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Quantification in Basque

Urtzi Etxeberria [CNRS-Iker]

3.1 Introduction

This paper explores the various syntactic and morphological means that Basque uses to express quantification. Basque is spoken in the Basque Country, although its official status is not equal throughout the whole area. Currently, Basque is one of the two official languages (together with Spanish) in the Autonomous Community of the Basque Country which consists of three provinces: Bizkaia, Gipuzkoa, and Araba. In the region of Navarre, the official status is a bit more limited in that only in some parts is Basque treated as an official language (together with Spanish). Of all these four provinces, i.e. the Spanish part of the Basque Country, Gipuzkoa and Bizkaia are the provinces with most Basque speakers, although the number of speakers is lately increasing in Araba. Basque is also spoken in the south of France, in the occidental part of the Département des Pyrénées Atlantiques (Lapurdi, Low Navarre, and Zuberoa are the three Basque provinces), but has no official status there. Nowadays, all adult Basque speakers can be said to be bilingual, either Basque-Spanish or Basque-French.

Historically, Basque is the only known language that remains of those that were spoken in Europe before the Roman conquest (cf. among many others Mitxelena 1968, 1979, Trask 1995, 1997). In fact, Basque is a language isolate with no known relatives and uncertain origins, and the Aquitanian language, which was spoken in the south western part of present day France and in part of the Pyrenees at the time of the Roman conquest, is taken to be the ancestral form of Basque (for detailed accounts, cf. Gorrochategui 1995, Zuazo 1995, Trask 1995, 1997, Lakarra 2005). Basque has been described both in traditional grammars written in French (e.g. Lecluse 1826, Darrigol 1827, Ithurry 1896, Lafitte 1944, Oyharçabal 1987), Spanish (e.g. Campión 1884), Basque (e.g. Goenaga 1978, Txillardegi 1978, Euskaltzaindia 1985, 1987a, 1987b, 1991, 1993, 1994, 1999), or English (e.g. Saltarelli 1988, King 1994, Laka 1995, Hualde and Ortiz de Urbina 2003a); and by generative linguists (cf. among many others de Rijk 1969, 1998, 2008, Goenaga 1978, Eguzkitza 1986, Ortiz de Urbina 1989, Laka 1990, Rebuschi 1997, Fernandez 1997, Elordieta 2001).

Most grammarians identify SOV as the 'neutral' word order of Basque (among others, cf. de Rijk 1969). Phrase internal order is mostly fixed in Basque, but phrase combination is quite flexible. All the permutations of the constituents in (1) are grammatical.¹

- (1) [Nere anai-a-k] [alaba-ri] [opari bat] [eman dio]
my brother-D.erg daughter-dat present one give aux
'My brother gave a present to his daughter'

3.2 Existential quantifiers

The quantifiers presented in this section are "intersective": they quantify over the set denoted by the intersection of the sets denoted by the NP and the VP.

¹ Different orders produce different prominence configurations, e.g. focus phrases must appear in the immediately preverbal position, changing the basic word order (cf. a.o. Eguzkitza 1986, Ortiz de Urbina 1983, 1989, 1999, Uriagereka 1999, Arregi 2003, Irurtzun 2006). Cf. end of section 2.3).

Singular agreement with the inflected verb is just agreement by default with no correspondence with actual number features. These agreement facts have an influence in the interpretation, e.g. they force distributive readings, they cannot combine with categorical predicates, etc. The reader is referred to Etxeberria & Etxepare (2008, in prep.) for an extensive discussion of these facts and for a possible analysis.

Another difference between these quantifiers is that while *batzuk* can be used to make reference to a set of just two members of whatever the NP denotes, *zenbait* seems to necessarily make reference to a bigger plurality.

- (7) a. Lagun batzuk etorri dira, Martxel eta Unax hain zuzen ere.
 friend some-abs come aux.pl Martxel and Unax so correctly too
 ‘Some friends have come, specifically Martxel and Unax.’
 b. *Zenbait lagun etorri dira, Martxel eta Unax hain zuzen ere.
 some friend-abs come aux.pl Martxel and Unax so correctly too
 ‘Some friends have come, specifically Martxel and Unax (intended)’

Apart from these differences, one similarity between these quantifiers is that they cannot be combined with the definite determiner (D) (cf. §5.1); it does not matter whether the D is placed on the nominal expression or on the quantificational element.

- (8) a. [Politikari(*-ak) batzuk(*-ak)] berandu iritsi ziren.
 [politician(-D.pl) some(-D.pl)] late arrive aux.pl
 ‘*The some politicians arrived late.’
 b. [Zenbait(*-ak) politikari(*-ak)] berandu iritsi ziren.
 [some(-D.pl) politician(-D.pl)] late arrive aux.pl
 ‘*The some politicians arrived late.’

3.2.2 Existential sentences

There are two ways in which Basque builds existential sentences. The first uses something similar to an expletive subject (like English *there* or French *il*, cf. McNally to appear, Francez 2007, 2009), although strictly speaking Basque lacks expletive subjects.⁵ The second is created by means of ‘locative-inversion’ where the coda – the element that expresses location – is moved to initial position (for the relation between existential sentences and locative constructions, cf. e.g. Lyons 1967, Kuno 1971, Kimball 1973, Clark 1978, Freeze 1992, Rigau 1997, Zeitoun et al. 1999; cf. Francez 2007. Others, e.g. Milsark 1974 have argued that this similarity is superficial, at least in some languages). For example, the Finnish example in (9a) is a locative sentence, while the one in (9b) is considered an existential one.

- (9) a. mies on huonee-ssa.
 man-nom is room-ines
 ‘The man is in the room.’
 b. huonee-ssa on mies.
 room-ines is man-nom
 ‘There is a man in the room.’

⁵ As is the case in Maori where they use an element meaning ‘yes’.

(i) Ae he taniwha.
 yes a taniwha
 ‘Yes, there are taniwhas.’ (from Bauer 1993, cited in McNally to appear)

However, these two existential constructions are not equally grammatical for all Basque speakers: while the first version is used in the eastern part of the Basque Country, i.e. the three provinces of the French part of the Basque Country and in the eastern part of Navarre, the locative inversion existential is used in the western part of the Basque Country.⁶

The element that is used in Basque to form the first kind of existential constructions uses the element *ba-* which is attached to the copula *izan* ‘be’ (cf. Oyharçabal 1984, Etxepare 2003a). The particle *ba-* is related to the positive particle *bai* ‘yes’.

- (10) Ba-da euli bat zopan.
 yes-is fly one soup-D-in
 ‘There is a fly in the soup.’

In (10), the particle *ba-* is attached to the third person singular form of *izan*, *da* ‘is’; it can also be attached to the third person plural form, *dira* ‘are’ as in (11).

- (11) Ba-dira euli batzuk zopan.
 yes-are fly some soup-D-in
 ‘There are some flies in the soup.’

This dedicated existential construction inflects with tense (both in singular and plural) as shown by the examples in (12).

- (12) a. Ba-da euli bat zopan gaur, atzo ere ba-zen euli bat zopan.
 yes-is fly one soup-D-in today yesterday too yes-was fly one soup-D-in
 ‘There is a fly in the soup today, yesterday there was a fly in the soup too.’
 b. Ba-dira euli batzuk zopan gaur, atzo ere ba-ziren euli batzuk zopan
 yes-are fly some soup-D-in today yesterday too yes-were fly some soup-D-in
 ‘There are some flies in the soup today, yesterday there were some flies in the soup too.’

The second way of creating existential sentences is by means of locative inversion:

- (13) a. Euli bat dago zopan. b. Zopan euli bat dago.
 fly one be.egon.sg soup-D-in soup-D-in fly one be.egon.sg
 ‘A fly is in the soup’ ‘There is a fly in the soup’

The verb used in this case is the copula *egon* – parallel to Spanish *estar* (cf. fn.2) –, in opposition to the first type of existential sentence which uses the copula *izan*. The existential sentence in (13b) can also be pluralized as in (14) and it also inflects for tense, (15).

- (14) Zopan euli batzuk daude.
 soup-D-in fly some be.egon.pl
 ‘There are some flies in the soup’

- (15) a. Zopan euli bat zegoen. b. Zopan euli batzuk zeuden.
 soup-D-in fly one be.egon.sg.past soup-D-in fly some be.egon.pl.past
 ‘There was a fly in the soup’ ‘There were some flies in the soup’

⁶ Right now, I’m unable to tell where exactly the border of these two uses should be (or is) placed and I will leave this for future research.

supported by the relation of this element to the positive particle *bai* ‘yes’ (cf. Altube 1929). Note that *ba-* is also used in yes/no questions as in (20).

- (20) Ba-duzu ogirik?⁸
 yes-have.you bread-part
 ‘Do you have any bread?’

In Basque, negative existentials do not make use of a special negation form and the same negation form as in simple declarative sentences is used: *ez* ‘no’.

- (21) a. Ez da eulirik zopan.
 no is fly-part soup-D.in
 ‘There isn’t any fly in the soup’
 b. Zopan ez dago eulirik.
 soup-D-in no be.egon fly-part
 ‘There isn’t any fly in the soup’

As for the definiteness restriction typically found in existential constructions crosslinguistically (although cf. among others Francez 2007, 2009 where it is argued that the definiteness effect is from illusory to non-existent), it is found in Basque (as we already saw for definites in the examples 16-19) with no exceptions. All Basque strong quantifiers –e.g. *guztiak* ‘all’, *gehienak* ‘most’, etc.– in (22), proportional partitive quantifiers –e.g. *N-etatik asko* ‘many of the N’, etc.– in (23) (cf. §5.9) as well as definites –e.g. *eulia* ‘the fly’– in (24) (cf. §5.1) are excluded from both types of existential sentences.

- (22) a. *Badira euli guztiak/gehienak zopan.
 yes-are fly all-D.pl/most-D.pl soup-D.in
 b. *Zopan euli guztiak/gehienak daude.
 soup-D.in fly all-D.pl/most-D.pl be.egon

- (23) a. *Badira eulietatik asko zopan.
 yes.are fly-D.pl-part many soup-D.in
 b. *Zopan eulietatik asko daude.
 soup-D.in fly-D.pl-part many be.egon

- (24) a. *Bada eulia zopan.
 yes-is fly-D.sg soup-D.in
 b. *Zopan eulia dago.
 soup-D.in fly-D.sg be.egon

3.2.3 Numerals and modified numerals

The Basque numeral system is vigesimal.

