the nominal *sartze* ('entrance') in (21a) leads us to a perfective reading because the verb *sartu* ('enter') is perfective, whereas the nominal *ibiltze* ('walking') in (21b) gives rise to an imperfective reading because the verb *ibili* ('walk') is imperfective. These inherent readings are invariable because there is no aspectual affix available for deverbal nouns.

(21) a. Mirenen sartzea harrigarria izan da.
Miren-GEN enter surprising been is
'Miren's entrance was surprising.'

b. Zure ibiltze astirotsuak nekatu egiten nau.
your walk slow-the-E make tired do AUX-1sA-3sE
'Your slow walking makes me tired.'

The behaviour of nominal infinitivals, i.e., deverbal nouns, in (20) and (21) contrasts straightforwardly with that of clausal infinitivals: Firstly, distributional data show that *-tze* in clausal infinitivals has the same distribution as the perfective affix. Both affixes can thus be identified as different values of the same grammatical category. In contrast, the affix *-tze* in nominal infinitivals lacks a perfective counterpart. Secondly, the contrast between (18b,c) and (21a,b) shows that the affix *-tze* in clausal infinitivals neutralizes the lexical aspectual features of V yielding perfective and imperfective readings available for both lexically perfective and imperfective verbs. This possibility is not available for *-tze* in nominal infinitivals, since it doesn't belong to the category Asp and thus it is not able to change aspectual values in the syntax. We thus conclude that the *-tze* in deverbal nominals is a derivational affix whereas the *-tze* in clausal infinitivals is one of the values of the functional head Asp.

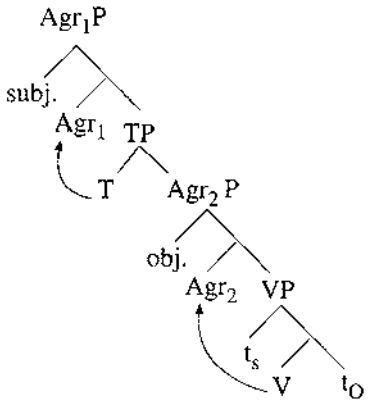
4. The Internal Behaviour of Basque Infinitivals: Concerning Tense and Agreement

Chomsky (1989, 1992) claimed that conditions for the licensing of structural Cases may be uniformized by assuming that this licensing always requires checking of

features by a specifier/head relation in a functional AgrP category. This checking of features must take place either in the overt syntax or in the Logical Form, depending on the strong or weak nature of the features in Agr.

In Chomsky's system, the set of Agr categories may bear person, number and gender features, but they lack Case features. Case features are available in the categories T(ense) and V(erb) and they are transferred to the two main Agr nodes (Agr for the subject and Agr for the object) when T and V adjoin to them as in (22).[4]

(22)



On the one hand we will assume the Obligatory Case Parameter as in Bobaljik (1992, 1993) and Chomsky (1992) in which Accusative and Ergative Case marking systems would differ only with regard to intransitive constructions: in Accusative systems, the Case of T would be obligatorily checked whereas in Ergative systems V is the Case that must be checked necessarily. Therefore, concerning intransitive verbs, Accusative systems behave as in (23a), whereas Ergative systems behave as in (23b).[5]

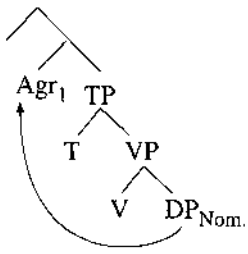
4. Laka (1995) claims that the categories bearing structural case are Tense and Aspect, and not Tense and Verb as in Chomsky (1992) and Bobaljik (1992, 1993). This suggestion has two clear advantages: on the one hand, the ergativity parameter is only related to functional categories, which is a desirable option in the Principles and Parameters framework. On the other hand, it captures the behaviour of languages with an aspectual or temporal sensitive split ergativity as Hindi, Georgian and Pachtou.

   Nevertheless, in this paper we will leave aside the discussion of the two proposals since, as shown above, Basque infinitivals bear V and Asp and the case marking system of Basque is not aspectually sensitive. Therefore, the view adopted would be irrelevant for our discussion.

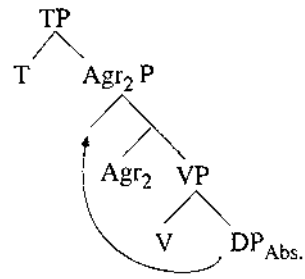
   Consequently, we have adopted the view in Chomsky (1992) as it is the one likely to be most familiar.

5. Laka (1995) claims that the Ergativity Parameter consists of a kind of feature that she calls 'active' and that must always be checked. Furthermore, this feature requires checking in the overt syntax: in accusative paradigms this feature is sited in T but in ergative paradigms it is sited in Asp.

(23) a.



b.



Basque parametrical choice is (23b), since the subject of intransitive predicates receives Absolutive Case, just like the object of transitive predicates. Dispensing for the moment with the complement of Control verbs, infinitivals license overt subjects and overt objects. In the system that we are assuming, this means that besides a VP, infinitivals bear T and Agr categories similar to those of finite clauses. Nevertheless, in infinitivals these categories are not morphologically overt.

In this section we will try to show that Agr and T categories are present in Basque infinitivals. Subsection 4.1. shows that Basque infinitivals bear the Agr nodes required for the licensing of a *pro* corresponding to each of the Ergative, Absolutive and Dative arguments of the infinitival. Subsection 4.2. is concerned with the nature of Agr nodes in Basque infinitivals. We conclude that despite the fact that they lack overt morphology, these Agr nodes bear strong features. Subsection 4.3. is concerned with the existence of a TP node in Basque infinitivals. In this subsection we explore the role of [Spec, T] and we claim that some subjects must site there in order to check features related to agentivity or control of the action. We also claim that Basque infinitivals bear a TP and that the role of this category is similar in finite clauses and in infinitivals.

4.1. The Category Agr and the Licencing of pro

As mentioned above, Basque infinitivals can license overt subjects and objects. Furthermore, overt arguments alternate with empty categories. In fact, in some contexts (24b) is as grammatical as (24a) and even more appropriate:

(24) a. [Zuk Peruri dirua ematea] nahi dut.
you-E Peru-D money-the (A) give-the(A) want AUX-3sa-1sE
'I want you to give money to Peru.'

b. [e_i e_k e_h ematea] nahi dut.
e_i e_k e_h give-the(A) want AUX-3sA-1sE
'I want you to give it to him.'

4.1.1. These empty categories do not belong either to the set of DP-traces or to the category PRO, since binding, control by an argument, and arbitrary reference are not required (25) (Ortiz de Urbina 1992). Furthermore, these empty categories may correspond either to subjects or to direct or indirect objects and thus they differ from controlled arguments, which must necessarily fill subject positions.

(25) Mirenek$_1$ [Jonek$_2$ e$_{1,*2,3}$ eramatea] nahi du.
Miren$_1$-E Jon$_2$-E e$_{1,*2,3}$ take-the(A) want AUX-3sA-3sE
'Miren wants Jon to take {us, you, him...}'

Anaphoric and PRO categories are thus excluded from these infinitivals. Another possibility must be explored, however, since the empty categories in (24b) could be variables bound by an empty operator. In fact, the empty categories in (24b) must be recoverable from the pragmatic context. This question seems similar to that of the null object in European Portuguese described by Raposo (1986).

(26) a. Joana viu __ na TV ontem.
'Joana saw __ on TV yesterday.'
(Raposo, 1986)

b. Joana viu-os na TV ontem.
'Joana saw them on TV yesterday.'
(Raposo, 1986)

Raposo claims that these empty objects are variables and he suggests a structure such as (27) for these constructions. The empty object would thus be a variable resulting from the movement of an empty operator to [Spec, C].

(27) [e$_i$] [$_S$, Op$_j$[$_S$ a Joana viu t$_j$ na TV ontem]]

The main evidence for this diagnosis is strong cross-over effects. The empty object in (28a) cannot be coreferential with the matrix subject because this object is a variable and thus the construction violates the Bijection Principle. The empty categories in Basque infinitivals do not give rise to strong cross-over effects (28b).

(28) a. *Ele$_i$ pensa que eu recomendei e$_i$ ao professor.
'He$_i$ thinks that I recommended e$_i$ to the professor.'
(Raposo, 1986)

b. Mirenek$_i$ [Jonek e$_{i/k}$ Bilbora eramatea] nahi du.
Miren-E Jon-E Bilbao-to take-the(A) want AUX-3sA-esE
'Miren wants Jon to take {her/us/me/you...} to Bilbao.'

Other tests for detecting the presence of an operator in Comp such as the Doubly Filled Comp prove the variable nature of the empty object of European Portuguese (29a) but do not work with Basque infinitivals bearing empty categories (29b, c, d).

(29) a. *Quando$_2$ é que o Manel vai oferecer ao António $e_1 t_2$?
'When is Manel going to offer to Antonio $e_1 t_2$?'
(Raposo, 1986)

b. Nora$_2$ nahi duzu Peruk e_1 t_2 eramatea?
to where want AUX-3sA-2sE Peru-E e1 t2 take-the(A)
'Where do you want Peru to take it?'

c. Noiz$_2$ nahi duzu e_1 liburua t_2 eramatea?
when want AUX-3sA-2sE e_1 book-the t_2 take-the(A)?
'When do you want{him/me} to take the book?'

d. Zergatik$_2$ nahi duzu Jonek e_1 liburua t_2 eramatea?
why want AUX-3sA-2sE Jon-E e_1 book-the t_2 take-the(A)?
'Why do you want Jon to take {you/me/us/them/him} the book?'

We thus conclude that the empty categories in (24b) belong to the category *pro*. Nevertheless, these empty categories identified as *pro* are puzzling in two different ways: (a) besides subjects, they can be either direct or indirect objects, and (b) the recovery of their reference is problematic, since Basque infinitivals lack overt agreement.

4.1.2. The Category pro *in Non-Subject Positions.* In Chomsky (1981), Huang (1984, 1989), Bouchard (1984) and some others, the occurrence of *pro* is considered to be restricted to subject positions.[6] Concretely, Bouchard (1984) claims that two kinds of languages must be distinguished: on the one hand, there would be 'romance *pro*-drop languages' in which *pro* is restricted to subject positions and, on the other, 'free-*pro* drop languages' in which *pro* is licensed in some other positions, even without agreement. That would be a characteristic of non-configurational languages.

Nevertheless, the existence of the category *pro* in non-subject positions has been well attested for many languages. Furthermore, it seems that the licensing of *pro* is not related to configurationality, since most of these languages have been

6. In languages lacking a system of overt agreement, such as Chinese, null and overt arguments may alternate in finite clauses. Huang (1989) identifies the empty subject as a *pro* but the empty object as a variable.

(i) Zhandsan shuo [e hen xihuan Lisi]
Zhangsan say very like Lisi
'Zhangsan said that [he] liked Lisi.'
(Huang, 1989)

(ii) Zhangsan shuo [Lisi hen xihuan e]
Zhansan say Lisi very like
'Zhangsan said that Lisi liked [him]'
(Huang, 1989)

fairly characterized as configurational. For instance Rizzi (1986) claims that arbitrary empty objects in Italian belong to the category *pro*. In the same way, Cole (1987) proves that empty objects belong to the category *pro* in different languages such as Quechua, Thaï and Korean. Kiss (1987) and Marácz (1987) also identify Hungarian empty objects as *pro*. Zribi-Hertz (1984) remarks that *pro* is licensed as complement of some prepositions in French. Afarli (1987) vindicates the *pro* status for some empty categories in coordinate constructions in Norwegian. Finally, there are languages which can use the category *pro* not only for direct objects, but also for indirect and applied objects: Georgian (Anderson (1984)), Malayan (Mohanan (1983)), Basque (Eguzkitza (1986); Ortiz de Urbina (1986)).

Summarizing, the existence of the category *pro* in non-subject positions is fairly attested for Basque and for a large set of other languages.

4.1.3. The Licensing of pro *and the Recovering of Its Reference.* Basque infinitivals lack morphologically overt agreement with their arguments. That makes the existence of *pro* in these constructions problematic from the view-point of the 'principle of recoverability' (Taraldsen (1978)) or the 'identification hypothesis' of Jaeggli (1982): overt agreement in Infl makes it possible to recover the reference of a pronoun and, consequently, this pronoun can be dropped. In this way, in languages such as Italian or Spanish, the subject of a finite clause can be dropped and, accordingly, the finite verb in these languages has overt agreement morphology for the subject. On the other hand, languages such as English, which almost totally lack agreement marks in the verb, avoid subject drop.

