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Basque spatial cases and the ergative-absolutive synchretism¹

Ricardo Etxepare (IKER-UMR5478, CNRS)

0. Introduction

This paper has as its aim to connect two seemingly disparate phenomena: the structure of Basque adpositional phrases and the synchretisms arising in plural DPs between ergative and absolutive arguments in some of the dialects of Basque. This synchretism, which can be found in western and central dialects of Basque, resolves in favour of absolutive marking, and has been taken to be the product of relatively shallow historical morphophonological processes. If the approach held here stands a reasonable chance, there may be a different way of looking at those synchretisms, by putting them in the context of diachronic processes related to the expansion of number morphology, and by capitalizing on the incompatibility of number with a particular kind of syntactic object: the so called *axial part* (Jackendoff, 1996), an integral part of locative constructions cross-linguistically, if recent work on the structure of those constructions is on the right track (see Kayne, 2005; Svenonius, 2006; Pantcheva, 2011, among many others). Before going into any detail about the things which are purportedly connected, I must warn the reader about the generous amount of hand-waving behind this paper. It will surely disappoint syntacticians of the most strict synchronic obedience, as many of the obvious issues arising from the analysis of adpositional phrases as entertained here remain deliberately ignored. It will be even more disappointing for linguists working on the history of Basque, since most of the paper is concerned with the structure of adpositional phrases in Basque from a purely synchronic perspective. Although the potential diachronic connections emerging from the analysis are, I think, relatively clear, their materialization in terms of actual historical discussion is outside the scope of this paper. The merits of the paper, if any, will lie in its ability to uncover a plausible syntactic motivation for a dialectal fact whose existence has been traditionally attributed to other factors. When set against the background of the diachronic development of both number and ergative marking in Basque, the analysis may contribute alternative ways of thinking about them.

1. Simple adpositions and ergative-absolutive synchretisms

Basque has three spatial cases (Creissels, 2008) or primary adpositions (Hagège, 2009) encoding location (*inessive*), path (*allative*) and source (*ablative*) (Hualde, 2002; Trask, 2003; De Rijk, 2008). A long standing puzzle in the domain of primary adpositions in Basque is the fact that whereas inessives seem to take DP complements (1a), the complements of allatives and ablatives must be bare, even if the spatial ground is interpreted as a definite (1b,c):

- | | | |
|---|---|--|
| (1) a. Mendi-a-n
Mountain-D-iness
“In the mountain” | b. Mendi-(*a)-ra
mountain-D-all
“To the mountain” | c. Mendi-(*a)-tik
mountain-D-abl
“From the mountain” |
|---|---|--|

Basque primary adpositions raise several questions when placed against the background of recent cartographic approaches to the structure of adpositional phrases. As shown by an increasing amount of cartographic work, in complex directional postpositions a Path feature seems to select the Place feature (see Koopman, 2000; Kracht, 2002; Svenonius,

But no such phenomenon is attested in ordinary DPs. Consider in this regard (7a,b):

- (9) a. Lur-a b. *Lur-e-a
 earth-D earth-epenthesis-D
 “The earth” “The earth”

As shown in (9b), the epenthetic vowel cannot follow a consonant ending stem before the determiner. If the sequence *-an* is analysed as *Det-iness*, it is not clear why an epenthetic vowel is required.

The second aspect that makes the epenthetic vowel special is the fact that it does not obey the usual phonological distribution of epenthetic vowels in Basque. Epenthetic vowels are required in Basque to break the sequence of two consonants in the context of morphological boundaries. This is the case for instance in the rest of the sequences of stem-primary adposition. Both the allative and the ablative suffixes start with a consonant, and an epenthetic vowel is required when the stem they attach to ends with another one:

- (10) a. Lur-*(e)-ra b. Lur-*(e)-tik
 earth-epenthesis-all earth-epenthesis-abl
 “To the earth” “From the earth”

The morphophonological process illustrated in (10a,b) is on the other hand, habitual in other morphological boundaries involving potential sequences of consonants. Thus, an epenthetic vowel is required for instance in sequences of stem-adnominal suffix, when the stem ends in a consonant. The epenthesis is (morpho-)phonologically conditioned: it is blocked if the relevant boundaries do not add up to a sequence of consonants:

- (11) a. Etxe-ko b. Lur-*(e)-ko
 home-adn earth-epenthesis-adn
 “Of home” “Of the earth”

The epenthetic vowel that obligatorily arises in the inessive is peculiar from this point of view too: the suffix starts with a vowel *-a* (what we called “the determiner”) but nevertheless requires an epenthetic vowel. The epenthetic vowel is thus unexpected both from a morphological point of view (the wrong boundaries seem to be targeted) and a phonological point of view (no phonological motivation).