- (25) Cardinal numbers
 a. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
 zero/huts, bat, bi, hiru, lau, bost, sei, zazpi, zortzi, bederatzi
 b. 10, 11, 12, 13, 14, 15, 16, 17, 18, 19
 hamar, hamaika, hamabi, hamairu, hamalau, hamabost, hamasei, hamazazpi,
 hemezortzi, hemeretzi

⁸ The affix *-(r)ik* is the Basque partitive marker (cf. §5.10; cf. Larramendi 1927, Azkue 1905, 1923; cf. de Rijk 1972 for historical references; cf. also Ettxeberria 2010b). The partitive is a polarity item, and it occurs mostly in polarity contexts, in positions in which an absolutive would otherwise occur (see de Rijk 1972).

c. 20, 21,...		30, 31,...	
hogei, hogeita bat		hogeita hamar, hogeita hamaika	
d. 40, 41,...		50, 51,...	
berrogei, berrogeita bat		berrogeita hamar, berrogeita hamaika	
e. 60	70	80	90
hirurogei	hirurogeita hamar	laurogei	laurogeita hamar
f. 100	200	1000	
ehun	berrehun	mila	

Note the irregular forms of the numerals ‘11’, ‘18’, and ‘19’. The construction of long numbers is illustrated by the following example.

- (26) mila bederatzehun eta hirurogeita hamasei
 thousand nine.hundred and sixty.and sixteen
 ‘1976’

In Basque, with the exception of *bat* ‘one’, and in some dialects *bi* ‘two’⁹, numerals are all prenominal.

- (27) a. adiskide bat a’. *bat adiskide
 fellow one one fellow
 ‘one fellow’
 b. adiskide bi b’. bi adiskide
 fellow two two fellow
 ‘two fellows’ ‘two fellows’
 c. bost/hamar/laurogei/berrehun/hiru mila ikasle
 five/ten/eighty/two hundred/three thousand student

Except for *bat* ‘one’, which shows some restrictions (see below), Basque numerals can easily combine with the D as in e.g. Germanic or Romance languages, a combination that results in a definite and referential interpretation (cf. Etxeberria 2005, in prep).

- (28) Zazpi lagun-ek bost oilasko-ak jan zituzten.
 seven fellow-D.pl-erg five chicken-D.pl-erg eat aux.pl
 ‘The seven fellows ate the five chickens.’

There is only one situation where *bat* ‘one’ plus the D, i.e. *bat-a* ‘the one’, is grammatical: explicit contrastive contexts, as in (29a). However, note that once you eliminate the element creating the contrast (*beste-a* ‘the other’), the result is ungrammatical, (29b).

- (29) a. Batak ogia ekarri zuen, besteak ardoa.
 one-D.sg-erg bread bring aux.sg other-D.sg-erg wine
 ‘The one brought bread, the other wine’
 b. *Batak ogia ekarri zuen.
 one-D.sg-erg bread bring aux.eg.
 ‘The one brought bread’

When we add the D to the numeral *bi* can also mean ‘both’: *biak* ‘both of them’. With the proximate plural version of D *-ok* (cf. §5.1) added to the numeral plus the pronoun *gu* ‘we’ or

⁹ In the most western dialect, i.e. in Bizkaia.

zuek ‘you.pl’ we get the meanings ‘both of us’ and ‘both of you’ respectively: *gu biok* and *zuek biok*. The construction *zu eta biok*, which literally means ‘you and both of us’, actually means ‘you and I (together)’, and this construction may also be extended to larger numerals: *Ricardo, Beñat eta hirurok* ‘Ricardo, Beñat, and I (together)’, literally ‘Ricardo, Beñat, and the three of us’, or *Ricardo, Beñat, Xarles, Aurelia eta bostok* ‘Ricardo, Beñat, Xarles, Aurelia and I (together)’, literally ‘Ricardo, Beñat, Xarles, Aurelia and the five of us’.

Ordinal numerals are formed by adding the suffix *-garren* to the cardinal numeral (except for those that express ‘first’ and ‘last’): *bi-garren* ‘second’, *hiru-garren* ‘third’, *hogeita bat-garren* ‘twenty first’, *ehun-garren* ‘hundredth’, *mila-garren* ‘thousandth’, etc. The Basque ordinal expressing ‘first’ is *lehen* or its variants *lehenengo*, *lehenbiziko*, *lehendabiziko* which take the genitive suffix *-ko* ‘of’, or *aurren* or its variant *aurreneko*, again with the genitive marker *-ko*. ‘Last’, on the other hand, is expressed by *azken* or its variants *azkeneko*, *azkenengo*, also formed with the genitive marker *-ko*.

The morpheme *-garren* can also attach to the interrogative *zenbat* ‘how many, how much’ to ask *which oneth?*

- (30) *Zenbatgarren iritsi da helmugara?*
 How many-th reach aux.sg finish line-to
 ‘Which oneth did s/he get to the finish line?’

The numerals can attach to a variety of modifiers, some of which follow the [Num+N] sequence, whereas some others precede it.

- | | | |
|------|----------------------------------|--|
| (31) | <i>bost katu baino gehiago</i> | ‘more than five cats’ [lit. five cat than more] |
| | <i>bost katu baino gutxiago</i> | ‘less than five cats’ [lit. five cat than less] |
| | <i>hogei katu inguru</i> | ‘approximately twenty cats’ [lit. twenty cat around] |
| | <i>gehienez bost katu</i> | ‘at most five cat’ |
| | <i>gutxienez bost katu</i> | ‘at least five cat’ |
| | <i>bakarrik bost katu</i> | ‘only five cat’ |
| | <i>sei eta hamar katu artean</i> | ‘between six and ten cat’ [lit. six and ten cat between] |
| | <i>ia hogeia katu</i> | ‘nearly twenty cat’ |

To express ‘approximately’ we can use the word *inguru* ‘around’ or alternatively we can add the genitive marker plus the numeral *bat* ‘one’ to the numeral, although it is possible to get the same reading without actually using the genitive marker.

- (32) *Martxel bost(-en) bat egun egon da Parisen.*
 Martxel-abs five-gen one day stay aux.sg Paris-in
 ‘Martxel spent approximately five days in Paris’

When the cardinal numeral to which we add the genitive marker plus *bat* ‘one’ [*-en bat*] is *bat* ‘one’ as in (33), the interpretation that we get is that of *someone*, or *some or other*. The second *bat* ‘one’ of the construction with no genitive marker can be pluralized: *bat-en batzuk* ‘some.pl or others’.

- | | | |
|------|---------------------------------|--------------------------------------|
| (33) | a. <i>Bat-en bat etorri da.</i> | b. <i>Bat-en batzuk etorri dira.</i> |
| | one-gen one-abs come aux | one-gen some-abs come aux |
| | ‘Someone came’ | ‘Some (pl) came’ |

In this case, no nominal expression can be combined with the *baten bat* construction as shown by the ungrammaticality of (34a). To make it grammatical we need to introduce the nominal

- (39) a. Ez zen emakumerik etorri.
no aux.sg woman-part come
'No woman came'
- b. Anek ez zuen goxokirik jan.
Ane-erg no aux.sg candy-part eat
'Ane didn't eat any candy'
- c. *Mutilik ez zuen dantza egin.
boy-part no aux.sg dance do

3.2.4 Value judgment cardinals

Among those Basque quantifiers that could be translated as 'many' (or 'abundant') we can mention the following: *asko* 'many', *ugari* 'abundant, copious', *franko* 'many', *anitz* 'many', *pila bat* 'lots of', *hainbat* 'quite a few'.¹⁰ On the other hand, among those Basque quantifiers meaning 'few' (or 'a few') we find the following: *gutxi* 'few' (and its variant *guti*), *gutxi batzuk* 'a few', *pixka bat* 'a little', *apur bat* 'a little'.

These quantifiers also vary in whether they are preposed or postposed with respect to the nominal expression they combine with: *asko* 'many', *franko* 'many', *anitz* 'many',¹¹ and *pila bat* 'lots of', can precede or follow the nominal expression.¹²

- (40) a. Asko haur etorri ziren.
many child-abs come aux.pl
'Many children came.'
- b. Haur asko etorri ziren.
child many-abs come aux.pl
'Many children came.'
- (41) a. Franko ehiztari ikusi nituen atzo.
many hunter-abs see aux.pl yesterday
'I saw many hunters yesterday.'
- b. Ehiztari franko ikusi nituen atzo.
hunter many-abs see aux.pl yesterday
'I saw many hunters yesterday.'
- (42) a. Anitz ikasle gaixo daude.
many student-abs sick be.egon
'Many students are sick.'
- b. Ikasle anitz gaixo daude.
student many-abs sick be.egon.
'Many students are sick.'
- (43) a. Soldadu-ek pila bat astakeria egin zituzten.
soldier-D.pl.erg pile one nonsense-abs make aux.pl
'The soldiers carried out a lot of foolish acts.'

¹⁰ *Hainbat* derives from the combination of the genitive forms **haren* 'of it' and the numeral *bat* 'one'.

¹¹ The prenominal use of these three quantifiers is almost exclusively limited to the eastern dialects.

¹² In older Basque, *asko* 'many' and *franko* 'many' could combine with a [NP+partitive case] construction:

- (i) a. Jostailurik asko erosi zuten. b. Lagunik franko ikusi dut gaur kalean.
toy.part many buy aux friend.part many see aux today street.in
'They bought many toys' 'I have seen many friends in the street today'

Although the partitive in quantifier constructions can be said to have been common to all Basque areas, in present day Basque, this use is almost exclusively restricted to one expression: *eskerrik asko* 'lit.: thank-part many'; cf. de Rijk (1972).

- b. Soldadu-ek astakeria pila bat egin zituzten.
 soldier-D.pl.erg nonsense pile one-abs make aux.pl
 ‘The soldiers carried out a lot of foolish acts.’

On the other hand, *ugari* ‘abundant, copious’ can only appear in postnominal position.

- (44) a. Perretxiko ugari ikusi ditut basoan.
 abundant mushroom-abs see aux.pl wood-D.sg-in
 ‘I have seen many mushrooms in the wood.’
 b. *Ugari perretxiko ikusi ditut basoan.
 abundant mushroom-abs see aux.pl wood-D.sg-in
 ‘I have seen many mushrooms in the wood.’