It is a well-known fact that there is a tendency in the Universal Grammar for allowing empty pronouns when their reference can be recovered from the verb morphology. Thus, the *pro*-drop parameter would be the result of different levels of Agreement richness. However, it is also well known that the correlation between licensing of *pro* and overt agreement morphology is not exact (Chomsky (1981)).

There are some languages in which there is a clear correspondence between the licensing of *pro* and overt agreement. For instance, Hebrew, Pachtou and Irish described respectively by Borer (1986), Huang (1984) and McCloskey & Hale (1984), belong to this type. These are languages with a defective or irregular agreement paradigm for some tenses or persons, and drop of pronouns is avoided with defective verbal forms whereas it is allowed with verbal forms bearing agreement, although only for agreeing arguments.[7]

7. Borer (1986) has shown that null subjects in Hebrew are only allowed in the past and future and that they are excluded from the present, which lacks personal markers.

Another clear example of this correlation is Pachtou, which is a language with a split ergativity paradigm and a monopersonal agreement in the verb: in the present the verb agrees following an accusative pattern and in the past following an ergative pattern. It is the case that in Pachtou the nominative argument can be a *pro* in the present whereas it is the absolutive argument (the subject of intransitive verbs or the object of transitive verbs) that can be dropped in the past (Huang, 1984).

Finally Irish has a defective personal agreement paradigm: as shown by McCloskey & Hale (1984) most tenses bear only personal agreement markers for the first person (singular and plural) but the conditional is an exception, since it allows agreement with the first and second persons (singular and plural). In Irish only first person pronouns can be dropped, except for the conditional, which also allows dropping of first and second person pronouns.

Nevertheless, it is well known that languages such as Chinese, Japanese and Korean lack agreement specifications and even so they allow the category *pro* (see for instance Huang (1984, 1989) and Cole (1987)). The same fact is attested for Scandinavian languages (Platzak (1987)).

Rizzi (1986) observes that ϕ-features seem not to play any role in the grammar of these languages. He speculates about the idea that Universal Grammar offers the option of using ϕ-features, and some grammatical systems take it whereas certain others do not. Basque is still problematic for Rizzi's hypothesis: if we only look at finite clauses, the Basque option would be that of using ϕ-features, since agreement with Absolutive, Ergative and Dative arguments is indispensable. Infinitivals, however, lack any kind of overt agreement and even so, *pro* is licensed for all three types of argument mentioned.

The behaviour of romance languages such as Spanish seems even more puzzling. Spanish has overt agreement morphology in the verb for subjects but it lacks such a morphology for objects. The licensing of the category *pro* in finite constructions is as expected in a language which takes advantage of using ϕ-features, since *pro* is allowed in subject positions (30a) but is avoided in object positions (30b).

(30) a. *pro* he llevado un libro a casa.
pro have (agr1s) taken a book to house
'I took a book home.'

b. *pro_i hemos llevado pro_k a casa.
pro_i have(agr1p) taken pro_k to house

Nevertheless, arbitrary *pro* objects are licensed in Spanish finite clauses. Following Rizzi (1986) we identify the empty category in (31a) as a *pro*, because it can control the PRO subject of an embedded infinitival (31b).[8]

(31) a. Esto conduce pro_{arb} a la siguiente conclusión.
'This leads to the following conclusion.'

b. Esto conduce pro_{arb} a [PRO concluir lo que sigue]
'This leads to conclude what follows.'

The Spanish example in (31b) contrasts with English (32b) precisely in the availability of the empty object to control PRO. Rizzi (1986) suggests that this contrast is related to the *Pro*-drop Parameter: English is not a *pro*-drop language and consequently neither subjects nor objects can be dropped (33). In (32a, b), instead of the category *pro*, we have object deletion.[9]

8. The examples in (31) are the direct translation of Italian examples in Rizzi (1986):
(i) Questo conduce alla seguente conclusione.
(ii) Questo conduce a [PRO concludere quanto segue]

9. Object deletion would imply saturation of this argument in the lexicon and thus this position would not be projected in the syntax. The existence of an object *pro* implies the projection of a complement position in the syntax.

(32) a. This leads ___ to the following conclusion.
(Rizzi, 1986)

b. *This leads ___ [PRO to conclude what follows]
(Rizzi, 1986)

(33) a. * __ took a book

b. I took a book.

Turning to Spanish, infinitival constructions which lack overt verbal morphology license nominative overt subjects. These constructions also allow empty subjects, which can be characterized as members of the category *pro* (Rigau (1992)).

(34) a. Al entrar (María), empezaron a chillar.
on enter (María) started(agr3p) to scream
'When María came in they started to scream.'
(Rigau, 1992)

b. Al desmayarte (tu), empezaron a chillar.
on faint-TE (you) started(agr3p) to scream
'When you fainted, they started to scream.'
(Rigau, 1992)

Notice that the licensing of *pro* in Spanish infinitivals is independent from the recoverability of its reference: in (34a) *pro* may be licensed but its reference cannot be recovered from a morphologically overt element. In contrast (34b) bears the clitic *-TE* which allows us to recover the features [second person, singular] of the *pro* element.[10]

European Portuguese provides us with a Case in which the licensing of Nominative Case and *pro* is related to a morphologically overt Agr (Raposo, 1986, 1987). In this language there is an interesting contrast concerning empty objects, since strong cross-over effects such as those in (28a), repeated here as (35a), disappear when the clitic pronoun is realized (35b).

(35) a. *Ele$_i$ pensa que eu recomendei e$_i$ ao professor.
'He$_i$ thinks that I recommended e$_i$ to the professor.'

b. Ele$_i$ pensa que eu **o**$_i$ recomendi ao professor.
'He$_i$ thinks that I recommended him$_i$ to the professor.'
(Raposo, 1986)

10. We assume here the view that some Romance clitics are affix-like elements like agreement morphemes (Borer, 1984; Suñer, 1988; Fernández Soriano, 1989; Sportiche, 1992; Franco, 1984; Mendikoetxea, 1995).

Infinitivals are also very interesting since inflected and non-inflected infinitivals are available in European Portuguese. Subjects agreeing with the infinitival verb can be overt or *pro*.

(36) Será difícil [(elles) aprovar*em* a proposta].
'It will be difficult they to-approve-Agr the proposal.'
(Raposo, 1987)

In contrast, when the infinitival lacks agreement, the subject must be an empty category generally identified as PRO (37).

(37) a. *Será difícil [elles aprovar a proposta].
'It will be difficult they to-approve the proposal.'

b. Será difícil [PRO aprovar a proposta].
'It will be difficult to-approve the proposal.'
(Raposo, 1987)

In any case, it seems that languages differ in a number of different ways concerning the licensing of *pro*: there are languages which never allow *pro*. For instance English avoids this category even for third person singular pronouns which agree with the verb in the present. Some other languages only allow *pro* when its specifications are overtly realized in the verb morphology (Portuguese, Irish, Hebrew and Pachtou for instance). A third type of languages, such as Chinese, lack any kind of morphological agreement and yet they allow *pro* in some contexts. Finally, there are languages, for instance Basque and Spanish, which show morphologically overt agreement in the verb and allow *pro* arguments but also allow *pro* arguments in some constructions which lack overt agreement.

Therefore, the variability in the licensing of *pro* across languages leads us to argue that three types of coordinates must be taken into account in order to characterize a *Pro*-drop Parameter[11]:

(i) Conditions for the licensing of *pro* must be separately considered for each kind of argument (subject, direct object, indirect object, object of prepositions etc.) for each language.
(ii) Conditions for the licensing of *pro* and overt DP arguments must be similar in essence.
(iii) The recovery of the content of *pro* is independent from formal licensing conditions.

The coordinate (i) insures that we take into account languages that never allow the category *pro* (English), but we also consider languages which only allow *pro* in subject positions (Chinese) and, for instance, languages which allow the category *pro* for subject, and direct and indirect objects (Basque).

11. For condition (iii), we follow Rizzi (1986).

(ii) would be a condition of the Universal Grammar applying to all kinds of languages. The *Pro*-drop Parameter would be the consequence of the interaction of the different characteristics of each language with the licensing condition of DP arguments imposed by the UG.

Finally, (iii) ensures that grammars which take advantage and grammars which do not take advantage of using ϕ-features available in the UG are taken into account. It must also ensure that languages with different kinds of constructions concerning the exploitation of ϕ-features are also considered.

As for the conditions for the licensing of *pro*, a number of different hypotheses have been formulated: whereas for Rizzi (1986) the requirement for the licensing of *pro* is Case, Adams (1987) argues that the relevant relation for the licensing of this empty category is government. On the other hand, some authors (Jaeggli (1986); Roberge (1986); Authier (1992)) claim that *pro* is not Case-marked. Authier argues that the absence of the category *pro* in some languages such as English results from the obligatory assignment of structural Cases in this language. However, in Null Subject Languages, nominative need not be assigned or phonetically realized and consequently, *pro* subjects are allowed. In a language such as Basque, Ergative, Absolutive, and Dative Case would not be assigned obligatorily and thus, *pro* would be licensed for the three kinds of arguments.

Assuming the framework of Chomsky (1992) concerning the licensing of structural Cases, all languages would license Case in a specifier/head relation in AgrPs. Consequently, if *pro* is licensed by Case or by government, this category would be allowed for all languages. On the other hand, if *pro* is not Case marked, it would not be visible for θ-role assignment.[12] Furthermore, if the unavailability of *pro* results from the necessity of Case assignment, why does a language such as English allow object deletion but not subject deletion? And why does a language such as Basque, which allows the category *pro* in both subject and object positions, avoid object deletion while allowing subject deletion?

(38) a. *Horrek ondoko ondoriora eramaten du.
that-E following conclusion-the-to led AUX-3sA-3sE
'That leads to the following conclusion.'

b. *Hori ondoko ondoriora eramaten da.
that(A) following conclusion-the-to led AUX-3sA
'That leads to the following conclusion.'

(39) Hau honela egiten da.
this in this way done AUX-3sA
'This is how it is done.'

12. This is an undesired consequence. In fact, until Chomsky & Lasnik (1991), the category PRO was the only argument kind considered as visible for θ-role assignment without receiving case. One of the advantages of the Null Case Hypothesis in Chomsky & Lasnik (1991) is precisely the assumption that PRO receives the Null Case and thus it is visible for θ-assignment in the same way as any other argument.

In (38), the deletion of the object is avoided, either with or without auxiliary change: the auxiliary °*edun* 'have' in (38a) is the current (diargumental) auxiliary for transitive verbs and the auxiliary *izan* 'be' in (38b) is the (monoargumental) auxiliary for intransitive predicates. In (39) we have an example of subject deletion giving rise to an impersonal: the auxiliary °*edun* 'have' has been replaced by the auxiliary *izan* 'be'.

The contrast between English and Basque in respect to deletion of arguments is a consequence of the Obligatory Case Parameter in Bobaljik (1992, 1993) and Chomsky (1992): English is an Accusative language and thus, Nominative Case must be assigned, whereas Basque is an Ergative language and consequently, Absolutive Case must be assigned. Nevertheless, there is no asymmetry between subjects and objects with regard to the licensing of *pro* either in English or in Basque: *pro* is always allowed in Basque and always avoided in English.

Furthermore, Accusative *pro*-drop languages such as Italian and Spanish allow *pro* subjects but generally avoid *pro* objects. If *pro* were allowed when a structural Case is not obligatorily assigned, we would expect *pro*-drop Accusative languages to allow *pro* in object positions but to avoid it in subject positions. We thus conclude that the licensing of *pro* is not related to (either the obligatoriness or the optionality of) Case.

Suppose that *pro* is licensed by checking ϕ-features other than Case (person, gender, number) in [Spec, Agr] positions.[13] First of all, differences across languages would be the result of different characteristics of the functional category Agr in each language. Secondly, since following Chomsky (1989, 1992) it is assumed that an AgrP is projected for each argument receiving structural Case, the licensing of *pro* for different kinds of arguments inside a language can be explained assuming different characteristics for each AgrP. Finally, languages in which the licensing of *pro* is sensitive to the overtness of agreement would be also captured.