We may add to this the fact that the *-a* of inessive phrases does not undergo other morphophonological phenomena that target D across dialects. An illustrative case is provided by the dissimilation phenomenon arising in Biscayan when the article *-a* attaches to a stem that itself ends in *-a* (10a). Dissimilation does not arise in inessives (12b) (Martinez Areta, 2010):

- (12) a. *Alaba* “daughter” + *-a* -> *Alabea* “the daughter”
 b. *Gona* “skirt” + *-an* -> *Gonan* “In the skirt”/**Gonean*

1.1. A little historical morphosyntax

Jacobsen provides an account of the epenthetic vowel, that he views as the historical residue of an underlying sequence of two distinct morphemes, none of which is the determiner: the first one would involve a consonant, unrealized in our time, the second one being the inessive, as in (13). The underlying consonant in (13) accounts for the presence of an obligatory epenthetic vowel. What looks like the determiner *-a* is in fact part of another morpheme, which starts with an (nowadays unrealized) consonant. This underlying consonant (represented as C below) triggered the presence of the epenthetic vowel, seen as historical residue. The actual epenthesis is a historical residue of this state of affairs.

(13) Lur + Ca + -n

De Rijk (1981) has suggested that the unrealized consonant in (13) corresponds to the velar consonant of the suffix *-ga*. This suffix marks animate grounds in Basque and precedes the inessive:

- (14) a. *Xabier-en
 Xabier-iness
 ‘‘In Xabier’’
- b. Xabierr-en-ga-n
 Xabier-gen-suffix-inessive
 ‘‘In Xabier’’

The reason why the consonant is not realized in non-animate grounds is due to a historical phonological rule of weakening that applied to voiced consonants between vowels. The reason why the consonant is overtly realized in (14) follows from the fact that animate grounds, besides undergoing locative declension are obligatorily case-marked by a genitive case-suffix that ends in a consonant. This way, the locative declension suffix does not find itself surrounded by vowels, and the structural description for the weakening rule does not arise. In other words, *-a* and *-ga* are historically related allomorphs in the context of inessive phrases. As suggested by Lakarra (2005), *-ga-* is actually at the origin of the ergative suffix, realized as a voiceless velar *-k* in final position:

- (15) Xabier-e-**k** egin du
 Xabier-epenth-erg done he-has-it
 ‘‘Xabier did it’’

The affix *-ga-* has thus resulted in two different allomorphs: *-a-* between vowels (weakening) and *-k* in final position (loss of voicing). If we stand on the footsteps of De Rijk/Lakarra, we may conclude that *-a* in the inessive phrases is actually a case marker historically related to the ergative.

1.2. *-a* as the old demonstrative

Manterola (2006, 2008, 2009) has a different view on the status of *-a-* in the inessive. He has developed the hypothesis that the Basque declensional paradigm results from the cliticization or phonological reduction of the old demonstrative paradigm. The presence of the epenthetic vowel thus follows from the fact that the old locative demonstrative

(nowadays the adverbial demonstrative *han* “there”) had an initial aspiration (still existing in some eastern varieties) that triggered the presence of the epenthetic vowel:

(16) *Lur* “earth” + *han* “there” -> **Lur-e-han* “In the earth” -> *Lur-e-an*

One obvious problem with this view is that the article itself does not give rise to the epenthesis, despite the fact that its older demonstrative form *ha* “that” was also aspirated.

1.3. Interim summary

(17) *-a* in the inessive phrases is not a determiner, but an allomorph of the case suffix *-ga*

2. The syntactic status of *-a-*

If *-ga-* is a case suffix historically related to the ergative, then the structure of Basque *etxean* “in the house” cannot be parallel to French or Spanish *à la maison*, *en la casa* (18a,b), modulo the head-final constraint, but corresponds rather to (18c), with the case marker *-a-* (glossed as CM) selecting the inessive (see below).

(18) a. [En [la casa]] b. [À [la maison]] c. [_{ErgP} Etxe -a [_{InessP} -n ...]]
 Prep the house Prep the house house CM iness
 “In the house” “In the house” “In the house”

First, note that the purported determiner, which in Basque is often associated to familiarity and definiteness (see Etxeberria, 2005) in DP arguments, is compatible with an overt indefinite article in the context of ground complements, and this with a clear indefinite interpretation:

(19) *Liburua mahai bat-e-a-n dago*
 book-the table one-D-iness is
 “The book is on a/*the table”

Sequences of indefinite and definite determiners are possible in Basque, with the meaning of “one of the”, and clear definite (and distributive) interpretation (20), none of which properties are manifest in the ground case:

(20) *Bat-a-k 100 orrialde zituen, beste-a-k 150*
 one-D-erg 100 page had, other-D-erg 150
 “One of the books had 100 pages, the other one 150”

Besides the fact that the determiner preceding the inessive presents semantic properties unlike those in normal nominal contexts, it also shows syntactic restrictions which are unlike those found in canonical DPs. Artiagoitia (2004) and Etxeberria (2005) have shown that the determiner *-a* in Basque selects a number head. When the number is plural, the complex determiner head has the form *-ak* in (21):

(21) *Liburu-a-k*
 book-D-Number

“Books/the books”

The ground complements of inessive suffixes, and of spatial suffixes in general, have the intriguing property of not accepting the plural determiner:

- (22) *Liburu-a-k-e-n
book-D-Num-inessive
“In the books”

Number in the complement of spatial suffixes in Basque is carried by a special suffix that directly attaches to the nominal stem:

- (23) Liburu-eta-n
book-pl-iness
“In the books”