Also *gutxi* ‘few’, *gutxi batzuk* ‘few’ and *pixka bat* ‘a little’, *apur bat* ‘a little’ are grammatical only when in postnominal position.

- (45) a. Politikari gutxi etorri ziren.
 politician few-abs come aux.pl
 ‘Few politicians came.’
 b. *Gutxi politikari etorri ziren.
 few politician-abs come aux.pl
- (46) a. Politikari gutxi batzuk etorri ziren.
 politician few some-abs come aux.pl
 ‘A few politicians came’
 b. *Gutxi batzuk politikari etorri ziren.
 few some politician-abs come aux.pl
- (47) a. Garazi-k ardo pixka bat edan du.
 Garazi-erg wine little one-abs drink aux.sg
 ‘Garazi has drunk a little wine.’
 b. *Garazi-k pixka bat ardo edan du.
 Garazi-erg little one wine-abs drink aux.sg
- (48) a. Ane-k txokolate apur bat jan du.
 Ane-erg chocolate crumb one-abs eat aux.sg
 ‘Ane has eaten a little chocolate.’
 b. *Ane-k apur bat txokolate jan du.
 Ane-erg crumb one chocolate-abs jan aux.sg

Finally, *hainbat* ‘quite a few’ can only appear in prenominal position.

- (49) a. Hainbat lagun oporretan daude.
 some friend-abs holiday-in be.egon.pl
 ‘Some friends are on holiday.’
 b. *Lagun hainbat oporretan daude.
 friend some-abs holiday-in be.egon.pl

Except for *gutxi batzuk* ‘lit.: few some’, which only agrees with the verb in plural, and for *pixka bat* ‘a little’ and *apur bat* ‘a little’, which only agree with the verb in singular (this is default agreement; cf. Etxeberria 2005), all of the other quantifiers mentioned in this section show agreement alternation regardless of their position with respect to the nominal (cf. Etxeberria & Etxepare 2007, in prep). Hence, the examples in (40-44), (45a), and (49a) can show no agreement with the inflected verb as the following examples show.

- (40') a'. Asko haur etorri zen.
many child-abs come aux.sg
'Many children came.'
- b'. Haur asko etorri ziren.
child many-abs come aux.pl
'Many children came.'
- (41') a'. Franko ehiztari ikusi nuen atzo.
many hunter-abs see aux.sg yesterday
'I saw many hunters yesterday.'
- b'. Ehiztari franko ikusi nuen atzo.
hunter many-abs see aux.sg yesterday
'I saw many hunters yesterday.'
- (42') a'. Anitz ikasle gaixo dago.
many student-abs sick be.egon
'Many students are sick.'
- b'. Ikasle anitz gaixo dago.
student many-abs sick be.egon.
'Many workers are ill today.'
- (43') a'. Soldadu-ek pila bat astakeria egin zuten.
soldier-D.pl.erg pile one nonsense-abs make aux.sg
'The soldiers carried out a lot of foolish acts.'
- b'. Soldadu-ek astakeria pila bat egin zuten.
soldier-D.pl.erg nonsense pile one-abs make aux.sg
'The soldiers carried out a lot of foolish acts.'
- (44') a'. Perretxiko ugari ikusi dut baso-a-n.
mushroom abundant -abs see aux.sg wood-D.sg-in
'I have seen many mushrooms in the wood.'
- (45') a'. Politikari gutxi etorri zen.
politician few-abs come aux.sg
'Few politicians came.'
- (49') a'. Hainbat lagun oporretan dago.
some friend-abs holiday-in be.egon.sg
'Some friends are on holiday.'

There is another interpretation that *hainbat* can get: 'as many/much as that'. Note that the previous examples given with *hainbat* cannot get this interpretation. In this interpretation *hainbat* 'as many as that' also shows agreement alternation.

- (50) Amaia-k hainbat urte ditu/du.
Amaia-erg some year aux.pl/aux.sg
'Amaia is as old as that.'

Another prenominal Basque quantifier formed from the same stem as *hainbat* (namely **haren* 'of it') also has the same meaning: *hainbeste* 'as many as that -distal-'. This is a construction that can also be formed using the genitive form of other demonstratives plus *beste* 'other', that is, *honenbeste* 'as many as this' (from *hau* 'this' marked genitive *honen*) and *horrenbeste* 'as many as that' (from *hori* 'that' marked genitive *horren*) –cf. §5.1–.¹³

¹³ Both *hainbat* and *hainbeste* can be used in comparative structures. *Honesbeste* does not give rise to this comparative structure.

These quantifiers can agree with the verb in singular or in plural as the following example shows (the same applies to *hainbat*).

- (51) Amaia-k honen-beste/horren-beste/hain-beste urte ditu/du.
 Amaia-erg this.gen-other/that.gen-other/that.gen-other year aux.pl/aux.sg
 ‘Amaia is as old as this/as that/as that.’

Now, contrary to what happens with the quantifiers meaning ‘some’, some of the quantifiers in this section accept the addition of the D.¹⁴ *Asko* ‘many’ is one such.

- (52) Polit asko-a zen opari-a!¹⁵
 nice many-D.sg was present-D.sg
 ‘The present was very nice.’

This *asko-a* however, seems to be more a degree modifier meaning ‘very’ than a quantificational element as we can observe in the English translation in (52). The construction in (52) is equivalent to another construction (more commonly) used to express degree, in (53). Note that in Basque, the presence of the D is obligatory in Adjectival Phrases (cf. among many others, Zabala 1993, 2003, Artiagoitia 2006, Eguren 2006a, Etxeberria in prep.).

- (53) Oso polit*(-a) zen opari-a!
 very nice-D.sg was present-D.sg
 ‘The present was very nice.’

In fact, *asko* with the meaning of ‘very’ is found in some 17th century texts in preadjectival position just as the present form *oso* ‘very’. In (53), it modifies the whole AdjP *fraide deboten* ‘devout friars’ (example from Etcheberry Ziburukoa 1697).

- (54) Asko fraide debot-e-n Aita buruzagi-a.
 many friar devout-D.pl-gen father superior-D.sg
 ‘The superior Father of very devout friars.’

Franko ‘many’ may be used as a degree modifier meaning ‘very’ as well, although its position is necessarily pre-adjectival.

- (55) Franko on-a da!
 many good-D.sg is

-
- (i) Zuk hainbat/hainbeste diru daukat nik.
 You-erg as much as money have I-erg
 ‘I have as much money as you’

Thanks to an anonymous reviewer for pointing this out to me.

¹⁴ However, when this happens their behavior is not that of quantifiers (except maybe for *franko* and *gutxi*). Cf. the discussion in examples (60-61).

¹⁵ *Aski* ‘enough’ (which is not be treated in this paper) can also be used in this kind of construction.

- (i) Gizon jator aski-a da hori! (Euskaltzaindia 1994: 107)
 man nice enough-D.sg is that
 ‘That is quite a nice guy!’

Aski can also appear in preadjectival position.

- (ii) Aski polit-a da opari hori!
 nice many-D.sg is present that
 ‘The present is very nice.’

Note that formerly *asko* meant ‘enough’ in the eastern dialects.

‘She/he/it is very good!’

Another quantificational element that has been used as a degree modifier combined with adjectives is *gutxi* ‘few’, its meaning ‘not very’ (example from Elissamburu 1890).

- (56) Bere hitz-eta-n da guti sinhesgarri-a, bere agintz-eta-n guti leial-a.
her/his word-D.pl-in is few credible-D.sg her/his order-D.pl-in few loyal-D.sg
‘She/he is not very credible in her/his words, not very loyal in her/his orders.’

Ugari ‘abundant’ can also appear with the D. In such a case, it is clearly behaving as an adjective (example (57a) is taken from Añibarro 1820).

- (57) a. Zure-tzat Jainkoa beti da franko-a, ugari-a, prestu-a.
you.sg-ben God-D.sg always is frank-D.sg abundant-D.sg reliable-D.sg
‘God will always be frank, abundant, reliable [...] for you.’
b. Hiztun ederr-a eta ugari-a da gizon hau.
speaker beautiful-D.sg and abundant-D.sg is man this
‘This man is a beautiful and abundant speaker.’

This adjectival usage is available for *gutxi* ‘few’ although it is not very productive nowadays.

- (58) Gauza gutxi-a
thing few-D.sg
‘The small thing’

Despite the possibility these ‘quantifiers’ have of appearing with the D, observe that when this happens they completely lose their quantificational meaning and function as adjectives or degree modifiers. In fact, in all of the examples in (40-47)¹⁶ (some of them repeated here as (59)) the D cannot combine with the quantifier, no matter whether it is placed on the nominal expression or on the quantifier.^{17, 18}

¹⁶ Except for *franko* ‘many’ which accepts appearing with the D but only when this is combined with the nominal expression. See ex. (60).

¹⁷ Although I don’t provide examples here, the singular form of the D (+singular agreement with the verb) does not improve the sentence at all.

¹⁸ A reviewer points out that it is possible to find a few examples of *ugari* ‘abundant, copious’ and *asko* ‘many, much’ followed by a demonstrative (the examples below are taken from *Ereduzko Prosa Gaur* [Modern Exemplary of Prose in Basque], <http://www.ehu.es/euskara-orria/euskara/ereduzkoa/>):

- (i) Eta gaur, bera ezagutu zuten asko horien ordezkarri moduan...
and today s/he know aux.pl many those.gen representative way.in
‘And today, as a representative of those many that got to know her/him...’
(Martin Ugaldere Ezagutza, *Berria* 2004/11/11).
- (ii) Ba, jaso hau: urteko gau oskarbi horietan botatako ihintzarekin...
well, take this year.gen night clear sky those.in thrown dew.with
‘Well, take this: with the dew fallen in those clear nights of the year...’
(P. Zabala, *Naturaren Mintzoa*, Alberdania 2000, p.411).

Two comments are in order here: (i) most of the speakers that I have consulted (myself included) regarding this kind of example find them (at least) strange, or even ungrammatical; and (ii) both *asko horien* ‘of those many’ and *gau oskarbi horietan* ‘in those clear nights’ in the examples above are anaphoric in that they make reference to a previously mentioned set; note that they cannot be used with a deictic interpretation, that is, it is not possible to use *ikasle asko hauek* ‘lit.: student many these’ while pointing out a set of students; right now, I do not have an explanation of why this is so. Finally, the reader is referred to Etxeberria & Giannakidou (2010) for a possible syntactic and semantic analysis of this kind of constructions in languages where they are completely grammatical, e.g. Greek, English, Spanish, etc.