But what is the characteristic of Agr that licenses *pro*? Let us explore the possibility that differences across languages concerning the licensing of *pro* lie in checking conditions for Agr.

(40) *Checking Condition for Agr*
Check features in Agr by Spec/head relation if and only if

(i) the argument filling [Spec, Agr] is overt

or

(ii) Agr is morphologically overt

or

(iii) Agr bears strong features

In any language one or more of the three conditions can be met when an argument is licensed. For example when an overt argument is licensed in Basque finite

13. Some kind of role for the licensing of *pro* has been attributed to Agr in Manzini (1983), Huang (1984, 1989) and Borer (1986, 1989). Nevertheless, the role of Agr in those analyses should be to provide *pro* with a semantic content and no checking ϕ-features as in our view.

clauses, all three conditions co-occur: Basque has morphologically overt agreement and, as we show in 4.2., AgrPs have strong features.

Firstly, when arguments are overtly realized, the condition in (40) is filled because (i) is filled. We thus expect that all languages will allow overt DPs. Secondly, languages such as Hebrew, Pachtou and Irish would only allow the empty category *pro* when Agr is overtly realized in the verb (ii), which predicts that their AgrPs bear weak features and thus they cannot fill the condition in (40) via (iii). English lacks overtly realized Agr in the verb, and its Agr has weak features. Consequently, it lacks the category *pro*.[14]

Chinese, on the other hand, would not meet conditions (i) or (ii) when a *pro* is licensed in subject position. Its Agr_s must have strong features and consequently it allows the category *pro* independently from the overtness of Agr. Basque meets condition (ii) in finite clauses and thus *pro* is licensed. However, when *pro* is licensed in Basque infinitivals, neither (i) nor (ii) is filled. The licensing of *pro* must thus take place via an Agr with strong features. Spanish would behave like Basque with regard to Agr_s but would behave like English concerning Agr_o. Consequently, subject *pro* is licensed in Spanish finite clauses via (ii), since both (ii) and (iii) are met. Nevertheless, in infinitivals lacking morphologically overt agreement, *pro* subjects are licensed via (iii).

In any event, checking condition in (40) requires more refinement and empirical evidence but we suggest it as a departure for further work.

4.2. Does Agr in Basque Infinitivals Bear Strong Features?

In the framework of Chomsky (1992) functional categories may bear weak or strong features. However, this feature classification is explicitly distinguished from characteristics such as morphologically overt/non overt. The only significant evidence for the strength of the features contained in a functional head is overt movement in the syntax of an element to the specifier of this category.

Basque allows a very free ordering of the arguments in a clause. However, some orderings are perceived as neutral whereas others are very marked. As for finite clauses, Laka (1993) has claimed that in Basque NP arguments must remain internal to the VP but DP arguments must be externalized. Locative complements provide Laka with a piece of evidence for this contrast. The object of unergative predicates[15] remains inside the VP in the syntax and in the neutral order the locative argument is external to it (41a). Transitive (41b) and unaccusative (41c) predicates contrast with unergative ones, since the complement of V is a DP and consistently it must necessarily be externalized in the overt syntax. The consequence is that the neutral ordering clearly is that in which the locative immediately precedes the verb.

14. English has morphologically overt agreement in the verb for the third person singular in the present. However, this would be too restricted and speakers could not deduce any recoverability condition from it.
15. As pointed out in note 1 we are assuming here the view of Laka (1993) in which unergative predicates in Basque are actually dyadic predicates with an unincorporated NP object.

(41) a. Etxean lan egiten dut.
home-at work done Aux-3sA-1sE
'I work at home.'

b. Haurra etxean utzi dut.
baby-the home-at left AUX-3sA-1sE
'I left the baby at home.'

c. Haurra etxean dago.
baby-the home-at is
'The baby is at home.'

We will assume that in this case the object of transitive verbs or the subject of unaccusative verbs is raised in the overt syntax to [Spec, Agr_2] and thus Agr_2 bears strong features in Basque finite clauses.[16] As for Ergative subjects, in the neutral ordering, they always appear external to the Absolutive object, and thus they must also move in the overt syntax.

(42) Mirenek haurra etxean utzi du.
Miren-E baby-the(A) home-at left AUX-3sA-3sE
'Miren left the baby at home.'

Furthermore, in the neutral ordering, time adverbs often intervene between the subject and the object, which is the expected arrangement if time adverbs are adjoined to T, the Ergative subject is sited in [Spec, Agr_1] and the object in [Spec, Agr_2] as in (44).

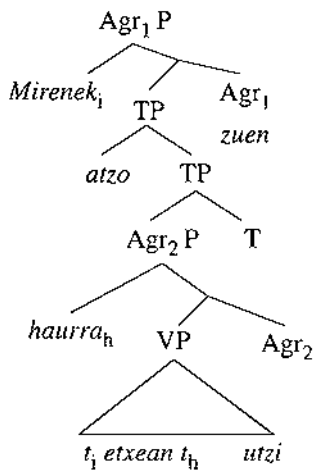
(43) Mirenek atzo haurra etxean utzi zuen.
Miren-E yesterday baby-the(A) home-at left AUX-3sA-3sE(PAST)
'Yesterday Miren left the baby at home.'

16. This assumption is problematic concerning NP internal arguments of unergative predicates. We are assuming, as in Laka (1993), that Basque unergative predicates are dyadic and thus they project Agr_1 and Agr_2. If Agr_2 has strong features and the internal argument of unergative predicates remains internal to the VP, those features should arrive to the spell out without checking and the derivation should crash. Note that the bare NP lacks ϕ-features to be checked in [Spec, Agr_2] since those features are assumed to correspond to the DP category.

We are thus forced to conclude that the Agr_2 projected by unergative predicates bears weak features. In fact, this Agr_2 has only one possible value, i.e. third person singular, and thus it can be identified as a different kind of Agr.

Concerning case, we assume as in Laka (1993) that case is assigned to the NP internally to the VP and thus, V lacks any case to transmit to Agr_2. Consequently, the NP of unergative predicates lacks any motivation for movement to [Spec, Agr_2].

(44)



Infinitivals behave very similarly to finite clauses with respect to the ordering of Ergative and Absolutive arguments. Thus we conclude that these arguments also move in the overt syntax, so Agr_1 and Agr_2 of Basque infinitivals bear strong features.

(45) a. Ez nau harritzen [zuk etxean lan egiteak].
no AUX-1sA-3sE surprise you-E home-at work do-the-E
'You working at home doesn't surprise me.'

b. Ez nau harritzen [Mirenek atzo haurra
no AUX-1sA-3sE surprise Miren-E yesterday baby-the
etxean uzteak].
home-at leave-the-E
'Miren leaving the baby home yesterday doesn't surprise me.'

Summarizing, Basque infinitivals bear Agr phrases with strong features and this would be the characteristic that licenses overt and *pro* arguments in these non-finite constructions.

4.3. Is There a TP in Infinitivals?

Most Basque infinitivals license both overt and *pro* Ergative arguments. We have related this fact to the existence of an Agr_1. We have also shown that this Agr node bears strong features. But in the framework of Chomsky (1992) we are assuming, Agr_1 lacks Case features and must receive them from Tense. Therefore, the licensing of Ergative subjects leads us to assume as well the existence of a TP in infinitivals. In this subsection we provide some evidence for the existence of the category Tense in Basque infinitivals, at least in those infinitivals this paper is

concerned with. We will look first at the behaviour of negation in these constructions, and then at the role of [Spec, T] in finite clauses and in infinitivals.

4.3.1. Negation. Laka (1990) claims that Neg is generated above IP in Basque and that Infl is forced to move to Neg by Tense c-command Condition. In this way the ordering of Basque matrix clauses with a fronted Neg-Infl is obtained (46b).

(46) a. Etxea **erori da.**
House-the fallen AUX

b. **Ez da** etxea **erori.**
No AUX house-the fallen
'The house hasn't fallen down.'

(Laka, 1990)

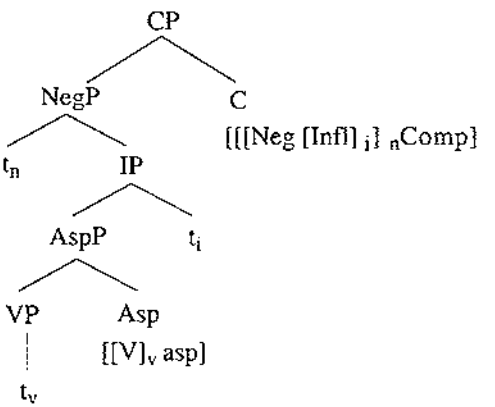
Concerning finite embedded clauses, Laka claims that the [Neg-Infl] complex is postposed because it must be adjoined to Comp. This is schematized in (48).

(47) a. **[Erori den]** etxea.
fallen AUX-that house-the
'The house that has fallen down.'

b. [Erori ez den] etxea.
fallen no AUX-that house-the
'The house that didn't fall down.'

(Laka, 1990)

(48)



(Laka, 1990)

As for Basque non-finite clauses such as (49), Laka argues that they lack Tense and thus neither the verb nor the auxiliary is fronted. Therefore, the Tense c-command Condition must be what accounts for the contrast between (47b) and (49).

(49) **Ez** gezurrik **esan.**
no lies-PART tell
'Don't tell lies.'

(Laka, 1990)

Infinitivals such as (50) contrast with non-finite clauses such as (49), since they behave just like finite embedded clauses. Assuming as in Laka (1990) that the ordering of negative clauses results from the Tense c-command Condition, V adjoins to a Tensed Infl in Basque infinitivals and a further movement takes place adjoining the complex [Neg-V-Infl] probably to the Determiner or Comp. The result is a postposed [Neg-V-Infl-Det] or [Neg-V-Infl-Comp].

(50) a. Nahiago dut [Jonek niri gezurrik **ez esatea**].
prefer AUX-3sA-1sE Jon-E I-DAT lie-PART no tell-the(A)
' I would rather Jon didn't tell me lies.'

b. Komenigarria da [e_{arb} haurrei gezurrik **ez esatea**].
advisable is children-DAT lie-PART no tell-the(A)
'It is advisable not to tell lies to children'

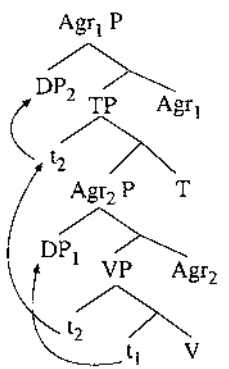
c. *pro*$_i$ [e_i gezurrik **ez esaten**] saiatuko naiz.
pro$_i$ e_i lie-PART no telling try-FUT AUX-1As
'I will try not to tell lies.'

Notice that the behaviour of infinitivals is similar when they license overt subjects (50a) and when they require controlled or arbitrary empty subjects (50b,c). Therefore, negation provides us with evidence for the existence of the category Tense in Basque infinitivals both with empty and with overt subjects.

4.3.2. On the Role of [Spec, T]. In the framework of Chomsky (1992), the Case features necessary for the checking of nominative and Ergative Case are assumed to be sited in the head T. Furthermore, T would bear verbal and nominal features, and the Extended Projection Principle (EPP) is derived from the strength of the nominal features in T. Languages can fulfill the EPP in the overt syntax or at LF depending on the strong or weak nature of the nominal features of T. Bobaljik & Jonas (1994) claim that there are languages in which [Spec, T] is licensed in the overt syntax, and languages in which it is not licensed. If a language has strong nominal features in T but does not license [Spec, T], T must raise to Agr_1 in order to check the nominal features of T in the overt syntax.

Furthermore, Bobaljik (1993) and Bobaljik & Jonas (1994) predict that in languages having both strong nominal features in T and licensing of [Spec, T] the subject of transitive verbs must always fulfill the [Spec, T] position at S-structure if the object moves overtly to [Spec, Agr_2]. Otherwise this subject must cross two available specifiers (that of Agr_o and that of T) violating minimality (51a).

(51) a.



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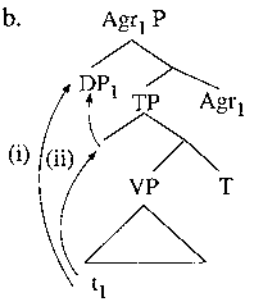
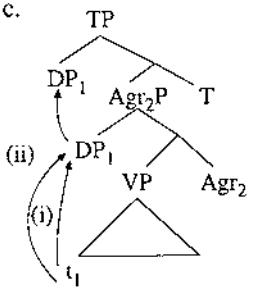


c.