In other words, plural grounds do not admit overt determiners: the distinction between definite and indefinite plurals is realized via allomorphy: the suffix *-eta-* encodes definiteness and plurality; the suffix *-ta-* encodes indefiniteness, and is unmarked for plurality (cf.24b,c):

- | | | |
|------|--|--|
| (24) | a. Etxe-eta-n
house-pl-iness
“In the houses” | b. (Hainbat) etxe-ta-n
so-many house-suf-iness
“In so many houses” |
| | c. Hondar-e-ta-n
sand-epenth-suf-iness
“In the sand” | |

The asymmetry between plural and singular determiners in inessive constructions remains mysterious under the idea that the inessive postposition takes a complement headed by the determiner *-a*. But if *-a* is a case affix why does it occur with inessives, but not with allatives or ablatives? Since Koopman’s seminal paper (2000) on the Dutch adpositional system, we know that the structure of simple PPs must be extended to provide room for various functional projections. The idea behind Koopman’s analysis is that in the same way that nouns and verbs project functional structure, lexical adpositions can also be shown to do so. In Den Dikken’s elaboration of this idea, both Place and Path adpositions project functional structure which is akin to the one found in nominal and verbal phrases. Concretely, Den Dikken (2010:100) proposes the following parallel functional skeleton for all lexical categories N, V and P:

- (25) a. [CP C^[FORCE] [D_{xP} D_x^[TENSE] [AspP Asp^[EVENT] [VP V ...]]]]
b. [CP C^[DEF] [D_{xP} D_x^[PERSON] [AspP Asp^[NUMBER] [NP N ...]]]]
c. [CP C^[SPACE] [D_{xP} D_x^[SPACE] [AspP Asp^[SPACE] [PP P ...]]]]

In the adpositional field, the C-layer is involved in the extraction of adpositional heads out of the PP (Van Riemsdijk, 1978), D_{xP} is related to deixis, and the aspectual head to the bounded/unbounded status of the location or path. The deictic layer represents how the location or path is oriented vis-à-vis the speaker. Thus, locative adpositions distinguish whether the location is at the speaker’s place (here) or away from it (there).

In Path adpositions, the head expresses whether the path is oriented towards or away from the speaker.

I will modify the Koopman/Den Dikken proposal for Basque, by contending that all three primary adpositions are in fact functional items, reminiscent of the aktionsart categories belonging in the verbal domain. In their singular form, they are associated to a locational noun, in the same way aktionsart functional structure associates to a (verbal) root. The intended rough structure is the one in (26), where the primary adpositions represent functional projections of an abstract noun encoding an Axial Part or a spatial noun (Svenonius, 2007). This axial noun relates to the Ground (represented by the DP below in a way that we will describe in the next section. Capitalizing on the connection between *-ga-* and the ergative case marker, I take *-ga-* to head a relatively high projection, akin to Tense:

(26) [TP *ga* [AspP/InessP Place [AxP PLACE [DP *etxe*]]]]

3. Locational Nouns in Basque

3.1. Extending the structure of adpositional phrases

To understand the properties of this silent spatial noun, it may be useful to turn to the syntactic status of overt locational nouns in Basque. In addition to postpositional suffixes, Basque has a rich inventory of locational nouns which allow a more flexible localisation of the figure vis-à-vis the Ground and combine with the previous suffixes (see Euskaltzaindia, 1985; De Rijk, 1990, 2008; Eguzkitza, 1997; Hualde, 2002). An illustrative sample is provided below:

- (27) a. *Etxe-a-ren aurre-a-n*
 House-D-gen front-D-loc
 "In front of the house"
- b. *Zuhaitz-en arte-tik*
 trees-gen among-from
 "From among the trees"
- c. *Ohe-a-ren azpi-ra*
 bed-D-gen under-all
 "(to) under the bed"
- d. *Erreka-a-ren ondo-tik*
 river-D-gen next-through
 "Through the space next to the river"
- e. *Errekaren inguru-a-n*
 river-gen space-around-det-loc
 "Around the river"

According to De Rijk (1990), locational nouns behave as regular nouns: (i) they require a complement with a genitive suffix, as binominal structures typically do, and (ii) bear suffixes that usually attach to nouns, such as the inessive postposition. This is illustrated

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in (28); (iii) locational nouns participate in noun compounding (see De Rijk, 1990 and below), and (iv) many of them have a referential use and can be followed by a determiner, as shown in (29):

- (28) Etxearen aurre-a-n
House-gen front-D-iness
"In front of the house"
- (29) a. Etxearen **aurrea/aitzina** konpondu beharra dago
House-gen front fix need is
"The front/façade of the house should be fixed"
- b. **Inguru** hura arras hondatua zen
area that completely ruined was
"That area was completely ruined"
- c. **Ondo** hetan ibiltzen ginen
place that-in walk-hab aux[1plA]
"We used to wander in those places"

Point (iv) can be clearly disputed. The referential use of locational nouns gives rise to some subtle shifts in meaning. It is clear that *aurre/aitzin* "front" identifies very different spatial entities in (30a) and (30b):

- (30) a. Etxearen aurre-a (PART/WHOLE)
House-gen front-D
"The façade/front-side of the house"
- b. Etxearen aurre-a-n (PROJECTED SPACE)
house front-D-loc
"In front of the house"
"In the façade/front-side of the house"