- (59) a. Nerabe(*-ak) asko(*-ak) berandu iritsi ziren. [=40b]
 teenager(-D.pl) many(-D.pl) late arrive aux.pl
 ‘Many teenagers arrive late.’
 b. Perretxiko(*-ak) ugari(*-ak) ikusi ditut baso-a-n. [=44a]
 mushroom(-D.pl) abundant(-D.pl) see aux.pl wood-D.sg-in
 ‘I have seen many mushrooms in the woods.’
 c. Politikari(*-ak) gutxi(*-ak) iritsi ziren berandu. [=45a]
 politician(-D.pl) few(-D.pl) arrive aux.pl late
 ‘Few politicians arrived late.’

There are two quantifiers that apparently maintain their quantificational meaning when combined with the D (either sg or pl):¹⁹ *franko* ‘many’ in (60), and *gutxi* ‘few’ in (61).^{20, 21}

- (60) a. Unai ehiztari-a franko ikusi du gaur.
 Unai-erg hunter-D.sg many see aux.sg today
 ‘Unai has seen many hunters today.’
 b. Unai ehiztari-ak franko ikusi ditu gaur.
 Unai-erg hunter-D.pl many see aux.pl today
 ‘Unai has seen hunters many times today.’
 (61) a. Helmuga gurutzatu zuten txirrindulari gutxi-ak leher eginda iritsi ziren.
 finish line cross aux.pl cyclist few-D.pl-abs burst done arrive aux.pl
 ‘The few cyclists that crossed the finish line did so completely exhausted.’
 b. Afaltzeko edan dudan ardo gutxi-ak logura eman dit.
 dinner-gen drink aux.sg wine few-D.sg-erg sleep-will give aux.sg
 ‘The little wine I’ve drunk for dinner made me sleepy.’

However, note that the way in which the D combines with these two quantifiers is different: with *franko* ‘many’, it is the nominal expression that appears with the D; with *gutxi* ‘few’, the D combines with the quantificational expression.

Both these quantifiers show some specific behaviour when in these contexts:

Gutxi plus the D must always be used inside relative clauses and there is no other way in which the D can combine with *gutxi*, as the ungrammaticality of (59c) already demonstrated.²²

¹⁹ Note that when *franko* combines with a plural DP as in (60b) it is interpreted as an adverbial; see below.

²⁰ The Basque Corpus of the XXth Century [http://www.euskaracorpua.net/XXmendea/Konts_arrunta_fr.html] shows that the use of *franko* with a D, as in (60), is much more reduced statistically than that of *franko* with no D, as in (41b-b’). Thanks to Patxi Goenaga for pointing this out to me.

²¹ Some speakers do not accept *gutxi+ak* but accept the construction if instead of the D a demonstrative is used.

²² We could think that the D that appears with *gutxi* in sentences like (61) is the D related to the relative clause. But if this were the case other quantifiers should also allow the D when in relative clauses, and they do not.

- (i) *Helmuga gurutzatu zuten txirrindulari asko-ak leher eginda iritsi ziren.
 finish line cross aux.pl cyclist many-D.pl burst done arrive aux.pl
 ‘The many cyclists that crossed the finish line did so completely exhausted (intended)’

Furthermore, the fact that *gutxi* appears with the D when in relative clauses is not a necessary condition since it can also appear without it.

- (ii) Helmuga gurutzatu zuten txirrindulari gutxi iritsi ziren leher eginda.
 finish line cross aux.pl cyclist few arrive aux.pl burst done
 ‘A few cyclists that crossed the finish line were completely exhausted’

Another possibility is that *gutxi*, just like numerals, can be definite and referential (cf. §2.3). This could be correct since the denotation of [*NP+gutxiak*] seems to be indeed referential (cf. Etxeberria 2005 for discussion on this; cf. also Etxeberria in prep).

Franko on the other hand shows differences depending on whether the D is singular or plural. When plural, *franko* seems to be functioning as an adverbial and the sentence in (60b) would be interpreted as ‘Unai has seen hunters many times today’. When D is singular, the use of *franko* is restricted to some specific syntactic contexts, which is what differentiates it from the rest of quantifiers analysed in this section: it is grammatical in direct object position (60a) and in the subject position of unaccusative sentences (62a); but quite unexpectedly, it is ungrammatical in the subject of transitive sentences (62b) and as the subject of individual-level predicates (62c).^{23,24}

- (62) a. Ikasle-a franko etorri zen.
 student-D.sg many-abs come aux.sg
 ‘Many students came.’
 b. *Ume-ak franko goxoki bat jan du.
 child-D.sg-erg many candy one eat aux.sg
 ‘Many children ate a candy.’ (intended)
 c. *Modelo-a franko itsusi-a da.
 model-D.sg-abs many ugly-D.sg is
 ‘Many models are ugly.’ (intended)

Before moving to the next section, I’d like to comment on two other issues: (i) the comparative and superlative forms of *asko* ‘many’, (ii) the specific property of the changing word order of *gutxi* ‘few’.

In order to form the comparative and superlative forms of *asko* ‘many’, we take *gehi* as stem, which is also used to express addition in Basque. To this stem, we can add the comparative suffix *-ago* as in (63a) to create the comparative form *gehiago* ‘more’. For the superlative form, the suffix *-en* is used; and to this construction it is possible (though not necessary) to add the D as shown in (63b-b’). Note that the example in (63b’), with a D attached to the superlative morpheme, is ambiguous between a superlative and a quantificational use.²⁵

- (63) a. Liburutegi honetan beste hartan baino liburu gehi-ago daude.
 library this-loc other that-loc than book plus-comp aux
 ‘There are more books in this library than in that one.’
 b. Liburutegi honek ditu liburu gehi-en
 library this-erg has book plus-sup
 ‘This library has the most books.’
 b’. Liburutegi honek ditu liburu gehi-en-ak
 library this-erg has book plus-sup-D.pl
 ‘This library has most (of the) books.’

Note that in situations where the superlative interpretation is not allowed, the presence of the D is obligatory (64) (cf. Hualde & Ortiz de Urbina 2003b and Etxeberria 2005 for discussion).

²³ See Etxeberria (in prep.) for a possible analysis of the behavior of *franko* when combined with a singular DP.

²⁴ Sentence (62c) would be grammatical if *franko* was interpreted as a degree modifier meaning ‘very’ modifying the adjective *itsusi* ‘ugly’ that follows it (cf. example (54) above). However, this is not the interpretation that interests us here.

²⁵ *Gutxi* ‘few’ can also be combined with the comparative and the superlative suffixes as in (ia-b). The difference between *asko* and *gutxi* is that the quantifier reading we just described for *gehi-en* is not found with *gutxi-en*.

- (i) a. gutxi-ago b. gutxi-en
 few-comp few-sup
 ‘less’ ‘least’

- (64) a. Diputatu gehien*(-ak) berandu iritsi ziren
 M.P. plus-sup-D.pl late arrive aux.pl
 ‘Most of the MPs arrived late.’
 b. Peruk ikasle gehien*(-ak) izozkiak jaten ikusi zituen.
 Peru-erg student plus-sup-D.pl ice-cream-D.pl eating see aux.pl
 ‘Peru saw most of the students eating ice-creams.’

Now, as mentioned, *gutxi* ‘few’ has one unique property: it behaves like focus operators in that it induces a change in the basic word order of the clause (cf. Etxepare 2003b, Etxeberria 2001, in prep).²⁶ Note that focus phrases in Basque must appear in the immediately preverbal position, which produces a change in the basic SOV Basque word order (cf. a.o. Eguzkitza 1986, Ortiz de Urbina 1983, 1989, 1999, Uriagereka 1999, Arregi 2003, Irurtzun 2006).

- (65) a. *[Peru-k]_F baloi-a zulatu du.
 Peru-erg ball-D.sg-abs burst aux.sg
 ‘Peru has burst the ball.’
 b. Baloia [Peruk]_F zulatu du.
 c. [Peruk]_F zulatu du baloia.

If we observe the examples offered in this section (except for those in 60a-b) we will notice that this is exactly what happens with *gutxi*. That is, *gutxi* must necessarily occupy the preverbal position, irrespective of its grammatical function; and in case it is moved from this position, the result is ungrammatical as (66b-67b) show.²⁷

- (66) a. [Tenis jokalaria gutxi-k] hautsi dute erraketa.
 tennis player few-erg break aux.pl racket-D.sg-abs
 ‘Few tennis players have broken the racket.’
 b. *[Tenis jokalaria gutxi-k] erraketa hautsi dute.
 (67) a. Elene-k [liburu gutxi] irakurri ditu aurten.
 Elene-erg [book few-abs] read aux.pl this.year-in
 ‘Elenek has read few books this year.’
 b. *Elenek [liburu gutxi] aurten irakurri ditu.

3.2.5 Interrogatives

The cardinal question word is *zenbat* ‘how many, how much’ and the intersective non-cardinal one is *zer* ‘what’ or *zein* ‘which’ (although not every speaker uses both).

- (68) a. Zenbat ikasle etorri ziren?

²⁶ *Numeral baino gutxiago* ‘less than numeral’ shows exactly this same behavior, but due to lack of space this quantifier will not be treated extensively in this paper. For more on this quantifier (as well as quantifiers such as *numeral baino gehiago* ‘more than numeral’) the reader is referred to Etxeberria (2005, in prep).

²⁷ Note that *gutxi batzuk* ‘a few’ does not share with *gutxi* the restriction of appearing in preverbal position as the SOV order of the following example clearly shows.

- (i) Tenis jokalaria gutxi batzuek erraketa hautsi dute.
 tennis player few some-erg racket break aux.pl
 ‘A few tennis players have broken the racket.’

It seems as though the necessity of appearing in preverbal position is a consequence of the negative nature of *gutxi* (and things like *bost N baino gutxiago* ‘less than five N’). Cf. §5.5; cf. also Etxeberria (in prep).