Concerning subjects of intransitive predicates, Accusative and Ergative languages would pattern differently. In Accusative languages, both [Spec, TP] and [Spec, Agr_1] are available as a landing site for the subject, due to the fact that [Spec, Agr_2] does not intervene in this case. The two available possibilities are illustrated in (51b).

In Ergative languages, on the other hand, the Obligatory Case Parameter forces the object of an intransitive verb to check its Case features in [Spec, Agr_2]. If T lacks nominal features, the subject would remain in [Spec, Agr_2] (51ci). But if T has strong nominal features, a further movement to [Spec, T] would be required in order to check strong nominal features in T (51cii). The principle of greed (Chomsky 1992) would require the moved argument to also have such features requiring checking. Therefore, the nominal features checked in [Spec, T] cannot be Case, which is checked further down in [Spec, Agr_2].

Let us suppose that the nominal features checked in [Spec, T] are those related to agentivity or control of the action, i.e., something related to the intentionality of the action. We call this feature [+control].[17] Ergative subjects would in any case finish in [Spec, Agr_1] and thus no asymmetry would be expected. With Absolutive arguments, however, some kind of asymmetry would appear. In fact, Basque Absolutive-Dative predicates are of two kinds (52):

17. Something else must be said in respect to this feature. Gràcia (1987) remarked that the interpretation of the subject as controller of the action denoted by the predicate depends on two factors:

(a) the intrinsic characteristics of the predicate
(b) some semantic characteristics of the subject such as [± animate]

A classic syntactic test to detect control of the action by the subject lies in the licensing of final clauses: stative verbs such as *jakin* ('know') and *edun* ('to have') are avoided with final clauses:

(i) *Mirenek matematika daki, unibertsitatean sartzeko.
Miren-E mathematics(A) knows university-in enter-in order to
'Miren knows mathematics in order to enter the university'

(ii) *Mirenek hogei urte ditu, unibertsitatean sartzeko.
Miren-E twenty years(A) has university-in enter-in order to
'Miren is twenty years old in order to enter the university.'

(52) a. Mireni haurra erori zaio.
Miren-D child-the(A) fallen AUX-3sA-3sD
'Miren dropped the child.'

b. Miren haurrari mintzatu zaio.
Miren(A) child-the-D spoken AUX-3sA-3sD
'Miren spoke to the child.'

The example (52a) corresponds to the neutral ordering in dyadic constructions headed by verbs such as *erori* 'fall'. Note that the Dative argument is to the left of the Absolutive argument. This is the expected ordering if we compare it to that of tryadic constructions such as (9a), repeated here as (53).

(53) Zuk niri liburu batzuk eman dizkidazu.
you-E I-D book some(A) given AUX-3pA-1sD-3sE
'You gave me some books'

On the other hand, in constructions headed by a verb such as *mintzatu* 'speak', the neutral ordering is that in (52b), with the Absolutive argument preceding the Dative argument. Nevertheless, agreement morphemes in the auxiliary are similarly arranged in both cases.[18]

On the other hand, animate and inanimate subjects contrast straightforwardly in respect to this test:

(iii) Mirenek atea ireki du, etxean sartzeko.
Miren-E door-the open has house-in enter-in order to
'Miren opened the door in order to enter the house.'

(iv) *Giltzak atea ireki du etxean sartzeko.
key-the-E door-the open has house-in enter-in order to
'The key opened the door in order to enter the house.'

This property of subjects as controller of the action seems relevant to the licensing of controlled subjects in obligatory control constructions (Lasnik, 1992) and also in subject oriented secondary predicates (Demonte, 1988).

(v) John tried [PRO to visit Bill].
*John tried [PRO to resemble Bill].

(Lasnik, 1992)

(vi) John always drives drunk.
*John Knows French drunk.

(vii) *Juan ama la naturaleza extasiado.
'Juan loves the anture enrapt.'

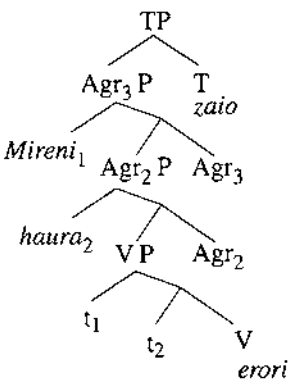
(Demonte, 1988)

18. This is much more evident with first or second person agreement.

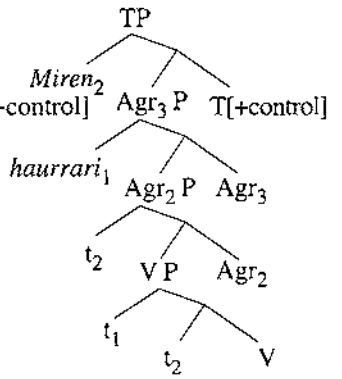
(i) Ni zuri mintzatu natzaizu.
I(A) you-D spoken AUX-1sA-2sD.

The contrast between (52a) and (52b) lies in the agentivity or control of the action by the Absolutive argument: whereas in (52a) the Absolutive argument does not control the action expressed by the verb, in the (52b) it does. We claim that the difference in ordering results from the raising of Absolutive arguments to [Spec, T] when they contain the feature [+ control], which must be checked in this position (54).[19]

(54) a.



b.



Infinitivals behave similarly to finite clauses concerning the arrangement of the Absolutive and Dative arguments (55).

(55) a. [Mireni haurra erortzea] pentsaezina da.
Miren-D child-the(A) fall-the(A) inconceivable is
'Miren dropping the child is inconceivable.'

b. Beharrezkoa da [Miren haurrari mintzatzea].
Necessary is Miren(A) child-the-D speak-the(A)
'Miren must speak to the child.'

This leads us to postulate that T is present in infinitivals and that raising to [Spec, TP] must take place when the Absolutive argument and the head T bear the feature [+control].

19. Note that if we assume in Basque that all three arguments that agree with the verb are generated inside the VP and are then externalized in order to check their case features (ergative, dative, absolutive), three Agr nodes are required as in Cheng & Demirdash (1993). The resulting structure would be problematic for minimality, and a structure such as that suggested by Collins & Tráinsson (1993) for Double Object Constructions would be required. This structure would bear two VPs and some functional nodes intervening between them would be required. For a concrete analysis of Basque tryadic constructions via a clause structure such as that in Collins & Tráinsson see López & Austin (1995). Here, however, we are only concerned with dyadic predicates and shall not go deeply into this subject for reasons of extension.

5. Basque Infinitivals and the Category DP

In this section we claim that most Basque infinitivals have a DP. This explains their nominal behaviour, without assuming an NP as complement of D. Subsection 5.1 describes the behaviour of Basque regular DPs containing an NP. Subsection 5.2 compares the behaviour of infinitivals with that of regular DPs, concluding that most of them are headed by a determiner. Finally, subsection 5.3. compares infinitivals that only allow the affix determiner *-a* with those allowing both the affix *-a* and a demonstrative such as *hori* ('that'). We explain this contrast by the different nature of the two determiners: the former is an affix and thus the complex [V-T-a] is available for selection in the head D. Infinitivals headed by a demonstrative, however, lack Tense features available for selection and may only fill positions requiring nominal features.

5.1. The Behaviour of Basque Regular DPs

5.1.1. Basque regular arguments[20] headed by an N always require an overt determiner or quantifier to be grammatical. This is evident for arguments with an unspecific reading, since they also require the determiner *-a*, which generally heads definite DPs (Laka 1993). In fact (56a) is ambiguous between a specific and an unspecific reading.

(56) a. Ardoa edango dugu.
wine-the drink-FUT AUX
'We will drink (the) wine.'

b. *Ardo edango dugu.
wine drink-FUT AUX
'We will drink wine.'

5.1.2. When the DP has a specific reading, demonstratives are also allowed instead of the affix *-a*.

(57) Ardo hori edango dugu eta ez hau.
wine that drink-FUT AUX and not this
'We will drink that wine and not this one.'

5.1.3. Regular DPs containing an NP show Ergative, Dative or morphologically unrealized Absolutive Case. Furthermore they trigger obligatory agreement in Case, person and number with the verb (or the auxiliary).

(58) Nik haurrei gozokiak eman dizkiet.
I-E children-D sweets-the(A) given AUX-3pA-3pD-1sE
'I gave the children sweets.'

20. That is, arguments other than the non-incorporated objects of unergative predicates such as *lan egin* ('to work'), *hitz egin* ('to speak').

In fact, the ungrammaticality of the following examples is explained by the failure of Case (59a), person (59b) or number (59c) agreement in the auxiliary.

(59) a. *Nik haurrei gozokiak eman dizkidate.
I-E children-D sweets-the(A) given AUX-3pA-1sD-3pE

b. *Nik haurrei gozokiak eman dizkidazu.
I-E children-D sweets-the(A) given AUX-3pA-1sD-2sE

c. *Nik haurrei gozokiak eman diet.
I-E children-D sweets-the(A) given AUX-3sA-1sD-2sE

5.2. Infinitivals and the Category DP

5.2.1. Infinitivals that allow overt subjects but lacking a determiner are avoided. The determiner used is often the affix *-a*.[21]

(60) a. [Miren egunero berandu etortzea] parkaezina da.
Miren-A every day late come-the unforgivable is
'Miren coming late every day is unforgivable.'

b. *[Miren egunero berandu etortze] parkaezina da.
Miren-A every day late come unforgivable is.
'Miren coming late every day is unforgivable.'

Infinitivals with arbitrary empty subjects also show the determiner *-a* and they are ungrammatical without this morphological mark.

(61) a. [e_{arb} erretzea] kaltegarria da.
e_{arb} smoke-the(A) harmful is
'To smoke is harmful.'

b. *[e_{arb} erretze] kaltegarria da.
e_{arb} smoke harmful is
'To smoke is harmful.'

Finally, infinitivals with controlled empty subjects show two different paradigms: some of them are allowed both with and without determiner (62a, b) while others always lack this morpheme (62c):

(62) a. Mireni$_i$ ahaztu zaio [e_i liburua ekartzea].
Miren-D$_i$ forgotten AUX-3sA-3sD e_i book-the(A) bring-the(A)
'Miren forgot to bring the book.'

21. Demonstratives are also allowed but they provide the sentence with a rhetorical nuance.

(62) b. Mireni$_i$ ahaztu zaio [e$_i$ bizikletaz ibiltzen].
Miren-D$_i$ forgotten AUX-3sA-3sD e$_i$ bicycle-by riding
'Miren forgot how to ride a bicycle.'

c. Miren$_i$ [e$_i$ liburua irakurtzen] hasi da.
Miren(A) e$_i$ book-the(A) reading started is
'Miren has started reading the book.'

5.2.2. Infinitivals with the affix *-a* show in addition Ergative, Dative or Absolutive Case-marking depending on the relation they have with the matrix predicate. In (63a) and (63d) the infinitival is the external argument of a dyadic predicate and, consequently, it takes Ergative Case. The verb *iritzi* ('find') in (63b) is a tryadic predicate and the infinitival shows the Dative Case corresponding to the subject of the nominal predicate *harrigarri* ('strange'). Finally, in (63c), the infinitival behaves as the subject of the nominal predicate but, since it appears with the auxiliary *izan* ('be'), the infinitival bears the Absolutive Case.

(63) a. [Miren berandu heltze**ak**] harritu egin nau.
Miren(A) late arrive-**the-E** surprised do AUX-1sA-3sE
'Miren arriving late surprised me.'

b. Harrigarri deritzot [Miren berandu heltze**ari**].
strange find-3sA-3sD-1sE Miren(A) late arrive-**the-D**
'I find strange Miren arriving late.'

c. Harrigarria da [Miren berandu heltze**a**].
strange is Miren(A) late arrive-**the(A)**
'Miren arriving late is strange.'

d. [e$_{arb}$ erretze**ak**] kalte egiten digu.
e$_{arb}$ smoke-**the-E** harm do-FUT AUX-3sA-1pD-3sE
'Smoking is bad for you.'

5.2.3. Agreement between these infinitivals and the matrix verb is required (64). In fact, (64b) is avoided because the matrix verb lacks agreement with the Ergative infinitival.