Under the "referential" use in (30a), the only interpretation of the noun *aurre* is "façade" (that is, a part of the house). In (30b), its meaning is ambiguous between "space in front of the house" (thus not a part of the house itself) "and façade of the house". The ambiguity disappears if we force a syntactic structure that goes beyond a bare noun. For instance, adjectival modification is only possible under the "referential" interpretation:

- (31) Etxearen aurre hondatuan
house-gen front ruined-iness
"In the ruined façade of the house"
"*In the ruined front of the house"

Adding a plural also forces a referential reading:

- (32) a. Etxearen aurreetan
house-gen façade-pl-iness
"In the façades of the house"
"*In the fronts of the house"
- b. Etxeen aurreetan
house-gen.pl façade-pl-loc
"In the façades of the houses"
"*In the fronts of the houses"

On the other hand, not all locational nouns admit a referential use. The non-referential interpretation is the only possible one for some of those nouns. This is the case for *arte* "space in between" as shown in (33):

- (33) a. *Hango arteak meharregi ematen du
 that-gen space-in-between narrow-too looks aux[3sE-3sA]
 "That space in between looks too narrow"
- b. Besoen artean gorde du
 arms between kept aux[3sE-3sA]
 "She kept it between her arms"

The only possible meaning for the noun *arte* is that of "space in between, projected from a ground or reference object embracing that space". Let us call this type of interpretation a "projective interpretation". Locational nouns thus define spatial regions projected from their DP complement (Aurnague, 1996). Projective interpretations are a characterizing feature of locational nouns when they are embedded in simple postpositional constructions. For Svenonius (2010), the syntactic differences between true nouns and locational nouns in their projective interpretation justifies defining the latter as a distinct functional item. Locational nouns with a projective meaning lexicalize a particular syntactic head, distinct from both the Ground (represented by the complement DP) and Place (represented by an adpositional head), that he calls Axial Part. The semantic content of the category can be described according to the following definition of axial parts by Jackendoff (1996:14): "The axial parts of an object –its *top*, *bottom*, *front*, *back*, *sides*, and *ends*- ..., unlike standard parts such as *handle* or a *leg*, ...have no distinctive shape. Rather, they are regions of the object (or its boundary) determined by their relation to the object's axes. The up-down axis determines top and bottom, the front/back axis determines front and back, and a complex set of criteria distinguishing horizontal axes determines sides and ends." The projective interpretation of the bare nouns in locative adpositional phrases can also account for the fact that the nouns in question, unlike the referential ones, admit reduplication, a morphological process by which a scalar interpretation is imposed on the axial noun. Consider the contrast below (Aurnague, p.c):

- (34) a. Etxearen aurre-aurrean dago
 house-gen front-front-D-iness is
 "It is in the very front side of the house"
- b. *Etxearen aurre-aurrea dago kaltetua
 house-gen front front-D is damaged
 "??The very façade of the house has been damaged"

Projective interpretations can be easily modified in terms of scalar degrees. The scalar structure of the projected space allows (more or less) prototypical interpretations of the regions involved: some regions may represent better what constitutes a relevant space in front of the house than others, and this is what reduplication captures, by implying that something like the best instantiation of the notion "space in front" is intended. Interestingly, reduplication affects directly the axial noun, not the whole locative

expression. In other words, what reduplicates is the bare noun, not the adpositional phrase:

- (35) a. Aurre-aurre-a-n
front-front-D-iness
“In the very front”
- b. *Aurrean-aurrean
front-D-iness-front-D-iness
“In the very front”

The morphological structure of the phenomenon therefore clearly indicates that the scalar dimension is associated to the axial noun, not to the adpositional phrase.

Axial Parts constitute a semantically distinct spatial notion and a syntactically autonomous functional category. They are selected by a Place denoting adposition, the inessive suffix, and they in turn select a reference object or ground (36). This structure is uniform in the Basque area.

- (36) [PlaceP Place⁰ [AxialP AxialP⁰ [DP_{ground} ...]]]

In Basque the axial part is a bare noun, with no functional structure beyond its category feature itself. The determiner heading the Axial Part has no referential function and it does not sustain number.

With respect to the ground, the nominal properties of the axial part head in this structure have a reflex in Case assignment. The axial noun receives case from the inessive head. The ground term either receives inherent genitive case (37a) or forms a compound with the axial noun (37b):

- (37) a. Etxearen aurrean
house-gen front-Det-Loc
"In front of the house"
- b. Etxe-aurrean
house front-D-Loc
"In front of the house"

Note that the locational noun structures require *two* case assigners (locative and genitive), or incorporation.

3.2. *Back to inessives*

If we look at the kind of restrictions imposed on overt axial nouns, they are structurally analogous to the ones we find in non-plural locative phrases:

- (i) The so-called “determiner” is irrelevant to the definite or referential status of the Ground (cf. compatibility with *bat*), suggesting it is not a determiner but an extra case-affix, as in inessives.
- (ii) It does not support number

(i) and (ii) invite the hypothesis that underlying the non-plural locative phrases there is a silent Axial Noun, something like PLACE (see also Kayne, 2005; Botwini-Roken, 2004, 2008; Terzi, 2010; Leu, 2010).