- | | |
|--|---|
| four grass pile
'four piles of grass' | three bread loaf
'three loafs of bread' |
| e. bi esne botila/kopa (cf. §2.8)
two milk bottle/cup
'two bottles/cups of wine' | f. lau ur tanta
four water drop
'four drops of water' |
| g. sei txokolate ontza
six chocolate square
'six squares of chocolate' | |

The order [numeral-noun-classifier] is the only grammatical order (except for *botila* 'bottle', *kopa* 'cup' and its kin, which gives a grammatical result, in (74e), but see §2.8).

- | | |
|---|--|
| (74) a. *bost buru abel
five head cattle | b. *hiru fardo lasto
three bale straw |
| c. *lau meta belar
four pile grass | d. *hiru barra ogi
three loaf bread |
| e. bi botila/kopa esne
two bottle/cup milk | f. *lau tanta ur
four drop water |
| g. *sei ontza txokolate
six square chocolate | |

There is also a more generic classifier, *ale* 'piece' which allows counting mass terms that contain small parts or pieces such as rice, coffee, etc.

- | | |
|---|--|
| (75) a. lau kafe ale
four coffee piece
'four beans of coffee' | b. bi gari ale
two wheat piece
'two grains of wheat' |
| c. bost arroz ale
five rice piece
'five grains of rice' | |

As was the case with the more specific classifiers in (73), the classifier cannot appear between the numeral and the noun: **lau ale kafe*.

There exist also some classifier-like elements in Basque. These classifier-like elements aim at expressing a quantity different from the conventional single unit associated with the count noun. So, for example, *lore* 'flower', *baina* 'pod', or *ardi* 'sheep' are count terms to which we can add numerals directly, e.g. *lau lore* 'four flowers', *hamar ardi* 'ten sheeps'. However, these count terms can also be counted in groups, and for this, we need classifier-like terms.

- | | |
|---|---|
| (76) a. hiru lore sorta
three flower bunch
'three bunches of flowers' | b. zazpi baina parda
seven pod stake
'seven stakes of pod' |
| c. bi mahats mordo
two grape bunch
'two bunches of grapes' | d. lau artalde ²⁹
four sheep.group
'four herds of sheep' |

²⁹ *Artalde* 'herd of sheep' is a compound noun coming from the combination of *ardi* 'sheep' and *talde* 'group'. The noun *talde* 'group' can be used as a classifier-like element with all animals, although *artalde* is the most typical one.

Again, the only grammatical order of the constituents is the one in (76), i.e. [numeral-noun-classifier]: **hiru sorta lore*, **zazpi parda baina*, **bi mordo mahats*, **lau talde ardi*.

3.2.8 Container expressions and measure phrases

In Basque, there are apparently two constructions that function as measure phrases. The only thing that changes between these two constructions is the order of the constituents: [num-noun-classifier] versus [num-classifier-noun].³⁰

- (77) a. *hiru ardo botila*
 three wine bottle
 ‘three bottles of wine’
- b. *hiru botila ardo*
 three bottle wine
 ‘three bottles of wine’

However, these are just appearances since the construction in (77a) with the order [num-noun-measure] is necessarily a container expression (also known as *individuating expression*) whereas the one in (77b) with the order [num-measure-noun] is necessarily a measure phrase.

The fact that the construction in (77a) is a container expression is shown by the following examples. Among container words we can mention: *botila* ‘bottle’, *kopa* ‘cup’, *edalontzi* ‘glass’, *kaxa* ‘box’, etc.; and all these, of course, could also be considered classifiers, cf. §2.7, example (74e).

- (78) a. *Izarok [hiru ardo botila] ekarri ditu. Bat hutsik zegoen.*
 Izaro.erg three wine bottle bring aux.pl. one empty aux.sg
 ‘Izaro brought three bottles of wine. One was empty’
- b. *Anek [hiru [ardo botila polit]] ekarri ditu.*
 Ane.erg three wine bottle nice bring aux.pl.
 ‘Ane brought three nice bottles of wine (the bottles are nice)’

In both the examples in (78) it is possible to make reference to the element that contains the liquid, i.e. to the container: in (78a) we can continue talking about the emptiness of one of the bottles mentioned in the previous sentence; in (78b) we also make reference to the container and when we add a modifier *-polit* ‘nice’ in this case— what we modify are the bottles, i.e. the elements that are nice are the bottles.

When the word order of the constituents is the one in (77b), the result is a measure phrase. As a consequence, it is not possible to make reference to the container *botila* ‘bottle’ and a continuation sentence equivalent to the one (78a) is ungrammatical, (79a). Now, when we add a modifier such as *polit* ‘nice’ to something like *hiru botila ardo* as in (79b), what we happen to be modifying is the containee, i.e. the wine, not the container bottle.

- (79) a. *Izarok [hiru botila ardo] ekarri ditu. *Bat hutsik zegoen.*
 Izaro.erg three bottle wine bring aux.pl. one empty aux.sg
 ‘Izaro brought three bottles of wine. One was empty’
- b. *Anek [hiru botila [ardo polit]] ekarri ditu.*
 Ane.erg three bottle wine nice bring aux.pl.
 ‘Ane brought three bottles of nice wine (the wine is nice)’

³⁰ The reader is referred to Etxeberria & Etxepare (in prep) for extensive discussion on individuating expressions and measure expression as well as for a possible analysis.

Note that the container expression in (86c), *two cups of wine*, necessarily makes reference to the individual cups and allows only plural agreement with the verb.

3.2.9 Units of time and distance

In Basque, there are various possibilities to express time expressions meaning English *for*: e.g. instrumental, inessive, or absolutive (if main verb stative).

- (87) a. Gizonak hamar orduz lo egin zuen.
 man-D.sg ten hour-instr sleep do aux.sg
 ‘The man slept for ten hours’
 b. Etxean lan egiten du zortzi orduan.
 home-D-at work do aux eight hour-D-ines
 ‘S/he works at home for eight hours’
 c. Ordu bat egon naiz hor kanpoan zure zain.
 hour one stay aux there out-in your wait
 ‘I’ve been out there waiting for you for an hour’

When we use words like *aste* ‘week’, *hilabete* ‘month’, *urte* ‘year’, etc. inside time adverbials the affix *-bete*, from the adjective *bete* ‘full’, is typically used; and it is possible to express the *for* meaning by making use of the instrumental, the inessive or the absolutive: *astebetetz*, *astebetean*, *astebete*. The allative case marker *-ra* plus the relational (genitive) *-ko* also gives the *for* meaning.

- (88) Astebeterako etorri naiz.
 week-full-rako come aux
 ‘I came for a week’

Time expressions that express ‘in’ can be the following:

- (89) Zazpi egunetan itzuliko naiz.
 seven day-ep-loc return aux
 ‘I will return in seven days’

In (89), the indefinite locative marker *-tan* is used. Suffixing *-tan* to a stem ending in a consonant, triggers epenthetic *-e-*, as in *egunetan*. It is possible to express a similar (if not the same) meaning as (89) by using the locative word *barru* ‘interior’ (90a). The inessive form of *barru*, *barruan*, also expresses ‘within’ (90b); the time phrase in this construction is often marked genitive (90c).

- (90) a. Zazpi egun barru itzuliko naiz.
 seven day interior return aux
 b. Zazpi egun barruan itzuliko naiz.
 seven day interior-in return aux
 c. Zazpi egunen barruan itzuliko naiz.
 seven day-gen interior-in return aux
 ‘I will return (with)in seven days’

Another time expression is the one in (91) where the [numeral+noun] sequence bears the absolutive case marking:

- (91) Aste batek zazpi egun ditu.
 week one-erg seven day aux
 ‘A week has seven days’ or ‘There are seven days in a week’

Distance between two locations can be expressed using either the construction in (92) or in (93).

- (92) Donostia Bilbotik ehun kilometro(ta)ra dago.
 Donostia Bilbo-abl 100 km-indef-all be.egon.sg
 ‘Donostia is 100 kms from Bilbo’

- (93) Bilbotik Donostiara ehun kilometro daude.
 Bilbo-abl Donostia-all 100 km be.egon.pl
 ‘It is 100 kms from Bilbo to Donostia’

Comparatives are formed by attaching the comparative suffix *-ago*. The D that appears after the comparative suffix is optional in the eastern varieties of Basque.

- (94) Jon Mikel baino hiru zentimetro altu-ago-a da.
 Jon Mikel than 3 cm tall-comp-D is
 ‘Jon is three centimeters taller than Mikel’

3.2.10 A-Quantifiers

In this section we turn to adverbial expressions that quantify over events. In Basque, the value judgment cardinals (cf. §2.4) *asko* ‘many, much’, *ugari* ‘abundant, copious’, *franko* ‘many’ (cf. examples (60b)), and *gutxi* ‘few’ can be used as adverbials that quantify over events. Note that the neutral syntactic position of adverbs in Basque is preverbal.

- (95) a. Jon asko etortzen da taberna honetara.
 Jon many come aux bar this-indef-all
 ‘Jon comes to this bar many times/a lot’
 b. Ugari ikusi ditu horrelakoak.
 many see aux.pl that way-rel-D.pl
 ‘She/he has seen that kind of thing many times’
 c. Unai ehiztari-ak franko ikusi ditu gaur.
 Unai-erg hunter-D.pl many see aux.pl today
 ‘Unai has seen hunters many times today.’
 d. Gutxi ikusi dut Jon hemen.
 few see aux Jon here
 ‘I’ve seen Jon here few times’

There are four other adverbs denoting frequency that have the meaning of *often* and that could replace the adverbial *asko* in (95a) giving as a result exactly the same meaning: *maiz*, *sarri*, *ardura* (in the eastern dialects), and *usu* (only in the most eastern dialects, especially in Souletin).

Another possible way, in fact more frequent, to get adverbial expressions that quantify over events is to add the indefinite locative marker *-tan* to all the value judgment cardinal and to *maiz* and *sarri* (not to *ardura* and *usu*) (96a) (cf. §2.4), to the existential quantifiers (96b) (cf. §2.1) as well as to numerals (96c) (cf. §2.3).