(64)a. [Miren berandu heltze**ak**] ezinezko egiten
Miren(A) late arrive-**the-E** impossible make
du [bilera garaiz hastea].
AUX-**3sA-3sE** meeting-the on time start-**the(A)**
'Miren arriving late makes it impossible to start the meeting on time.'

b. *[Miren berandu heltze**ak**] ezinezko egiten
Miren(A) late arrive-**the-E** impossible make
da [bilera garaiz hastea].
AUX-**3sA** meeting-the on time start-**the(A)**

On the other hand, infinitivals without a determiner do not always agree with the matrix verb (65). Note that in the example (65) we have the monadic auxiliary *izan* 'to be', despite the fact that the matrix predicate has two arguments: the subject and the infinitival complement.

(65) Miren$_i$ [e$_i$ liburua irakurtzen] hasi da.
Miren(A) e$_i$ book-the(A) reading started AUX-**3sA**
'Miren has started reading the book.'

5.2.4. Some infinitivals allow the demonstrative *hori* 'that' as well as the determiner affix *-a*. Three major groups can be distinguished amongst them: on the one hand, infinitival subjects of the main verb or a nominal predicate Case marked Absolutive, Dative or Ergative (66).

(66) a. [Miren egunero berandu etortze hori]
Miren-(A)/Miren-GEN every day late come that(A)
parkaezina da.
unforgivable is
'That business of Miren coming late every day is unforgivable.'

b. [Miren egunero berandu heltze horrek] harritu gaitu.
Miren(A) every day late arrive that-E surprised AUX-1pA-3sE
'That business of Miren arriving late every day surprised us.'

c. [Miren egunero berandu heltze horri] parkaezina
Miren(A) every day late arrive that-D unforgivable
deritzot.
find-3sA-3sD-1sE
'I find unforgivable that business of Miren arriving late every day.'

Secondly, infinitivals with empty arbitrary subjects also allow demonstratives.

(67) [e$_{arb}$ egunero bi pakete erretze hori] kaltegarria da.
e$_{arb}$ every day two packets smoke that(A) harmful is
'That business of smoking two packets of cigarettes every day is harmful.'

Finally, infinitival complements of factive predicates (68) are also grammatical with demonstratives.

(68) Gorroto dut [Jonek jakin gabe hitz egite hori]
hate AUX-3sA-1sE Jon-E know without word make that(A)
'I hate Jon speaking without knowing what he's talking about.'

The other infinitivals are avoided with a demonstrative: firstly infinitivals complement of volitive (69a) and Control verbs (69b),

(69) a. *[Jonek astiro hitz egite hori] nahi dut.
Jon-E slowly word make that(A) want AUX-3sA-1sE
'I want that business of Jon speaking slowly.'

b. *Jonek$_i$ ahaztu du [e$_i$ liburua ekartze hori].
Jon$_i$-E forgotten AUX-3sA-3sE e$_i$ book-the(A) bring that
'Jon forgot that business of bringing the book.'

and secondly adjunct clauses with a temporal reading (70).

(70) *[Jon gelara sartze horretan] guztiak isildu
Jon(A) room-into enter that-on everybody fallen silent
ziren
AUX(Past)
'When that business of Jon coming into the room happened, everybody fell silent.'

Our conclusion is that the affix *-a* of infinitivals is a determiner. In the following subsection we will explain the impossibility of a demonstrative in some kinds of infinitivals which allow the affix *-a*, taking into account the different nature of the two determiners.

5.3. On the Relation between Determiner and Tense: the distribution of Basque infinitivals

In subsection 5.2. we saw that two values of the determiner, i.e. the affix *-a* and a demonstrative, are allowed with some kinds of infinitival whereas other kinds of infinitival only allow the affix *-a*. First of all, we will look at a schematic representation of infinitivals headed by each kind of determiner, taking into account the internal structure we are assuming for Basque infinitivals.[22]

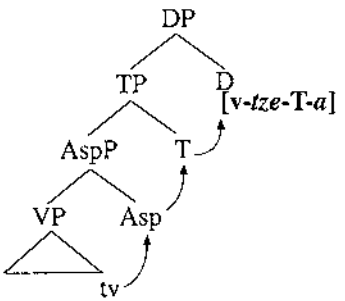
Dispensing with both Agr nodes and movement of the arguments to the corresponding specifiers, infinitivals headed by a determiner would have a structure similar to (71). The suffix *-a* is morphologically dependent and thus is part of the infinitival complex. V is raised via head to head movement in order to check all features that it contains. The movement from T to D is motivated by the necessity of the dependent morpheme *-a* to attach to something.[23] The result is that at the end

22. Note that this structure is similar to that claimed by Abney (1986, 1987) for English gerunds. Such a structure turns out to be problematic for the concept of Extended Projection as in Grimshaw (1991), since it would be expected for a DP to be the extended projection of an N and not the extended projection of a V. Grimshaw (1991) solves this problem by a mechanism of feature neutralization. Fernández de Lagunilla & Anula (1992) also develop a theory for the neutralization of features in clausal infinitivals.

23. Here we are assuming the refinement by Lasnik (1995) of Chomsky's Last Resort Condition for Movement (Greed), that is, 'Enlightened Self Interest': items move either to satisfy their own requirements or those of the position they move to.

of the derivation the complex [v-tze-T-a] is sited in the determiner head as in (71a). The demonstrative, however, is an independent word and Consecuently, in (71b) there is not any motivation for movement over the head T. Therefore, the infinitival complex cannot be raised until the determiner head.

(71) a.



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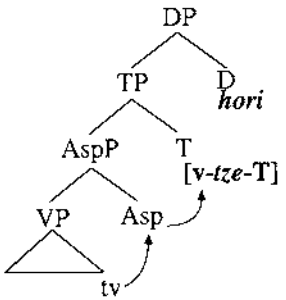

Contexts requiring a DP, that is, subject positions and complements of verbs selecting facts, are available for both kinds of constructions in (71). However, in those contexts that require Tense or another constituent of Infl to be selected, constructions such as (71b) are avoided, since Infl is not available for selection. We claim that adjuncts with a temporal reading, complements of volitive predicates and Control infintivals are avoided with a demonstrative due to the impossibility of Infl to move to the head D.

First of all, we will look at temporal clauses such as (70). We will assume that the inessive postposition in (70) is a temporal operator that selects a temporal expression as complement.[24] This complement may be a finite clause as in (72a) or a noun with temporal value such as a day of the week, a month, an hour or a part of the day (72b).

(72) a. [Miren gelara sartu zenean], guztiak
Miren(A) room-the-into enter AUX-INES, every body(A)
isildu ziren.
fallen silent AUX
'When Miren entered the room, everybody fell silent.'

b. Jon {astelehencan/ udan/ otsailan/ zortzietan/
Jon(A) {Monday-INES/ summer-INES/ February-INES/ eight-INES/
arratsaldean} helduko da.
afternoon-INES} arrive-FUT AUX
'Jon will arrive {on Monday/in the summer/ in February/ at eight o'clock/in the afternoon}'

24. A similar assumption is made by Rigau (1992) for Catalan and Spanish.

(70) fails to meet the selectional requirements for the inessive postposition. But when the demonstrative is replaced by the affix *-a* we also obtain grammatical temporal clauses with infinitivals (73).

(73) [Jon gelara sartzean] guztiak isildu ziren.
Jon(A) room-into enter-the-in everybody fallen silent AUX(Past)
'When Jon came into the room everybody fell silent.'

As additional evidence for the idea that in (70) it is the lack of temporal value which fails, we will look at an example such as (74). In this case the inessive postposition without being a temporal operator has an (abstract) locative value and consequently the demonstrative is allowed.

(74) [Jon noizean behin berandu heltze horretan] ez dut inolako
Jon(A) sometimes late arrive that-in no AUX any
arazorik ikusten.
problem see
'I don't see any problem in that business of Jon arriving late sometimes.'

Volitive predicates such as those in (75a) and (75b) take an infinitival clause without a factive interpretation as complement. These predicates also allow clausal complements with a subjunctive verb form as in (75c) and (75d).

(75) a. *[Jonek lasai hitz egite hori] nahi dut.
Jon-E calm speak that(A) want AUX

b. [Jonek lasai hitz egitea] nahi dut.
Jon-E calm speak-the(A) want AUX-3sA-1sE
'I want Jon to speak calmly.'

c. [Jonek lasai hitz egin dezan] nahi dut.
Jon-E calm speak AUX(subj.) want AUX
'I want Jon to speak calmly.'

d. Espero dut [Miren garaiz hel dadin].
hope AUX Miren(A) on time arrive AUX (subj.)
'I hope that Miren will arrive on time.'

If we assume that volitive predicates always select the feature [+subjunctive] in their clausal complements, we restrict the idea of Ortiz de Urbina (1992) that all predicates that select infinitival clauses impose this requirement on their complement. The feature [+subjunctive] must be sited in one of the nodes of the embedded Inflection. We assume here the idea in Laka (1992) that all subjunctive clauses have

in common the presence of a modal element in Infl.[25] Therefore, the required feature is available for selection only when the head of the infinitival is the affix *-a* as in (71a).

Finally, regarding infinitivals with empty controlled subjects such as (76a), we will assume following Bobaljik (1993) that they can be characterized by an anaphoric or dependent Tense. Furthermore, we will assume that Control is the result of this dependent Tense. Control verbs such as *ahaztu* ('forget') require their complement to bear this type of anaphoric Tense. But as seen above, T is available for selection only when the infinitival is headed by the determiner *-a* (76b).

(76) a. *Jonek$_i$ ahaztu du [e$_i$ liburua ekartze hori].
Jon$_i$-E forgotten AUX-3sA-3sE e$_i$ book that(A) bring that
'Jon forgot that business of his bringing the book.'

b. Jonek$_i$ ahaztu du [e$_i$ liburua ekartzea].
Jon$_i$-E forgotten AUX-3sA-3sE e$_i$ book-the(A) bring-the
'Jon forgot to bring the book.'

Summarizing, the differences in distribution of Basque infinitivals can be explained by assuming that they are determiner phrases containing a tensed clause. The different morphological nature of each value of the determiner head makes Infl available or unavailable for selection or checking in the head D.

6. Infinitivals with Empty Subjects

As mentioned above, there are two contexts in which Basque infinitivals require empty subjects: on the one hand infinitivals with an arbitrary subject like (77a) and on the other, infinitival complements of Control verbs such as *ahaztu* ('forget') and *hasi* ('start')(77b, c).

(77) a. [e$_{arb}$ erretzea] kaltegarria da.
e$_{arb}$ smoke-the(A) harmful is
'Smoking is harmful.'

b. Miren$_i$ ahaztu zaio [e$_{i/*k}$ liburua ekartzea].
Miren-D$_i$ forgotten AUX-3sA-3sD e$_{i/*k}$ book-the(A) bring-the(A)
'Miren forgot to bring the book.'

c. Miren$_i$ [e$_{i/*k}$ liburua irakurtzen] hasi da.
Miren(A) e$_{i/*k}$ book-the(A) reading started is
'Miren has started reading the book.'

25. Laka (1992) claims that this modal element is present in both dubitative subjunctives and volitive or desiderative subjunctives requiring disjunct reference. In Basque only desiderative predicates take subjunctive complements. Dubitative predicates don't select subjunctive complements but a negative complementizer.

The contexts in which these categories appear are the same as assumed for the category PRO in languages such as English. We have shown that the category Tense and Agr are also present in this kind of infinitivals. Thus a view such as that in Chomsky (1981) in which the presence of this empty category is related to the absence of T and Agr is excluded. Another possibility is to relate the licensing of PRO to a weak Tense which bears the features of a Case referred to as 'Null Case' in Chomsky & Lasnik (1991). In any event, the inability to take overt subjects would be related to the Case Filter and more concretely to the category Tense.

Subsection 6.1. explores the implications that the view in Chomsky & Lasnik (1991) would have for languages with an Ergative Case marking system. Subsection 6.2 describes semantic restrictions of controlled subjects. In subsection 6.3. we assume the idea of Bobaljik (1993) that Control is the result of a dependent or anaphoric Tense which must be raised to the matrix Tense at LF. Control only arises with subjects raised to [Spec, T]. Finally subsection 6.4. relates null subjects with arbitrary reference to a generic Tense which is forced to project Agreement with a minimal referential content.