(38) [InessP Iness⁰ [AxialP PLACE AxialP⁰ [DPGround ...]]]

3.3. *Partial ellipsis of places*

One intriguing property of singular inessive phrases is that (at least for a subset of Basque speakers) they do not license partial nominal ellipsis:

(39) Bera bizi zen lekuan argia zuten,
(S)he-abs live aux place-D-iness light they-had

??baina gu bizi ginen-Ø-e-an ez
but we-abs live aux-Det-iness not

“In the place where he/she lived they had light, but in the one we lived, we didn’t”

The noun *leku* “place” corresponding to the relativized noun in the antecedent clause can not be elided in the second one. This fact is surprising when we see that nominal ellipsis is possible under an ordinary determiner:

(40) Bera bizi zen leku-a ederra zen,
S(h)e-abs live aux place-D nice was,

baina gu bizi ginen(-a/hura) ez
but we-abs live aux-D/demonstrative not

“The place she/he used to live was nice, but the/that one we lived in was not”

The effect is stronger when ellipsis does not follow from strict structural identity:

(41) Hura aspaldiko hilobiz betea zegoen,
That long-ago tombs full was

eta hezurrik aurkitzen zutenean marka bat jartzen zuten
and bones find-hab aux-Rel-loc sign one put aux

“That area was full of ancient graves, and when/*where they found bones, they put a sign on them”

In other words, if the sequence *Noun-D-iness* corresponds to a syntactic structure that includes the one corresponding to the partial sequence *N-D*, it is not clear why the former does not license nominal ellipsis too. In both cases, a noun meaning *Place* would be elided. The two structures are represented in (42a,b). The silent noun, possible in (a) but not in (b) is in boldface:

(42) a. [DP [NP [RelP [IP ___]-en] **Ø_{Place}** -] -a]

- b. [PostP [DP [NP [RelP [IP ___]-en] *Ø_{Place} -] -a] -n]

Partial ellipsis of Place is possible if the ground term is itself plural, or if a demonstrative is added (43). Syncretic locative cases of the *-eta* sort do license partial nominal ellipsis:

- (43) a. Zu ibiltzen zinen parajeetan pizti asko aurkitzen ziren,
you-abs frequent-hab aux-rel area-iness-pl animal many found aux

baina ni ibiltzen nintzen-Ø-e-tan ez
but I-abs frequen-hab aux-rel-iness-pl not

“In the areas you used to go to, there were many animals, but in the ones I used to go, there weren’t”

- b. Hura aspaldiko hilobiz betea zegoen,
That long-ago tombs full was

eta hezurrik aurkitzen zuten-Ø-etan marka bat jartzen zuten
and bones find-hab aux-Rel-pl-loc sign one put aux

“That area was full of ancient graves, and when/where they found bones, they put a sign on them

I would like to relate the ungrammaticality of those cases to the impossible (44):

- (44) Ondoan bizi da,
Next-D-iness live is

baina bizi d-en *ondoan ez nuke nik bizi nahi
but live aux-rel next-D-iness neg I-would I-erg live want

“He lives nearby, but at the nearby place he lives in, I would not like to live”

Relativization of locational nouns is impossible. This must be because locational nouns, having no phi-features, cannot relate to the structure projected by the relative clause in any grammatically meaningful way. That the relative phrase projects independent functional structure is shown by contrasts such as (45) (from Kayne, 1994):

- (45) a. *The Paris
b. The Paris I know

In other words, silent places are akin to locational nouns. This suggests the following structure for something like *etxean* “in the house” (46a), with a silent place occupying the position of locational nouns (46b) (see also Kayne, 2005; Terzi, 2008, and Botwini-Roken, 2004, 2008):ⁱⁱⁱ

- (46) a. [ErgP -a [InessP/AspP -n [AxP PLACE [DP etxe]]]]
b. [ErgP -a [InessP/AspP -n [AxP ondo [DP etxe]]]]

Plural locations do not license an axial noun. The latter cannot be pluralized, and does not sustain a plural ground. Plural locational DPs therefore are ordinary DPs, with no functional domain associated to a silent Place. I take *-ta-* to reflect Borer's Classifier Phrase (2005), one of the functional projections related to Number. The function of this classifier is to divide the denotation of the NP in atoms and sets of atoms. This functional head is supplemented by a syncretic affix *-e/-o-* that lexicalizes number and definiteness. Since plural locative phrases do not involve a silent Place noun, they only need a case-assigner.^{iv} This case-assigner is the inessive postposition:

(47) [_{InessivP} P [_{DP} D [_{DeicP} -o/-e- [_{ClassifP} -ta [_{NP} paraje]]]]]

3.4. *-a* and *-n* as C and Aspect

If the analysis is correct, *-a* is a case marker, cognate to the ergative suffix, which sits in a projection that dominates the Place adposition. Let us represent this projection as follows:

(48) [_{TP} -a [_{AspP} -n [_{AxP} PLACE Ax⁰ [...NP]]]]

As for *-n*, its status as both a spatial and an aspectual adposition is well established (see Demirdache and Uribe-Etxebarria, 2000 and subsequent works).