- (96) a.
- | | |
|------------------------|--------------------------------|
| <i>askotan</i> | many times/often |
| <i>ugaritan</i> | many times/often |
| <i>frankotan</i> | many times/often |
| <i>anitzetan</i> | many times/often |
| <i>pila batetan</i> | many times/often ³¹ |
| <i>maizetan</i> | many times/often |
| <i>sarritan</i> | many times/often |
| <i>hainbatetan</i> | quite a few times |
| <i>*arduratan</i> | many times/often (intended) |
| <i>*usutan</i> | many times/often (intended) |
| <i>gutxitan</i> | few times |
| <i>gutxi batzuetan</i> | few times |
- b.
- | | |
|--------------------|-----------|
| <i>batzuetan</i> | sometimes |
| <i>zenbaitetan</i> | sometimes |
- c.
- | | |
|-------------------|-------------|
| <i>bitan</i> | twice |
| <i>hirutan</i> | three times |
| <i>lautan</i> | four times |
| <i>bostetan</i> | five times |
| <i>hamarretan</i> | ten times |

In order to express ‘once’, the word that is used is *behin*, not *batetan*. However, it is possible to find *bate(t)an* in constructions like *behin bate(t)an* ‘lit. once one.loc’ to express ‘once upon a time’ in opening lines of tales; although *bazen behin* ‘lit. there was once’ is quite common in these contexts.

It is possible to use *behin* combined with the wh-word *noiz* ‘when’, *noizbehin*, to get the meaning ‘sometime, occasionally’ (cf. section 4 for more on *occasionally*).

- (97) *Noizbehin hitzegin zuten.*
 when-once talk aux
 ‘They talked to each other at some point’

Frequency adverbs can also be created with the noun *aldi* ‘time, occasion’ plus the instrumental case marker added usually to numerals and to quantifiers such as *zenbait*, *hainbat*, *batzuk*, but not with *asko* and its kin (except for *anitz*, mostly used in the eastern dialects) or with *gutxi*.

- (98) a.
- | | |
|-------------------|-------------|
| <i>bi aldiz</i> | twice |
| <i>hiru aldiz</i> | three times |
| <i>lau aldiz</i> | four times |
| etc. | |

³¹ Two other frequency adverbs derived from *pila batetan* ‘many times’ are *kristoren pilatan* ‘lit. Christ-gen many-indef.loc’ which has the meaning ‘many many times’, and (derived from this last) we can also have *Jesukristoren pilatan* ‘lit. Jesus Christ-gen many-indef.loc’ which would get the meaning ‘many many many times’. Basically, both *kristoren* and *Jesukristoren* are used as degree modifiers.

- b.
- | | |
|----------------------|-----------|
| <i>aldi batzuez</i> | sometimes |
| <i>zenbait aldiz</i> | sometimes |
- c.
- | | |
|-----------------------------|-----------------------------|
| <i>anitz aldiz</i> | many times/often |
| <i>pila bat aldiz</i> | many times/often |
| <i>hainbat aldiz</i> | quite a few times |
| * <i>aldi askoz</i> | many times/often (intended) |
| * <i>aldi frankoz</i> | many times/often (intended) |
| * <i>aldi ugariz</i> | many times/often (intended) |
| * <i>aldi gutxiz</i> | few times |
| * <i>aldi gutxi batzuez</i> | few times |
- etc.

Note that the noun *aldi* ‘time, occasion’ appears in the position where the quantifier allows its nominal expression, and that the instrumental case marker follows the last element in the construction, be it the numeral, the quantifier, or the noun itself.

We get exactly the same meaning as in the previous examples when we add the indefinite locative marker to the noun *aldi*. The difference between the use of the instrumental or the one of the locatives is that the latter can be used with (more) words meaning ‘many’ – *anitz*, *asko*, or *franko*– as well as with *gutxi* ‘few’ and *gutxi batzuk* ‘a few’.

- (99) a.
- | | |
|---------------------|-------------|
| <i>bi alditan</i> | twice |
| <i>hiru alditan</i> | three times |
| <i>lau alditan</i> | four times |
- b.
- | | |
|------------------------|-----------|
| <i>aldi batzuetan</i> | sometimes |
| <i>zenbait alditan</i> | sometimes |
- c.
- | | |
|-----------------------------|-----------------------------|
| <i>anitz alditan</i> | many times/often |
| <i>aldi askotan</i> | many times/often |
| <i>aldi frankotan</i> | many times/often |
| <i>pila bat alditan</i> | many times/often |
| <i>hainbat alditan</i> | quite a few times |
| * <i>aldi ugaritan</i> | many times/often (intended) |
| <i>aldi gutxitan</i> | few times |
| <i>aldi gutxi batzuetan</i> | few times |
- etc.

Finally, the noun *bider* (derived from the dative form of the word *bide* ‘way’) is also used to create frequency adverbs. This noun usually attaches to numerals: *bi bider* ‘two times’, *hiru bider* ‘three times’, *mila bider* ‘a thousand times’, etc. Although it can sometimes be found attached to other quantifiers: *hainbat bider* ‘sometimes’, *zenbait bider* ‘sometimes’ (not *batzuk*), *asko bider* ‘many times’, *anitz bider* ‘many times’, *gutxi bider* ‘few times’. The

noun *bider* can also be used with the instrumental *-z*: *bi biderrez* ‘two times’, *mila biderrez* ‘one thousand times’.³²

We now turn to negative adverbial quantifiers. There are three words in Basque that can be used with the meaning of *never*: *inoiz* (from combining the wh-word *noiz* and the prefix *e-* probably related to negation), *sekula*, *behin ere*.³³ However, in order to get the *never* meaning, the presence of an independent clausemate negation is necessary for these three elements. *Inoiz* and *sekula* can optionally take the intensifier *ere*.

- (100) a. Amaiak ez du inoiz (ere) jolasten.
 Amaia-erg no aux ever even play.prog
 b. Amaiak ez du sekula (ere) jolasten.
 Amaia-erg no aux ever even play.prog
 c. Amaiak ez du behin ere jolasten.
 Amaia-erg no aux once even play.prog
 ‘Amaia never plays’

Although these in (100) are the most typical order of the constituents, it is also possible to have *inoiz*, *sekula*, and *behin ere* in pre-negative position. The interpretation that we get is exactly the same.

- (101) a. Amaiak inoiz (ere) ez du jolasten.
 Amaia-erg ever even no aux play.prog
 b. Amaiak sekula (ere) ez du jolasten.
 Amaia-erg ever too no aux play.prog
 c. Amaiak behin ere ez du jolasten.
 Amaia-erg once even no aux play.prog
 ‘Amaia never plays’

Note that the expressions *inoiz* and *sekula* are glossed as *ever* in (100-101); this is exactly why they need the presence of the negation in order to get the *never* meaning. When no negation is present, they behave as NPIs (cf. §5.10) and can appear in yes/no questions (102a), in the protasis of conditionals (102b), in superlatives (102c), etc.

- (102) a. Inoiz/Sekula etorriko al da?³⁴
 ever/ever come al aux
 ‘Will s/he ever come?’
 b. Inoiz/Sekula etortzen bada, emaiozu gutun hau.
 ever/ever come.prog if.is you.give.him letter this
 ‘If s/he ever comes, give him this letter’
 c. Inoiz/Sekula ezagutu dudan krisi ekonomikorik gogorrena da hau.
 ever/ever know aux crisis economy-part hard-sup-D is this
 ‘This is the hardest economical crisis that I’ve ever known’

There is an exception to the behavior of negative words in the temporal *inoiz* ‘ever’, which can appear without any licenser meaning ‘sometime, on some other occasion’: *Izaro inoiz ikusi dut hemen* ‘I’ve seen Izaro here sometime/on some other occasion’.

³² Thanks to Xabier Artiagoitia for pointing this out to me.

³³ Note the presence of the element *ere*, which means ‘even’ in *behin ere*. This probably relates *behin ere* to focused elements that in Basque need to appear in preverbal position (cf. end of §2.4). This element will not be treated in this paper and I will leave it for future research.

³⁴ Some Basque dialects possess overt morphological marker for yes/no questions: *al* is one of them.

3.3. Generalized universal (co-intersective) quantifiers

D-Quantifiers:

The Basque universal quantifiers are: *guzti* ‘all’, *den* ‘all’, *oro* ‘all’, and *bakoitz* ‘each’.³⁵ These quantifiers always follow the nominal expression.

- (103) a. Ume guzti-ak etorri ziren.
child all-D.pl.abs come aux.pl
‘All of the children came.’
a’. *Guzti ume-ak etorri ziren.
All child-D.pl.abs come aux.pl
b. Lagun den-ak festara etorri ziren.
friend all-D.pl.abs party-to come aux.pl
‘All of the friends came to the party.’
b’. *Den lagun-ak festara etorri ziren.
all friend-D.pl.abs party-to come aux.pl
c. Ikasle oro-k lan bat egin zuen ikasgai-a gaindi-tze-ko.
student all-erg work one-abs make aux.sg subject-D.sg-abs pass-nom-gen
‘All of the students wrote a paper to pass the subject.’
c’. *Oro ikasle-k lan bat egin zuen ikasgai-a gaindi-tze-ko.
all student-erg work one-abs make aux.sg subject-D.sg-abs pass-nom-gen
d. Ikasle bakoitz-a-k abesti bat abestu zuen.
student each-D.sg-erg song one-abs sing aux.sg
‘Each student sang a song.’
d’. *Bakoitz ikasle-a-k abesti bat abestu zuen.
each student-D.sg-erg song one-abs sing aux.sg

Where we find variation is in the necessity of these universal quantifiers to appear with the D *-a(k)* (cf. §5.1). *Guzti* ‘all’, *den* ‘all’, and *bakoitz* ‘each’ must necessarily appear with the D as shown in (104-106), and the D must combine with the quantifier, not with the nominal expression as the (b) examples show.³⁶

- (104) a. Ume guzti*(-ak) etorri ziren.
child all-D.pl.abs come aux.pl
‘All of the children came.’
b. *Ume-ak guzti etorri ziren.
child-D.pl.abs all come aux.pl
(105) a. Lagun den*(-ak) festara etorri ziren.
friend all-D.pl.abs party-to come aux
‘All of the friends came to the party.’
b. *Lagun-ak den festara etorri ziren.
fan-D.pl.abs all party-to come aux
(106) a. Ikasle bakoitz*(-a-k) abesti bat abestu zuen.
student each-D.sg-erg song one-abs sing aux.sg

³⁵ *Guzti* and *den* have different origins. *Guzti* historically derived from an adjective, *-ti* is a suffix that creates adjectives (see Etxeberria 2005). *Den* derived from the relative form *den*; *dena*, a free relative, would mean ‘what there is’, implying that we make reference to ‘everything there is’, probably due to the D. However, nowadays they are not considered quantifiers, cf. Etxeberria (2005).