6.1. Control and Ergativity

The characterization of controlled subjects as in Chomsky & Lasnik (1991) is plausible for languages with an Accusative Case marking system but it fails when we are concerned with an Ergative Case marking system such as that of Basque. In Ergative Case marking systems there are two kinds of subjects from the view point of the Case they receive: whereas the subject of dyadic predicates receives Ergative Case, which is the Case related to T, the subject of monadic predicates receives the Case related to V (Absolutive).

If Control results from either the impossibility of assigning Case to the subject or from the assignment of the Null Case to this subject, an asymmetry would be expected in Ergative systems between the subject of dyadic and monadic predicates. However, as can be seen by comparing (77b, c) with (78a, b), the behaviour of the two kinds of subjects is the same inside the complement of Control verbs.

(78) a. Mireni$_i$ ahaztu zaio [e$_{i/*k}$ etortzea].
Miren-D$_i$ forgotten AUX-3sA-3sD e$_{i/*k}$ come-the(A)
'Miren forgot to come.'

b. Ikasleak$_i$ [e$_{i/*k}$ ikasgelara sartzen] hasi dira.
students-the(A) e$_{i/*k}$ entering room-into started are
'The students started coming into the room.'

That is, the subject of unaccusative verbs such as *etorri* ('come') or *sartu* ('enter') displays the same behaviour as the subject of transitive verbs such as *ekarri* ('bring') and *irakurri* ('read'). However, the former requires the Case of V (Absolutive) whereas the latter requires the Case of T (Ergative). Furthermore, the object of transitive predicates may be overt as can be observed in (77b) and (77c). Therefore, the Case of V is available in Control infinitivals and it would be expected for subjects of monadic predicates to not display control: since Agr$_2$P is

internal to TP, it would be avoided for an argument with its Case features checked in [Spec, Agr_2] to be raised to [Spec, T] in order to check the Null Case.[26]

We conclude that Control appears to be unrelated to Case.

6.2. Semantic Restrictions in Controlled Subjects

There are subjects of dyadic and monadic predicates which in finite clauses are Case marked Ergative and Absolutive respectively but which are excluded from the complement of Control verbs. They are verbs such as *jakin* ('know') or *erori* ('fall').

(79) a. *Mikeli$_i$ ahaztu zaio [$e_{i/*k}$ ikasgaia jakitea].
Mikel-D forgotten AUX-3sA-3sD $e_{i/*k}$ lesson know-the(A)

b. *Haur jaio berriari$_i$ ahaztu zaio [$e_{i/*k}$ erortzea].
Baby newborn-the-D forgotten AUX-3sA-3sD $e_{i/*k}$ fall-the(A)

It has been observed that Control imposes a thematic requirement on the controlee and that in obligatory Control constructions, the predicate of the complement must be an intentional action (Higgins (1973), Berman (1970), and Lasnik & Fiengo (1974)). Lasnik (1992) observes that this requirement might be stated as a property of the subject of the complement. In fact, when a verb such as *erori* ('fall') can also represent an intentional control of the action by the subject, it can head a Control infinitival (80).

(80) Aktoreari$_i$ ahaztu zaio [$e_{i/*k}$ erortzea].
actor-the-D forgotten AUX-3sA-3sD $e_{i/*k}$ fall-the(A)
'The actor forgot to fall.'

Lasnik (1992) also points out that these restrictions generally appear with verbs requiring obligatory Control and that they are not present with verbs that allow but do not necessarily require Control. He suggests that the two classes of superficially subjectless infinitivals should be treated differently.[27] This contrast also

26. López (1995) criticizes the Obligatory Case Parameter in Bobaljik (1992) and Chomsky (1992) by using precisely the absence of asymmetries amongst different kinds of subjects in non-finite constructions of ergative languages. He claims that the parametrization between accusative and ergative languages, far from being related to case, is related to Agr. The case in Tense would always be checked, and thus the subject of intransitive verbs would always check its case in [Spec, T] either in accusative or in ergative languages. In non-finite constructions, the case checked in [Spec, T] would be the Null case and thus control would result in either transitive or intransitive predicates.

This view explains the absence of asymmetries in control constructions with transitive and intransitive predicates in ergative languages but it leaves without explanation differences between absolutive-dative predicates described in subsection 4.3.2. and also thematic restrictions in control infinitivals that we will explore in the following subsection (6.2.).

27. Lasnik (1992) compares the behavior of obligatory control verbs such as *persuade* with optional control verbs such as *want*.

(i) a. John persuaded Mary [PRO to visit Bill]
b. *John persuaded Mary [PRO to resemble Bill]

(Lasnik, 1992)

arises in Basque. A verb such as *nahi* ('want') allows two kinds of non-finite complements. On the one hand there are infinitival complements with overt or *pro* subjects (81). The subject of these complements bears disjoint reference in respect to the matrix subject.[28] On the other hand, there are complements headed by a participle[29] which require an empty subject with the same reference as the matrix subject (82). In this case, arguments that are presumably controlled subjects do not need to be controllers of the action denoted by the embedded verb (82).

(81) a. Jonek [Mirenek ikasgaia jakitea] nahi du.
Jon-E Miren-E lesson-the(A) Know-the-a want AUX
'Jon wants Miren to know the lesson.'

b. Jonek_i [$\text{pro}_{*i/k}$ ikasgaia jakitea] nahi du.
Jon-E_i $\text{pro}_{*i/k}$ lesson-the(A) Know-the-a want AUX
'Jon wants her to know the lesson.'

(82) Jonek_i [$e_{i/*k}$ ikasgaia jakin] nahi du.
Jon-E_i $e_{i/*k}$ lesson-the(A) known want AUX
'Jon wants to know the lesson.'

The suggestion of Lasnik (1992) makes even more sense for Basque than for English, since the constructions in (81) and (82), besides being headed by a different verbal form, behave very differently: on the one hand, the object of the embedded verb in (82) agrees with the matrix verb (83) and secondly the embedded clause can not be negated (84).[30]

(83) Jonek_i [$e_{i/*k}$ ikasgai**ak** jakin] nahi **di**tu.
Jon-E_i $e_{i/*k}$ lesson-the-**pl**.(A) Know-the-a want AUX-**3pA**-3sE
'Jon wants to know the lessons.'

(ii) a. John wanted [Sue to visit Mary]
b. John wanted [Sue to resemble Mary]
c. John wanted [PRO to visit Bill]
d. John wanted [PRO to resemble Bill]

(Lasnik, 1992)

28. In most Basque dialects the *pro* in (81b) must bear disjoint reference in respect to the matrix subject. However, there are also some dialects in which (81b) does not show obviation effects. That is, in some dialects (81b) can also have the meaning of (82). See Goenaga (1984).

29. Note that this participle is different from that in (19). Participles in (82), (83) and (84) lack any kind of determiner.

30. Concerning these Basque constructions see Ormazabal (1991), which describes their behavior in greater detail, concluding that they are a case of verb incorporation.

(84) a. *Jonek$_i$ [$e_{i/*k}$ ikasgaia **ez jakin**] nahi du.
Jon-E$_i$ $e_{i/*k}$ esson-the-(A) no Know-the-a want AUX
'Jon wants not to know the lesson.'

b. *Jonek$_i$ [**ez** $e_{i/*k}$ ikasgaia **jakin**] nahi du.
Jon-E$_i$ no $e_{i/*k}$ lesson-the-(A) Know-the-a want AUX
'Jon wants not to know the lesson.'

Summarizing, the constructions in (82) do not pattern either as finite or as non-finite embedded clauses. Consequently we will put them aside and concern ourselves only with clearly infinitival embedded clauses in which it appears that controlled subjects are necessarily controllers of the action denoted by the embedded verb.

6.3. Time Dependence in Control Infinitivals

Much work has been done to find a unified theory for the categories *pro* and PRO (Manzini (1983), Huang (1984, 1989), Borer (1986, 1989)). Specifically, Manzini and Huang try to assimilate the licensing of both kinds of categories to a 'Generalized Control Rule' which will ensure that these empty categories receive semantic content from either Agr or an argument in the matrix clause.

Borer (1989) and Bobaljik (1993) detach the phenomenon of Control from the category PRO, providing us with data from the Italian, Korean and Inuit languages, in which overt pronouns and *pro* appear controlled in some syntactic contexts. Borer (1989) argues that Control is the result of an anaphoric Agreement. Languages such as English are assumed to lack empty pronominal elements of the category *pro*, the reason being related to the lack of a rich Agreement available for recovering the reference of *pro*. Borer claims that an empty subject, which she identifies as a *pro*, is available in English infinitivals and gerunds because of the anaphoric nature of their Agreement, which forces it to take reference from an argument in the matrix clause.

Bobaljik (1993) modifies the idea of Borer and claims that Control is due to a dependent or anaphoric Tense which must be raised to the matrix Tense at LF. He also claims that the coreference of the controlled subject with an argument of the matrix clause results from the fact that controlled subjects fill the [Spec, T] position of this anaphoric Tense.

The hypothesis that Control is related to an anaphoric Agr leaves without explanation thematic restrictions in controlled subjects but it captures well the idea that Control actually lies in sharing ϕ-features such as gender, number and person. On the other hand, the hypothesis of an anaphoric Tense captures some facts related to Control. First of all, Control arises with a special kind of Tense and secondly, thematic restrictions can be explained by the role assumed for [Spec, T] in subsection 4.3.2. Nevertheless, it is difficult to see how the anaphoric nature of Tense can force the controlled subject to share ϕ-features with an argument of the matrix clause. It looks as though the anaphoric nature of Tense would also determine a particular characteristic of Agr, for instance the lack of features to be checked.[31]

31. We leave open technical problems of this hypothesis for reasons of extension.

Comparing Control infinitivals with infinitivals which allow overt subjects, a clear contrast related to time instantiation appears immediately. Overt subject infinitivals allow time adverbs, and the time reference expressed by these adverbs need not necessarily be the same as that of the matrix clause. Control infinitivals, on the other hand, necessarily are referred to the time of the matrix clause. They allow time adverbs but these must correspond to the same time of the matrix clause. Compare the infinitival in (85a) with those in (85b) and (85c).

(85) a. Mirenek [ni gaur harekin erosketak egitera joatea]
Miren-E I(A) today she-with shopping-the-pl(A) do-to go-the(A)
nahi zuen.
wanted AUX(Past)

'Miren wanted me to go shopping with her today.'

b. Mirenek$_i$ ahaztu zuen [e$_i$ erosketak atzo
Miren$_i$-E forgotten AUX (PAST) e$_i$ shopping-the-pl.(A) yesterday
egitea].
do-the(A)

'Miren forgot to do the shopping yesterday.'

c. *Mirenek$_i$ ahaztu zuen [e$_i$ erosketak
Miren$_i$ -E forgotten AUX(PAST) e$_i$ shopping-the-pl(A)
gaur egitea].
today do-the(A)

'Miren forgot to do the shopping today.'

Thus there is a time dependence in Control infinitivals. Also, we will relate the fact described in 6.2. that controlled subjects must be controllers of an intentional action denoted by the verb of the embedded clause, to the feature [+control] which we have assumed to be checked in [Spec, T] (see subsection 4.3.2.). Only those subjects with the features [+control] can be sited in [Spec, T] and these are precisely the subjects available for Control.

Turning to the examples in (55), only those in which the Absolutive is external to the Dative are expected to allow controlled subjects and, in fact, the data confirm our expectations. Note that one of our assumptions is that Absolutive arguments external to Dative arguments fill [Spec, T] in the overt syntax and it is only when Absolutive arguments are external to Dative arguments (86b) that these subjects can be controlled.

(86) a. *Haurari$_i$ ahaztu zaio [Mireni e$_i$ erortzea].
child-D$_i$ forgotten AUX Miren-D e$_i$ fall-the(A)

b. Mireni$_i$ ahaztu zaio [e$_i$ haurrari mintzatzea].
Miren-D$_i$ forgotten AUX e$_i$ child-the-D speak-the(A)

'Miren forgot to speak to the child.'

We leave open the issue of how dependent Tense is related to anaphoric Agreement and conclude that Control results from the co-occurrence of two factors: on the one hand, a dependent Tense, and on the other, a subject raised to [Spec, T] in order to check the feature [+control]. This feature is related to the intentionality of the subject with respect to the action denoted by the verb. Therefore, controlled subjects do not differ in Case from non-controlled subjects. They only differ in the way in which they take reference. In any case, a category PRO seems not to be justified in Basque: we claim that controlled empty subjects also belong to the category *pro*.