3.5. Case-licensing

The silent Place would raise to the Spec of the Aspectual Phrase (47a), and the overt noun ends up in the Spec of C:

(49) a. [_{TP} -a [_{AspP} PLACE -n [_{AxP} (PLACE) Ax⁰ [...NP]]]]
 b. [_{TP} NP-a [_{AspP} PLACE -n [_{AxP} (PLACE) Ax⁰ [...(NP)]]]]
 c. [_{TP} Etxe-a [_{AspP} PLACE -n [_{AxP} (PLACE) Ax⁰ [...(NP)]]]]

The presence of *-a-*, a case-marker, in locative cases, is thus related to the licensing of a binominal structure. *-a-* represents the further functional layer necessary to the licensing of the case of the overt noun. The structure in (49) is highly reminiscent of the structure of an ordinary transitive clause in Basque. It is also reminiscent of those approaches to Basque ergativity which take the ergative case marker to be inserted to license a second nominal besides the absolutive one (Laka, 1993; see also Bittner and Hale, 1996).

3.6. Summary

The silent PLACE hypothesis explains away some of the most intriguing properties of inessive phrases in Basque:

(i) The non-referential status of the alleged determiner *-a* in singular inessive phrases. Under our analysis, there is no actual determiner in those cases. Note that in this sense inessive adpositional phrases behave exactly as their allative and ablative counterparts, which also seem to absorb the actual determiner of the Ground.^v

(ii) The distinct morphological status of plural and singular inessive phrases, which is

accounted for in terms of the presence/absence of a silent abstract Place noun.

(iii) The impossibility of relativization in non-plural inessive phrases, which is comparable to the impossibility of relativizing an axial part noun.

(iv) The presence of extra functional material, required for case-licensing a second nominal, our silent Place noun..

4. Adding Path

One obvious question that arises under this analysis is why the extra case-marker in inessive phrases is absent in the presence of Path denoting adpositions (50). Why should the presence of a Path feature prevent the emergence of the extra case-marker?

- | | | |
|------|---|---|
| (50) | a. Etxe-ra
House-all
“To the house” | b. Etxe(*a)-ra
house-Erg/C-all
“To the house” |
|------|---|---|

4.1. An extra case-supporting head

If we avail ourselves from the complex structure that cartographic approaches to the structure of adpositional phrases attribute to Path denoting adpositions (see (2a-c)), there is a straightforward reason why allative adpositional phrases should be simpler than inessive ones. They lack an extra-case assigner because, as complex adpositions, they already possess the functional structure necessary to case-license two nouns. The Path head case-licenses the overt noun, and the locative head licenses the silent noun:

- (51) a. [_{PathP} EtXE P [_{PlaceP} PLACE P [_{AXP...}]]]

If the Path licenses the case of the overt noun no other case assigner is required, and therefore it is not projected (see the notion of *economy of projection* in Boskovic, 1995):^{vi}

- | | |
|------|---|
| (52) | a. *[_{CP} etxe-a [_{PathP} (etxe) P [_{PlaceP} PLACE P [_{AXP...}]]]] |
| | b. *Etxeara
House-D-all |

One of the consequences of this analysis is that the lexicalization of spatial features can operate on syntactic phrases and does not necessarily target heads. This is in accord with the nano-syntax project (as spelled out in Starke, 2013; see Caha, 2009, for the concrete domain of adpositions and cases). Note that under a postsyntactic theory of lexical insertion, as in Distributive Morphology, this possibility can only be excluded by fiat. Under the approach defended in this paper, lexicalization of spatial adposition proceeds from less to more inclusive feature sets: the inessive lexicalizes Place, the allative lexicalizes Path and Place, and the ablative lexicalizes either Path and Place, with Path now restricted to spatial sources, or Source, Path and Place:

- | | |
|------|---------------------------|
| (53) | a. Inessive {Place} |
| | b. Allative {Path, Place} |

c. Ablative {Source, Path, Place}

In the syntactic computation, Path adpositions correspond to complex sequences of features, whose underlying presence is indirectly visible through case licensing.

5. Persons and Things

A problem for the analysis above is raised by directional adpositional phrases which contain a personal Ground. They involve both the cognate of the ergative case marker *-ga-*, the inessive, and the allative morpheme too (54b):

- | | | |
|------|---------------------------------------|---|
| (54) | a. Zu-ga-n
You-erg-loc
“In you” | b. Zu-ga-n-a
You-erg-loc-all
“To you” |
|------|---------------------------------------|---|

There are several properties of person locatives/directionals that set them apart from the non-personal ones. First, in person directionals we see affix stacking: the allative and the inessive are both overtly realized. Then, the order of the affixes is a puzzling one, assuming the order of *-ga-* (ergative), allative and inessive as Tense and Aspect related categories: we would have expected (55a), rather than (54b):

- | | | |
|------|-------------------|---|
| (55) | a. *Zu(re)-ga-a-n | b. [_{TP} Ground DP-Erg T [ALL [INESS...]]] |
|------|-------------------|---|

Both properties are unexpected under the analysis we were forced to accept on the basis of the featural hierarchy in (2).