³⁶ Etxeberria (2005, 2009), Etxeberria & Giannakidou (2010), Giannakidou (2004) argue that the QP internal D acts as the quantificational domain restrictor.

- ‘Each student sang a song.’
 b. *Ikasle-a-k bakoitz abesti bat abestu zuen.
 student-D.sg-erg each song one-abs sing aux.sg

The only one that need not appear with the D is *oro* ‘all’ (103c), repeated as (107).

- (107) Ikasle oro-k lan bat egin zuen ikasgaia gaindi-tze-ko.
 student all-erg work one-abs make aux.sg subject-D.sg-abs pass-nom-gen
 ‘All of the students must write a paper to pass the subject.’

This quantificational expression can optionally appear with the D. When this is the case, the D must obligatorily combine with the nominal expression, not with the quantifier (*contra* the rest of Basque universal quantifiers, cf. 104-106).

- (108) a. [Ikasle-ek oro-k] lan bat egin zuten ikasgaia gaindi-tze-ko.
 student-D.pl.erg all-erg work one-abs make aux.pl subj-D.sg pass-nom-gen
 ‘All the students must write a paper to pass the subject.’
 b. *[Ikasle oro-ek] lan bat egin zuten ikasgaia gaindi-tze-ko.
 student all-erg work one-abs make aux.pl subj.-D.sg pass-nom-gen

The D can be replaced by a demonstrative (109). Note that the case mark that appears in the demonstrative must also appear in the quantifier: ergative in (109a), comitative in (109b).

- (109) a. [Ikasle hauek oro-k] lan bat egin zuten ikasgaia gaindi-tze-ko.
 student these.erg all.erg work one-abs make aux.pl subj-D.sg pass-nom-gen
 ‘All these students must write a paper to pass the subject.’
 b. [Lagun hauek-in oro-rekin] joango naiz.
 friend these-com all-com go.fut aux.sg
 ‘I’ll go with all these friends.’

A similar construction is also available to the quantifiers *guzti* ‘all’ and *den* ‘all’. The difference between these two quantifiers and *oro* ‘all’ is that the former must necessarily appear with the D, always creating this sequence [Q-D] in order for the construction to be grammatical (cf. 104-106). Again, both the demonstrative that combines with the nominal and (in this case) the D combined with the quantifier need be case-marked.

- (110) [Ume hauek guzti-ak/den-ak] berandu iritsi ziren.
 child these.abs all-D.pl.abs late arrive aux.pl
 ‘All these children arrived late.’

One very interesting property of the universal quantifiers that can combine with a [NP+dem] or [NP+D] sequence is that they behave as floating quantifiers and not be adjacent to the N (cf. §5.20).

- (111) a. Ikasle hauek lan bat egin beharko dute orok.
 student these.erg work one make must aux all-erg
 ‘These students must write a paper to pass the subject all.’
 b. Ume hauek berandu iritsi ziren guzti-ak.
 child these.abs late arrive aux.pl all-D.pl.abs
 ‘These children arrived late all.’
 c. Politikari hauek gezurrak esan zituzten den-ek.

politician these.erg lie-D.pl-abs say aux.pl all-D.pl.erg
 ‘These politicians told lies all.’

These are the forms mostly used in the Basque literary tradition as well as the ones preferred by the Academy of the Basque Language. However, there is still another way in which the universal quantifier and the demonstrative can be combined, [N-Q-Dem], exemplified in (112). In this case, it is only the demonstrative that bears the case marking. Note that the construction in (112) is available only for *guzti* though.

- (112) a. [Ikasle guzti hauek] berandu etorri ziren.
 student all these.abs late come aux.pl
 ‘All of these students arrived late.’
 b. *[Ikasle den hauek] berandu etorri ziren.
 student all these.abs late come aux.pl
 c. *[Ikasle oro hauek] berandu etorri ziren.
 student all these.abs late come aux.pl

The only universal quantifier that is unable to combine with a demonstrative is *bakoitz* ‘each’, no matter where the demonstrative appears.³⁷ In order for *bakoitz* ‘each’ to be grammatical, it must appear with the D as in (113a).

- (113) a. Ikasle bakoitz-a-k izozki bat jan zuen.
 student each-D.sg-erg ice-cream one-abs eat aux.sg
 ‘Each student ate an ice-cream.’
 b. *Ikasle bakoitz honek izozki bat jan zuen.
 student each this.erg ice-cream one-abs eat aux.sg
 c. *Ikasle honek bakoitz izozki bat jan zuen.
 student this.erg each ice-cream one-abs eat aux.sg

One other difference between *bakoitz* ‘each’ and the rest of the Basque universal quantifiers is that *bakoitz* can only appear with the singular version of the D, not with the plural one.

- (114) *Ikasle bakoitz-ek izozki bat jan zuten.
 student each-D.pl.erg ice-cream one-abs eat aux.pl

The other universal quantifiers (except for *oro* ‘all’) can appear with the singular D.

- (115) a. Ane-k [etxe guzti-a] garbitu du.
 Ane-erg house all-D.sg.abs clean aux.sg

³⁷ It is possible to find *bakoitz* ‘each’ combined with a demonstrative in the Basque literature tradition, a use that is lost in present-day Basque. However, in such contexts, its meaning is clearly not ‘each’, but ‘unique’, equal to the current *bakar* ‘unique’, which is an adjective.

- (i) Hasera-ko hizkuntza bakoitz hura.
 beginning-rel language unique that
 ‘That initial unique language.’

Thus, *bakoitz* can be argued to have become a Q from an adjective (as is argued for *guzti*, *den*, *gehien* -cf. Etxeberria 2005); in fact, note that that was actually its original use as the following examples also corroborate.

- (ii) Jainko-a-ren seme bakoitz-a.
 God-D.sg-gen son unique-D.sg
 ‘The unique son of God’
 (iii) Guk dugu sinhesten eta ezagutzen Iainko bat bera, eta hura dela esentia bakoitz bat.
 ‘We believe in and know one God, who is a unique essence.’

- Lit.: ‘Ane has cleaned up all the house.’
 b. Ane-k [etxe den-a] garbitu du.
 Ane-erg house all-D.sg.abs clean aux.sg
 Lit.: ‘Ane has cleaned up all the house.’
 c. *Ane-k [etxe-a oro] garbitu du.
 Ane-erg house all-D.sg.abs clean aux.sg

Here the quantificational expressions are interpreted as making reference to the totality of the house; for the sentence to be true no part of this house should be found unclean.³⁸ This interpretation is not available for *bakoitz* ‘each’ though.

- d. *Ane-k [etxe bakoitz-a] garbitu du.
 Ane-erg house all-D.sg.abs clean aux.sg
 ‘Ane has cleaned up all the house (intended)’

A-Quantifiers:

In the adverbial domain Basque *beti* is the equivalent of English *always*.

- (116) Pellok beti autobusa hartzen du ikastolara joateko.
 Pello-erg always bus-D.sg take.prog aux school-to go-rel
 ‘Pello always takes the bus to school.’

Beti can be modified by the operators *ia* ‘almost’ and *kasik* ‘almost’.³⁹

- (117) Pellok ia/kasik beti autobusa hartzen du ikastolara joateko.
 Pello-erg almost always bus-D.sg take.prog aux school-to go-rel
 ‘Pello almost always takes the bus to school.’

When combined with the adverb *beti*, *ia* must necessarily precede the adverbial: *ia beti*, **beti ia*. However, *kasik* can be found either in the preadverbial or postadverbial position: *kasik beti*, *beti kasik*.⁴⁰

Sentence (ii) would nowadays mean ‘each son of God’, but its real meaning is ‘the unique son of God’. In (iii) on the other hand -example taken from Leizarraga 1571-, *bakoitz* ‘unique’ combines with *bat* ‘one’, a usage that is clearly ungrammatical in present-day Basque.

³⁸ There is another element in Basque that may be used to express the same meaning: *oso* ‘whole’, a qualifying adjective that is commonly used as a degree modifier meaning ‘very’ (see §2.4).

- (i) Jonek etxe oso-a garbitu du.
 Jon-erg house entire-D.sg.abs clean aux.sg
 ‘Jon has cleaned the entire house.’

Despite the initial similarity, there’s a clear-cut distinction between the universal quantifiers and *oso* ‘whole’. While *guzti* ‘all’ and *den* ‘all’ can be combined with mass terms, this is not possible for *oso* ‘whole’.

- (ii) Mattinek ron guzti-a/den-a edan du.
 Mattin-erg rum all-D.sg.abs/all-D.sg.abs drink aux.sg
 ‘Mattin has drunk all of the rum.’

- (iib) *Mattinek ron oso-a edan du.
 Mattin-erg rum entire-D.sg.abs drink aux

³⁹ There is third operator that functions as *almost* that will not be treated in this paper: *abantzu*.

- (i) Hamabiak abantzu dira.
 twelve-D.pl almost are
 ‘It’s almost twelve o’clock’

This operator is restricted to eastern dialects.

⁴⁰ *Ia* and *kasik* can combine with NPs, postpositional phrases, VPs, or even a full clause. Usually, the phrase initial position is the most common position (ia), but they can also appear in final position, in which case they seem to form an independent intonational unit (ib). The intermediate position is ungrammatical.

The universal quantifiers that we presented in the previous section can also give us an adverbial expression if we add to them the inessive.

- (118) a. Jon moztu egiten da bizarra kentzen duen guztietan/denetan/orotan/bakoitzean
 Jon cut do.prog is beard take.out aux all-D.pl-in/all-D.pl-in/ all-in/each-D.sg.in
 ‘Jon cuts himself whenever shaves himself’

We get exactly the same meaning when we add the noun *aldi* ‘time, occasion’.

- (119) a. *aldi guztietan* all of the times ≈ every time
 b. *aldi denetan* all of the times ≈ every time
 c. *aldi orotan* all of the times ≈ every time
 d. *aldi bakoitzean* each time

Note that the noun *aldi* ‘time, occasion’ appears in the same position where these quantifiers accept the nominal expression, i.e., *aldi* appears necessarily in prequantifier position.

A weakened form of the quantifier *oro* ‘all’, the suffix *-ero*, creates adverbs of frequency by attaching to a noun and expresses a recurrent pattern of time, as in (120).