6.4. Empty Subjects with Arbitrary Interpretation

Despite the fact that both require empty subjects, infinitivals with arbitrary subjects differ in some respects from the infinitivals analyzed in subsections 6.2. and 6.3. First of all, the former allow demonstrative determiners whereas the latter are avoided with that kind of determiners. Secondly, they fill subject positions whereas infinitivals with controlled subjects always appear in complement positions. Finally, the subject is an empty category but it is not controlled.

(87) a. *Jonek$_i$ ahaztu du [e$_i$ liburua ekartze hori].
Jon$_i$-E forgotten AUX-3sA-3sE e$_i$ book that(A) bring that

b. [e$_{arb}$ egunero bi pakete erretze hori] kaltegarria da.
e$_{arb}$ every day two packets smoke that(A) harmful is
'To smoke two packets of cigarettes every day is harmful.'

6.4.1. Generic Tense. Infinitivals with empty arbitrary subjects contain Tense, since they can be negated and they behave like embedded finite and infinitive clauses with negation. Note that we have assumed that the Tense c-command Condition is what accounts for the arrangement of the negation and the finite verb in finite embedded and matrix clauses.

(88) [e$_{arb}$ zigarrorik **ez erretzeak**] ez du esan nahi
e$_{arb}$ cigarrette-PART no smoke-the-E no AUX mean want
[e$_{arb}$ erretzailea **ez izatea**]
[e$_{arb}$ smoker no be-the(A)]
'Not smoking cigarettes does not mean not being a smoker.'

This tense must be generic: these clauses may take generic time adverbs such as *egunero* ('every day') but not adverbs which refer to a specific time like *bihar* ('tomorrow'), *gaur* ('today') or *atzo* ('yesterday').

(89) a. [e$_{arb}$ egunero bi pakete erretze hori] kaltegarria da.
e$_{arb}$ every day two packets smoke that(A) harmful is
'That business of smoking two packets of cigarettes every day is harmful.'

(89) b. *[e_{arb} {atzo/bihar/gaur} bi pakete erretze hori]
e_{arb} {yesterday/tomorrow/today} two packets smoke that(A)
kaltegarria da.
harmful is

'That business of smoking two packets of cigarettes {yesterday/ tomorrow/ today} is harmful.'

Such clauses have an independent generic Tense but not an anaphoric Tense. This fact makes them available for subject positions.

6.4.2. Arbitrary Interpretation. The other particular characteristic of these constructions is arbitrary interpretation of the subject. Rizzi (1986) points out that arb is not a referential index but a feature specification which can be characterized as [human, generic, ±plural, third person].[32] Two kinds of different features can be distinguished in this collection. On the one hand, we have semantic features such as human and generic which are non related to the head Agr.[33] On the other hand, we have person and number, which are nominal formal features generally assumed to be checked by spec/head relation in Agr. Let us analyse more deeply the contribution of each kind of feature to arbitrary interpretation.

6.4.2.1. Arbitrary interpretation would be inherent to certain elements such as the Spanish clitic *se* (90a) and the Italian clitic *si* (90b).

(90) a. *pro*$_{arb}$ SE duerme demasiado.[34]

b. *pro*$_{arb}$ SI dorme troppo.
SE/SI sleep too much
'People sleep too much.'

Nevertheless romance clitic *se/si* has also been seen as person and number featureless (Burzio, 1991; Mendikoetxea, 1995).[35] Furthermore, in Spanish arbitrary interpretation can also be obtained with first person plural agreement specification

32. Following Rizzi (1986) number specification would depend on the kind of language. For instance, in Italian it is [+plural] but in Spanish it is [±plural].
33. Corver & Delfitto (1993) for instance provide syntactic evidence against the presence of [human] in the feature specification of some Romance clitics.
34. Concerning the subject of these constructions, it is assumed that it belongs to the category pro. In constructons such as (i) the presence of the preposition *a* indicates that accusative case is assigned to *los niños* ('the children'). Nominative case must thus be assigned to the empty subject, which is therefore identified as a pro.
(i) pro SE lava a los niños.
SE wash to the children
'Children are washed.'
(Mendikoetxea, 1995)
35. Mendikoetxea (1995) has proposed that the clitic *se* is the value of an Agr head with zero person specification.

(90c). Nevertheless, arbitrary interpretation disappears when the corresponding pronoun is overt (90d).

(90) c. pro_{arb} dormimos demasiado.
sleep-1p.pl. too much
'We sleep too much.'

d. Nosotros dormimos demasiado.
we sleep-1p.pl. too much
'We sleep too much.'

One could thus conclude that arbitrary interpretation requires an empty subject but in fact it doesn't, since the noun *gente* (people') also ensures the required interpretation (90e).

(90) e. La gente duerme demasiado.
the people sleep too much
'People sleep too much.'

English is negatively specified for the *Pro*-drop Parameter and thus empty subjects are avoided in finite clauses. Arbitrary interpretation is obtained with the DP *people* (91).

(91) a. *e_{arb} sleep too much.

b. People sleep too much.

Arbitrary interpretation can also be obtained for objects. In this case, Romance languages and English look similar: they have arbitrary interpretation both with overt and with covert subjects.

(92) a. This leads (people) to the following conclusion.

b. Questo conduce (la gente) alla seguente conclusione.

c. Esto lleva (a la gente) a la siguiente conclusión.

Nevertheless, Rizzi (1986) provides syntactic evidence that two different phenomena must be distinguished between arbitrary covert objects: in English we have object deletion but in Romance languages we have a *pro*. This is evidenced by the activity of the arbitrary empty object as a controller, as a binder and as a subject of predication for adjunct and small clauses in Romance languages.[36]

36. The following examples are taken from Rizzi (1986).

(i) a. This leads people [PRO to conclude what follows].
b. *This leads [PRO to conclude what follows].
c. Questo conduce (la gente) a [PRO concludere quanto segue].

Spanish arbitrary objects can also be obtained with first person plural and second person singular clitics (93), i.e. with specifications of Agr_o other than third person. Nevertheless, if personal pronouns corresponding to these clitics are overt, arbitrary interpretation is not possible.

(93) a. Esto NOS lleva pro_{arb} a la siguiente conclusión.
this NOS(1p.pl. cl) lead to the following conclusion
'This leads to the following conclusion.'

b. Esta música TE pone pro_{arb} contento.
this music TE(1p.pl.cl.) render happy[m.s.]
'This music renders one happy.'

Basque also allows arbitrary interpretation with the noun *jende* ('people') and with the empty category *pro* in all subject, object and indirect object positions. However, in most cases the specification for arb must be first person plural (94b, c, e, f) or second person singular (94d), since third person singular or plural leads to a specific reading.[37]

(94) a. Honek ondoko ondoriora eramaten du jendea.
this following conclusion-to lead AUX-3sA-3sE people
'This leads people to the following conclusion.'

(ii) La buona musica riconcillia ___ con se stessi.
'Good music reconciles ___with oneself.'
(iii) Un dottore serio visita ___nudi.
'A serious doctor visits __nude([+pl.])'
(iv) Questa musica rende [___ allegri]
'This music renders ___ happy([+pl.])'

37. An arbitrary interpretation is possible with the third person singular in Basque.
(i) Orohar lan gehiegi egiten da.
generally work too much do Aux-3sA
'Generally people work too much.'

Nevertheless, the construction in (i) has the auxiliary *izan* 'be' characteristic of monadic constructions and it is interpreted as an impersonal. This leads us to postulate that the external argument is saturated in the lexicon. This is the mirror image in an ergative case marking system of object deletion in accusative case marking systems such as that of English. We can call it subject deletion. However, without change in the argument structure of the predicate arbitrary interpretation is not possible either with third person singular or third person plural specification.

(ii) *Orohar $\_\_\__{arb}$ lan gehiegi egiten du.
generally $\_\_\__{arb}$ work too much do AUX-3sA-**3sE**
'Generally people work too much.'
(iii) {pro_i/Jonek} lan gehiegi egiten du.
{pro_i/**Jon**}-E work too much do AUX-3sA-**3sE**
'Generally he/Jon works too much.'
(iv) *Orohar $\_\_\__{arb}$ lan gehiegi egiten dute.
generally $____{arb}$work too much do AUX-3sA-**3pE**
'Generally people work too much.'

(94) b. Honek $pro_{i/arb}$ ondoko ondoriora eramaten **gai$_i$tu.**
this-E $pro_{i/arb}$ following conclusion-to lead AUX-**1pA**-3sE
'This leads *us/people* to the following conclusion.'

c. $pro_{i/arb}$ edozein gauzarengatik haserretzen **gara.**
$pro_{i/arb}$ anything-because annoy AUX-**1pA**
'{We/People} get angry over anything.'

(Rodet, 1992)

d. pro_{arb} lo gutxi egiten baduzu, pro_{arb} arin
pro_{arb} sleep little do if-AUX-3sA-**2sE** pro_{arb} quickly
zahartzen zara.
get old AUX-**2sA**
'If you don't sleep much you quickly get old.'

e. Oro har $pro_{i/arb}$ lan gehiegi egiten **dugu$_i$.**
generally $pro_{i/arb}$ work too much do AUX-3sA-**1pE$_i$**
'Generally {we/people} work too much.'

f. [**e** $_{arb}$ jendearen aurrean hitz egiteak] $pro_{i/arb}$ lotsa ematen
people-of in front of speak-the-E $pro_{i/arb}$ embarrassment give
digu.
Aux-3sA-**1pD**-3sE
'People/we are embarrassed to speak in front of other people.'

Third person plural specification can lead us to a quasi universal quantification.[38] Nevertheless, we find the constructions in (95) more specific than arbitrary as characterized by Rizzi (1986): those constructions require a spatial specification.

(95) a. ***pro*** Indian ez dituzte behiak hiltzen.
pro India-in not AUX-3pA-**3pE** cow-the-pl kill
'In India cows are not killed.'

(Rodet, 1992)

b. ***pro*** etxe honetan lan gehiegi egiten **dute.**
pro house this-in work too much do AUX-3pA-**3pE**
'In this house people work too much.'

The conclusion is that person and number features are not decisive for arbitrary interpretation, since languages such as Spanish and Basque have this interpretation with almost all person and number specifications in Agr. Furthermore, Romance clitics *se/si* directly related to arbitrary interpretation have been characterized as person and number featureless.

38. Rodet (1992) describes in greater detail the behaviour of Basque constructions with arbitrary interpretation. The examples in (94c) and (95a) are directly taken from her paper.

6.4.2.2. In Rizzi (1986) the features [human, generic] are also required for arbitrary interpretation. In all the languages mentioned in this section this interpretation is obtained with the noun *people/gente/jende* . This noun has inherently the semantic features [human, generic] and arbitrary interpretation can be obtained both with generic (96a) and with non generic tense (96b). As for person and number features, they would be checked in an Agr with third person and singular or plural depending on the language.[39]

(96) a. Jendea etengabeki aldatzen da.
people(A) unceasingly change-frecuentatif AUX
'People change unceasingly.'

b. Jendea nabariki aldatu da azken urteotan
people(a) notably change-perfectif AUX last year-the(pl.)-IN
baina are gehiago aldatuko da hurrengoetan.
but even more change-future AUX following-the(pl.)-IN
'People changed notably in the last years but they will change even more and more in the following years.'

In any other context, generic tense and empty categories are required. Frequently the features [human, specific] have been related with the first and second person clitics of Romance languages. However, second person clitics allow arbitrary interpretation in Spanish (93b) and first person clitics don't. Mendikoetxea (1995) argues that human and specific are interpretative properties of the clitics and not actual morphological specifications. In addition, following Kayne (1993) she characterizes the clitic *se/si* as a [o-person] clitic. We will generalize this characterization and assume that arbitrary constructions bear an Agr with 'zero ϕ-features'. Furthermore, if we assume that 'zero ϕ-features' don't exist in any overt DP, *pro* would be the only category which can check ϕ-features in [Spec, Agr] with the zero specification. This Agr would be compatible only with a generic tense.