5.1. Persons

A relatively straightforward analysis of the order of the affixes would have the whole structure embedding the pronoun and the inessive suffix raise to the Spec of the Path phrase headed by the allative, as in clausal pied-piping, a well attested phenomenon in Basque (see Ortiz de Urbina, 1990; Ormazabal, Uriagereka and Uribe-Etxebarria, 2008, a.o):

- | | |
|------|---|
| (56) | [_{PathP} [_{XP} Zu-ga-Place-n...]-a [_{XP} Zu-ga-Place-n...]] |
|------|---|

This goes against some of the technical choices we made in the analysis of the previous cases. Remember that the allative was taken to lexicalize not just Path, but Path and Place. This is not an insurmountable problem once we realize that in cases like (54b) we have a different allomorph of the allative, one which is not phonologically conditioned, and therefore must be coded as such in the lexicon:

- | | | |
|------|--------------------------------|--------------------------|
| (57) | a. <i>-ra</i> (Path and Place) | b. <i>-a</i> (Only Path) |
|------|--------------------------------|--------------------------|

What is XP in (56)? The XP in (56) crucially involves person. Several authors (see San Martin, 2002; San Martin and Uriagereka, 2001) have argued that in Basque the licensing of personal subjects requires the presence of C. The presence of personal arguments (meaning 1st or 2nd person) can be shown to require clausal domains headed by finite T, unlike third person arguments in Basque. Thus, personal pronouns cannot stay in some clause-like non-finite contexts, and must raise to a the matrix finite T. See

for instance the contrast in (58) (from Etxepare and Uribe-Etxebarria, 2013):

- (58) a. Behar dut [_{InfP} liburu horiek ikusi]
 Need I-have book those-abs see-partc
 “I need to see those books”
- b. *Behar dut [_{InfP} zu ikusi]
 need I-have you-abs see
 “I need to see you”
- c. Behar zaitut [(zu) ikusi]
 need I-have-you see-partc
 “I need to see you”

Unlike an ordinary DP, a personal pronoun cannot occur inside a rightward finite dependent of the type studied by Etxepare and Uribe-Etxebarria. Those finite dependents seem to include a projection for Tense, which induces an opaque domain for agreement from the matrix T. Note that such an embedded infinitival cannot contain a personal pronoun in its object position. This is arguably due to the fact that the personal pronoun requires something more than T; it requires a C with a person feature, and only the matrix C-T complex can provide such a structural configuration.

If the ergative in (56) requires a Comp-T complex, then the raising of the whole clause is akin to clausal pied-piping in Basque.

- (59) a. Zu-ga-n-a
 you-erg-asp-all
- b. [_{PathP} [_{CP} Zu-ga-PLACE-n...]-a [_{CP} ~~Zu-ga-Person-n...~~]

(59) allows us to make another connection with Basque historical morphosyntax : it is likely the case that the Basque declarative complementizer *-ela* is just but the sequence of inessive *-n* plus the allative *-ra*.

5.2. Person and the Genitive

Consider now the following asymmetry, affecting locative constructions with personal grounds:

- | | | |
|------|--------|-----------------|
| (60) | a. Ni | a'. Ni-ga-n |
| | | I-erg-iness |
| | “I/me” | “In me” |
| | b. Zu | b'. Zu-ga-n |
| | | you-erg-iness |
| | “You” | “In you” (sing) |
| | c. Gu | c'. Gu-ga-n |
| | | we-erg-iness |
| | “We” | “In us” |

- (61) a. Zu-ek b. *Zu-e(k)-gan
 you-pl you-pl-erg-iness
 “You” “In you”
- b. Zu-en-ga-n
 you-gen-erg-iness
 “In you”

Historically, the second person plural was formed by adding a plural ending^{vii} to the old plural second person *zu* “you”. Second person plural is the only pronominal form that has grammatically overt number. The formation of locatives out of 1st and 2nd singular person pronouns can be a simple process of “merging to ergative/*-ga*-case suffix”. The grammatically plural one *zu-ek* “you (pl)” requires however a further case marker Genitive (*-en*). This brings to mind the number restriction we found in the case of the abstract locational noun PLACE. This restriction can be accounted for under the idea that an abstract PERSON exists side-by-side to PLACE, that does not support number either. If this is the case, the PERSON abstract noun must be sheltered from number by a genitive specifier containing the plural pronoun:

- (62) a. [[[Zu-en] PERSON]-ga...]
 you-pl.gen person-erg
- b. YOU_{PLURAL} –r PERSON

With the whole structure as in (63):

- (63) [TP [POSSP Zu-en PERSON]-ga [PLACE –n...]]

The structure in (63) is independently available to the rest of the personal pronouns, which freely alternate between the absolutive and the genitive forms:

- (64) a. Ni-ga-n b. Ni-re-ga-n/ene-ga-n
 I-erg-iness I-gen-erg-iness/my-erg-iness
 “In me” “In me”

The possibility of having bare personal pronouns must follow from the same kind of parallelism that associates overt locational nouns to abstract places: the abstract PERSON feature can be realized by the personal pronouns themselves, when they don’t possess grammatical number.

5.3. Anaphors

Basque only has a simple anaphor, the reciprocal *elkar* “each other”. In most dialects of Basque, the reciprocal anaphor requires the genitive in addition to the ergative:

- (65) a. Elkar-en-ga-n b. Elkar-en-ga-n-a
 recipr-gen-erg-iness recipr-gen-erg-iness-all

Simple locative reciprocals are impossible:

(66) *Elkar-ga-n

The impossible (64) has a straightforward analysis under the hypothesis that *-ga* is the equivalent of the ergative case marker in the adpositional domain, and the position where *-ga-* is realized is parallel to the subject position of finite clauses:

(67) No (reciprocal) anaphors in subject position (Salaburu, 1987)

*[_{TP} Elkar-ga T [_{AspP} -n ...]]

The reciprocal structure requires therefore a possessive structure:

(68) [_{TP} [_{PossP} Elkar-en PERSON] -ga [_{AspP} PLACE -n...]]

The contrast is not unlike the one in (69) with ergative DPs:

(69) a. *Elkarrek b. Elkarren lagunak
 Each-other-erg each-other-gen friends-erg

5.4. A generalization

The discussion in section 3-5 suggests the following generalization for Basque abstract nouns PLACE and PERSON:

(70) Basque abstract nouns (PLACE, PERSON) are incompatible with number

6. A note on the demonstrative paradigm and the ergative-absolutive syncretism

A conclusion in line with (70) can be drawn by a look at the demonstrative paradigm (the notion of demonstrative paradigm, under the present knowledge of the historical evolution of the Basque forms and the internal structure of both demonstratives themselves and demonstrative structures is obviously a very naïve one). The proximate demonstrative *hau* “this” (71a) makes the ergative with stem suppletion (71b):

(71) a. Hau b. Hon-ek
 this-abs this-erg
 “This” “This”

The stem that hosts the ergative marker is the same as the locative one:

(72) Hon-a
 this-loc-all
 “To here”

This seems to suggest that the presence of the ergative is associated to the underlying presence of a locative structure. This is hardly surprising in view of the existence of a silent PLACE noun in locative constructions, requiring an extra case-affix morphologically realized as *-ga-*. Moreover, the plural demonstrative does not present

stem suppletion:

- | | | |
|------|-------------------------------------|-------------------------------------|
| (73) | a. Hau-ek
this-pl.abs
“These” | b. Hau-ek
this-pl.erg
“These” |
|------|-------------------------------------|-------------------------------------|

This is what one expects if the ergative, being a second case marker, requires an underlying abstract noun. Abstract nouns do not support number, and therefore they are absent from plural contexts. As a consequence, no ergative will arise.

The same logic can be extended to the syncretism between absolutive and ergative in the context of ordinary DPs (4, repeated here), with which we started the discussion of this paper:

- | | | |
|------|---|---|
| (74) | a. Adiskide- ak etorri dira
Friends-abs come are
“(My) friends came” | b. Adiskide- ak liburua erosi dute
friends-abs book-abs bought have
“My friends bought it” |
|------|---|---|

The variation between (roughly) western and central varieties on the one hand and eastern ones on the other, when approached from the angle proposed here, takes a form which is different from that of a morphological accident, or a process of grammatical impoverishment. The lose of the distinction between ergative and absolutive marking in those varieties in the plural must be linked to the status of the ergative and the locative suffix *-ga-* as a second case marker, one that licenses an abstract place or person noun. The relevant abstract nouns do not support number, so we expect that they will be incompatible with the ergative case marker. It is known (see recently Etxeberria, 2011; Manterola, 2012), that the spreading of the determiner and plural number morphology (the two seem to spread together, see recently Manterola, 2012) followed a path that goes from western to eastern dialects. The syncretism is not attested in eastern varieties. One hypothesis that may deserve examination is that the spreading of the plural happened first in varieties in which the status of ergative as a “second” case marker motivated by the presence of an abstract noun was still operative. It could be the case that by the time plural number morphology spread to eastern dialects, the ergative case-marker had lost already its locative character, and was a mere case-affix, dependent on other configurational properties of the clause. This process must have taken place independently of the details of the paper, if the ergative suffix *-k* is an allomorph of the locative suffix *-ga-*, as argued for by Lakarra (2005:442-444). The plausibility (or lack thereof) of this hypothesis, which does not constitute the main object of the paper, as well as its relation to other related diachronic issues, such as the origin of the plural morpheme itself, the origin of basic declension cases in demonstrative forms (Manterola, 2008) and the somewhat different distribution of the ergative case-marker in western/central and eastern dialects (Aldai, 2008) is cautiously adjourned to a more enlightening occasion.

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ⁱⁱ The synchretism is limited to the case paradigm. The morphology in the finite auxiliary distinguishes plural ergative and absolutive.

ⁱⁱⁱ This raises the obvious issue of how to analyze simple axial noun constructions such as *aurrean* "in the front" or *atzean* "in the back". See Etxepare (forthcoming).

^{iv} For cases like *lasterreon* "immediately" with a proximate determiner and singular denotation, attested in earlier stages of basque, I am forced to accept a singular version of (47). I thank Julen Manterola for raising this problem.

^v Not that we understand how and why this happens. See Himmelmann (2001), Longobardi (2001) and Den Dikken (2006) for some recent discussion.

^{vi} With the well known exception of Souletin dialects. See also section 5.

^{vii} Possibly a plural demonstrative *hek* (see Manterola, 2008).