As for infinitivals with an empty subject with arbitrary interpretation, we conclude that they are the result of the combination of a generic Tense with an Agr with zero ϕ-features. This explains the unavailability for taking overt subjects even when they can be interpreted as arbitrary (97).

(97) *[Jendeak erretzea] kaltegarria da.
people-E smoke-the(A) harmful is
'People smoking is harmful.'

39. In English *people* is plural , but in Spanish and Basque *gente/jende* is singular.

7. Conclusions

We have taken a look at the structure of Basque infinitivals. Starting with their head category, we showed that these constructions are headed by a V which projects a VP. This VP projects the same functional categories that are present in finite clauses: AspP, Agr_oP, $Agr_S P$ and TP. However, the maximal projection of most of the constructions analyzed in this paper is a DP. This explains the striking distribution they show, particularly the availability of filling subject positions.

Agreement categories in infinitivals appear similar to those of finite clauses since, even lacking overt agreement morphology, the category *pro* is allowed for subjects, direct and indirect objects. We also have concluded that empty controlled and arbitrary subjects in Basque infinitivals belong to the category *pro* and not to the [+anaphoric,+pronominal] category PRO. The different kinds of subjects are the consequence of different kinds of Tense in infinitivals.

Concerning Tense we have found three kinds of infinitivals. First, infinitivals which license overt subjects bear a Tense very similar to that of finite clauses; second, infinitivals with controlled empty subjects bear an anaphoric Tense that we have assumed to be responsible for Control; and finally, infinitivals with empty arbitrary subjects show a generic Tense which is compatible only with an Agr bearing zero ϕ-features.

References

Abney, S. (1986). «Functional Elements and Licensing». GLOW 1986. Girona, Spain.

— (1987). *The English Noun Phrase in its Sentential Aspect*. Ph.D, MIT.

Adams, M. (1987). «From old French to the theory of Pro-Drop». *Natural Language and Linguistic Theory*, 5: 1-32.

Afarli, T. (1987). «Nonsubject Pro-Drop in Norwegian». *Linguistic Inquiry*, 18: 339-345.

Anderson, S. (1984). «On representations in morphology: case, agreement and inversion in Georgian». *Natural Language and Linguistic Theory*, 2: 157-218.

Authier, J.-M. (1992). «Arbitrary Null Object Languages in a Parametric Theory of Linguistic Variation». In Lakarra, J.; Ortiz de Urbina, J. (eds.). *Syntactic Theory and Basque Syntax*. Supplements of ASJU.

Berman, A. (1970). «Agent, Experiencer and Controlability». *Report No. NSF-24, Mathematical Linguisitics and Automatic Translation*. The Computation Laboratory of Harvard University.

Bobaljik, J. (1992). «Nominally Absolutive is not Absolutely Nominative». *Proceedings of WCCFL XI*.

— (1993). «On Ergativity and Ergative Unergatives». In Phillips, C. (ed.). *Papers on Case and Agreement II*. MIT Working Papers in Linguistics, vol. 19.

Bobaljik, J.; Jonas, D. (1994). «Subject positions and the roles of TP». ms. MIT & Harvard. Presented at GLOW 16 (1993).

Borer, H. (1984). *Parametric Syntax*. Dordrecht, Foris.

— (1986). «I-subjects». *Linguistic Inquiry*, 17(3): 375-416.

— (1989). «Anaphoric AGR». In Jaeggli, O.; Safir, K. (eds.). *The Null Subject Parameter*, Foris, Dordrecht.

Bouchard, D. (1984). *On the Content of Empty Categories*. Foris, Dordrecht.

Burzio, L. (1991). «The morphological basis of anaphora». *Journal of Linguistics*, 27: 81-105.

Cole, P. (1987). «Null Objects in Universal Grammar». *Linguistic Inquiry*, 18: 597-612.

Collings, C.; Tráinsson, H. (1993). «Object Shift in Double Object Constructions and the Theory of Case». In Phillips, C. (ed.). *Papers on Case and Agreement II*, MIT Working Papers in Linguistics, vol. 19.

Corver, N.; Delfitto, D. (1993). «Feature asymetry and the nature of pronoun movement», ms.Tilburg University and University of Utrecht.

Cheng, L.; Demirdash, H. (1993). «External arguments in Basque». In Hualde, J.I.; Ortiz de Urbina, J. (eds.). *Generative Studies in Basque Linguistics*. Amsterdam: John Benjamins Publishing Company.

Chomsky, N. (1981). *Lectures on Government and Binding*, Dordrecht, Foris.

— (1989). «Some Notes on Economy of Derivation and Representation». In Laka, I.; Mahajan, A. (eds.). *Functional Heads and Clause Structure*. MITWPL, vol. 10, Cambridge.

— (1992). «A Minimalist Program for Linguistic Theory». *MIT Occasional Papers in Linguisitics*, n. 1, MIT, Cambridge, MA.

Chomsky, N.; Lasnik, H. (1991). «Principles and parameters theory». In Jacobs, J.; van Stechow, A.; Sternfeld, W.; Vennemann, T. (eds.). *Syntax: An International Handbook of Contemporary Research*. Berlin: Walter de Gruyter.

Demonte, V. (1988). «Remarks on secondary predicates: c-command, extraction, and reanalysis». *The Linguistic Review*, 6: 1-39.

Eguzkitza, A. (1986). *Topics on the Syntax of Basque and Romance*, PhD Thesis, Los Angeles: University of California.

Fernández Lagunilla, M.; Anula, A. (1992). «Proceso de Filtrado de Rasgos Categoriales en la Sintaxis. Los infinitivos y la legitimación del caso nominativo». At the Second Colloquium on Generative Grammar, Vitoria-Gasteiz.

Fernández Soriano, O. (1989). *Rección y Ligamiento en español: Aspectos del Parámetro del Sujeto Nulo*. PhD. Thesis. Universidad Autónoma de Madrid.

Franco, J. (1993) *On Object Agreement in Spanish*. PhD. Thesis. USC.

Goenaga, F. (1994). *Euskal Sintaxia. Konplementazio eta nominalizazioa*. PhD. Thesis, Euskal Herriko Unibertsitatea.

Gràcia, Ll. (1987). *La Teoria Temàtica*, PhD. Thesis, Universitat Autònoma de Barcelona.

Grimshaw, J. (1991). «Extended Projections». ms. Linguistics and Cognitive Science Program and Center for Complex Systems. Brandeis University. Waltham, MA.

Higgins, R. (1973). *The pseudo-Cleft Constructions in English*. Ph.D. Thesis, MIT.

Huang, C-T J. (1984). «On the distribution and reference of empty pronouns». *Linguistic Inquiry*, 5: 531-574.

— (1989). «Pro-drop in Chinese: A Generalized Control Theory». In Jaeggli, O. (ed.). *The Null Subject Parameter*. Dordrecht: Kluwer Academic Publishers.

Jaeggli, O. (1982). *Topics in Romance Syntax*. Dordrecht: Foris.

— (1986). «Three Issues in the Theory of Clitics: Case, Doubled NPs and Extraction». In Borer, H. (ed.). *Syntax and Semantics*, 19. New York: Academic Press.

Kayne, R. (1993). «Towards a theory of auxiliary selection». ms. CUNY.

Kiss, K.E. (1987). *Configurationality in Hungarian*. Reidel, Dordrecht, MIT, Cambridge, MA.

Laka, I. (1989). «Constraints on Sentence Negation». In Laka, I.; Mahajan, A. (eds.). *Functional Heads and Clause Structure*, MITWPL, vol. 10, Cambridge.

— (1990). *Negation in Syntax: on the Nature of Functional Categories and Projections*. Ph.D. Thesis, MIT.

— (1992). «Sobre el subjuntivo». Paper presented at the Second Colloquium on Generative Grammar. In Goenaga, P. (ed.). *De Gramatica Generativa* (1995).

— (1993). «Unergatives that assign Ergative». In Bobaljik, J.; Phillips, C. (eds.). *Papers on Case & Agreement I*, MIT Working Papers in Linguistics, vol. 18: 149-172.

— (1995). «Theta blind Case: Burzio's Generalization and its Image in the Mirror». In Reuland, E. (ed.). *Workshop on Burzio's Generalization.*

Lasnik, H. (1992). «Two Notes on Control and Binding». In Larson, R. et al. (eds.). *Control and Grammar*. Dordrecht: Kluwer Academic Press.

— (1995). «Case and Expletives Revisited: On Greed and Other Human Failling». *Linguistic Inquiry*, 26(4): 615-633.

Lasnik, H.; Fiengo, R. (1974). «Complement object deletion». *Linguistic Inquiry*, 5.

Levin, B. (1983). *On the Nature of Ergativity*. Ph.D. Thesis, MIT. Cambridge, MA.

López, L. (1995). «Case Parameters and Split Ergativity». Paper presented at the Fifth Colloquium on Generative Grammar. A Coruña, 1995.

López, L.; Austin, J. (1995). «Nominative, Absolutive and Dative Languages». ms. of Cornell University (Ithaca), New York.

Manzini, R. (1983). «On Control and Control Theory». *Linguistic Inquiry*, 14: 421-446.

Marácz, L. (1987). «The system of personal pronouns in Hungarian». Paper presented at l'ATP Syntaxe et Enonciation (CNRS).

McCloskey, J.; Hale, K. (1984). «On the syntax of person, number inflexion in modern Irish». *Natural Language and Linguistic Theory*, 4: 487-554.

Mendikoetxea, A. (1995). «Romance Clitics and the Properties of Agr». ms. of Universidad Autónoma de Madrid, Madrid.

Mohanan, K.P. (1983). «Functional and anaphoric control». *Linguistic Inquiry*, 14: 641-674.

Ormazabal, J. (1991). «Modal verbs in Basque and head-movement». In Lakarra, J. (ed.). *Memoria L. Mitxelena Magistri Sacrum*. Supplements of ASJU, XIV.

Ortiz de Urbina, J. (1986). *Some Parameters in the Grammar of Basque*. PhD. Thesis, University of Illinois at Urbana-Campain.

— (1992). «Tenseless Verbal Forms in Basque» ms. Universidad de Deusto.

Oyharçabal, B. (1991). «Theorie des pronoms nuls et diversité linguistique: Biłan». In: Lakarra, J. (ed.). *Memoriae L- Mitxelena Magistri Sacrum*. Supplements of ASJU, XIV.

— (1992). «Structural Case and Inherent Case Marking: Ergaccusativity in Basque». In: Lakarra, J.; Ortiz de Urbina, J. (eds.). *Generative Studies in Basque Linguistics*. Supplements of ASJU, XXVII.

Platzack, C. (1987). «The Scandinavian languages and the Null-Subject parameter». *Natural Language and Linguistic Theory*, 5: 377-401.

Raposo, E. (1986). «On the null object in European Portuguese». In Jaeggli, O.; Silva-Corvalán, C. (eds.). *Studies in Romance Linguistics*. Dordrecht: Foris.

— (1987). «Case Theory and Infl-to-Comp: The Inflected Infinitive in European Portuguese». *Linguistic Inquiry*, 18.1: 85-109.

Rigau, G. (1992). «Propiedades de Flex en las construcciones temporales de infinitivo: la legitimación del sujeto». Paper presented at the Second Colloquium on Generative Grammar. In Goenaga, P. (ed.). *De Gramatica Generativa* (1995).

Rizzi, L. (1986). «Null objects in Italian and the Theory of *pro*». *Linguistic Inquiry*, 17(3): 501-557.

Roberge, Y. (1986). *The Syntactic Recoverability of Null Arguments*. Ph.D. Thesis. University of British Columbia. Vancouver, B.C., Canada.

Rodet, A. (1992). «Constructions amb lectura arbitrària en basc». *Anuario dell Seminario de Filologia Vasca «Julio de Urquijo»*. XXVI-1.

Rothstein, S.D. (1983). *The Syntactic Forms of Predication*. PhD. Thesis, MIT.

Suñer, M. (1988). «The role of Agreement in clitic-doubled constructions». *Natural Language and Linguistic Theory*, 7(3): 397-407.

Taraldsen, T. (1978). «On the NIC, Vacuous application, and the That-trace Filter». distributed by Indiana University Linguisitics Club.

Zribi-Hertz, A. (1984). *Orphan Prepositions in French and the Concept of «Null Pronoun»*. Monograph distributed by The Indiana University Linguistics Club. Bloomington, Indiana.