- (120) a. *orduero* every hour/hourly
 b. *ordu erdiro* every half hour
 c. *egunero* every day/daily
 d. *astero* every week/weekly
 e. *hilero / hilabetero* every month/monthly
 f. *urtero* every year
 g. *goizero* every morning
 h. *arratsaldero* every afternoon
 i. *gauero* every night
 j. *igandero* every Sunday

The noun the suffix *-ero* attaches to does not need to be a period noun like those we have in the example (120). The suffix *-ero* can also be added to nouns that denote a recurring activity: *otorduero* ‘at every meal’.⁴¹

Universal quantifiers based on interrogatives:

Basque has a productive process of forming (free choice) universals by prefixing *edo* ‘or’ to the interrogative bases.⁴²

- (121) a. Edo-nor/edo-zein pasa daiteke zulo horretatik.
 or who/or who pass can hole that-from
 ‘Anyone at all can get through that hole’
 b. Edo-nork/edo-zeinek egin dezake hori.
 or who.erg/or who.erg do can that

-
- (i) a. *ia/kasik mundu guztian* ‘lit.: almost world all-D-in; in almost the whole world’
 b. *mundu guztian, ia/kasik*
 c. **mundu ia/kasik guztian*

⁴¹ In the eastern dialects they used the unweakened form *oro* instead of the weakened suffix *-ero*: *egunoro* ‘every day, daily’, *hiloro* ‘every month, monthly’. In Souletin *oro* is used not as a suffix, but as a quantifier to which the instrumental case marker is attached: *egun oroz* ‘every day, daily’, *hil oroz* ‘every month, monthly’.

⁴² Zuazo (2008) argues that the free choice universal *edo+interrogative* is a feature of western Basque.

- ‘Anyone at all can do that’
- c. Jon edo-zer egiteko gai da.
Jon edo-what do able aux
‘Jon is able of doing anything at all’
- d. Edo-non erosi dezakezu opari bat.
or-where buy can present one
‘You can buy a present anywhere at all’
- e. Edo-noiz etor zaitezke gure etxera.
or-when come can our house-to
‘You can come to our house anytime you want/whenever’
- f. Edo nola eginda ere, ondo egingo duzu.
or-how do even well do aux
‘Anyhow you do it, it will be ok’

We get equivalent meanings by adding the noun *nahi* ‘desire’ to the interrogatives. In this case, *nahi* follows the interrogative.

- (122) a. *nor-nahi* ‘whoever, anyone at all’
b. *nor-nahik* ‘whoever.erg, anyone at all’
b. *zer-nahi* ‘whatever, anything at all’
c. *non-nahi* ‘wherever, anywhere at all’
d. *noiz-nahi* ‘whenever, anytime at all’
e. *nola-nahi* ‘however, anyhow’

3.4. Proportional quantifiers

D-quantifiers:

To express the proportional quantifier *most* Basque uses the superlative form of the value judgment cardinal *asko* ‘many, much’: *gehien*, formed by adding the suffix *-en* to the stem *gehi*, which is also used to express addition in Basque (cf. §2.4; example (63)). In order to get the quantificational interpretation it is necessary to add the D to *gehien*. It is possible to not add the D to *gehien*, in such a case the interpretation we get is only the superlative one, as in (123a). Now, when the construction we have is *gehien-ak*, i.e. with the D, the result is ambiguous between a superlative and a quantificational use, in (123b).

- (123) a. Liburutegi honek ditu liburu gehi-en
library this-erg has book plus-sup
‘This library has the most books.’
b. Liburutegi hon-e-k ditu liburu gehi-en-ak
library this-ep-erg has book plus-sup-D.pl
‘This library has most (of the) books.’

Now, interestingly, in situations where the superlative interpretation is not allowed, i.e. in situations where only the quantificational interpretation is possible, the presence of the D is obligatory (124) (cf. Hualde & Ortiz de Urbina 2003b; cf Etzeberria 2005 for extensive discussion and a possible analysis; cf. also Etzeberria in prep.).

- (124) a. Langile gehien*(-ak) berandu iritsi ziren
worker plus-sup-D.pl late arrive aux.pl
‘Most of the workers arrived late.’
b. Peruk ikasle gehien*(-ak) izozkiak jaten ikusi zituen.

Peru-erg student plus-sup-D.pl ice-cream-D.pl eating see aux.pl
 ‘Peru saw most of the students eating ice-cream.’

Expressions of percentage are formed by adding the genitive suffix *-ko* to the numeral *ehun* ‘a hundred’. The number follows this expression:

(125) *ehun-e-ko bost*
 hundred-ep-gen five
 ‘five per cent’

When we add a nominal expression to this percentage expression, the N must precede it and needs to appear with the genitive marker *-en*.⁴³

(126) *Ikasgela honetako ikasle*(en) ehuneko berrogeita hamabi euskalduna da.*
 classroom this.gen student-gen.pl hundred-gen forty-and twelve Basque is
 ‘Fifty-two per cent of the students in this class are Basque.’

Some proportional (partitive) quantifiers are formed by using the ablative marker *-tik* ‘of’. One possibility is to attach the ablative marker *-tik* to the numeral that expresses the totality from which we take a part, as in (127a).

(127) a. *Hamarr-e-tik zazpi poetek esna amets egiten dute.*
 ten-ep-abl seven poet-erg awake dream do aux
 ‘Seven out of ten poets daydream’

The ablative marker can also be attached to the nominal expression; in this case the order of the elements is different from the one in (127a) and the nominal expression appears just in between the two numerals as shown in (127b). The meaning we get is exactly the same as before.

b. *Hamar poeta-tik zazpik esna amets egiten dute.*
 ten poet-abl seven-erg awake dream do aux
 ‘Seven out of ten poets daydream’

A third possibility is to have the nominal expression in the first position of the constituent with the genitive marker *-en*. In this case, the ablative case *-tik* attaches to the first numeral (to the one that expresses the totality). Again, the meaning we get parallels the meanings of (127a-127b).

c. *Poeten hamarr-e-tik zazpik esna amets egiten dute.*
 poet-gen ten-ep-abl seven-erg awake dream do aux

⁴³ The suffix *-ko* is usually treated as a postposition due to the fact that it attaches to Postpositional Phrases (ia). It’s been described as locative genitive (ib).

(i) a. *Laguneki-ko harremana* b. *Donostia-ko hondartza*
 friend-with-ko relationship-D Donostia-ko beach-D
 ‘The relationship with the friend’ ‘The beach from Donostia’

The suffix *-(r)en* on the other hand attaches to a DP. Note that (ib) with *-(r)en* would be ungrammatical.

(ii) a. *Ama-ren etxea* b. **Donostia-ren hondartza*
 mum-ren house-D
 ‘My mum’s house’

Cf. among many others Euskaltzaindia (1991), de Rijk (2008).

‘Seven out of ten poets daydream’

Fraction expressions are also created by adding the genitive marker *-en* to the cardinal:

- (128) a. *seiren* ‘sixth (part)’
b. *zazpiren* ‘seventh (part)’
c. *hamarren* ‘tenth (part)’
d. *ehunen* ‘hundreth (part)’
etc.

Small fractional numerals are formed in an irregular way: *erdi* ‘half’, *heren* ‘third’, *laurden* ‘fourth’.

To all these fractional numerals we add numerals to get fraction expressions.

- (129) a. *erdi bat* ‘one-half’
b. *heren bat* ‘one-third’
c. *laurden bat* ‘one-fourth’
d. *bosten bat* ‘one-fifth’
e. *seiren bat* ‘one-sixth’

Note that fractional numerals are basically nouns since just like nominal expressions they can combine with numerals as well as with quantifiers.

- (130) a. *tarta erdi bat* ‘one half of a cake’
b. *tarta erdi asko* ‘many half-cakes’
c. *bi heren* ‘two thirds’
d. *hiru laurden* ‘three quarters’

It is possible to add a nominal to the fraction expressions in (129), with the noun marked with the genitive case *-en*.

- (131) a. *Ikasleen heren bat berandu etorri zen.*
student-D.pl.gen third one late come aux
‘One-third of the students came late’
b. *Liburuaren laurden bat irakurri nuen.*
book-D.sg.gen quarter one read aux
‘I read a quarter of the book’

The fractional numeral *erdi* ‘half’ typically appears with the plural version of the D as in (132a); in this case, the speaker would be talking about one part of a totality with different unities.⁴⁴ However, when the speaker is talking about one part of a unique totality *erdi* ‘half’ can also appear with the singular version of the D, as in (132b).

- (132) a. *Ikasleen erdi-ak berandu etorri zen.*

⁴⁴ According to some speakers, both the plural and the singular D are equally grammatical in (131a) with no change in meaning.

(i) *Ikasleen erdi-a berandu etorri zen.*
student-D.pl.gen half-D.sg late come aux
‘Half of the students came late’

The construction in (i) parallels the construction of languages like Spanish (*la mitad de los N* ‘lit.: the.sg half of the N’) or French (*la moitié des N* ‘lit.: the half of the N’).

- (136) Nire laguna berandu iristen da gehienetan.
 my friend-D.sg late arrive aux most-D.pl-in
 ‘My friend arrives late mostly/most of the time’

Now, in order to express the meaning of *mostly* in sentences such as ‘women voted mostly for Obama’, Basque uses *gehienbat* ‘lit.: most-one’, as shown in (137).⁴⁶

- (137) Emakumeek gehienbat Obamaren alde bozkatu zuten.
 women-D.pl most-one Obama-gen side vote aux
 ‘Women voted mostly for Obama’

It is possible to create other A-quantifiers by using the inessive as in (138a) (cf. §2.4 for other frequency adverbs). One other way to create adverbs is by adding the adverbializing suffix *-ki*, (138b,c).

- (138) a. Gizonezkoak normalean emakumezkoak baino altuagoak dira.
 men-D.pl usually women-D.pl than tall-comp-D.pl are
 ‘Men are usually taller than women’
 b. Javi normalki iruzkin laburren zale da.
 Javi normally/usually comment short fan is
 ‘Javi is normally/usually fan of short comments’
 c. Martxel ez da eskuarki etxetik urruntzen.⁴⁷
 Martxel no is usually home-abl move-away
 ‘Martxel does not usually move away from home’

To express *occasionally*, Basque has a very large number of adverbial expressions built by using *noiz* ‘when’, *behin* ‘once’, *edo* ‘or’ combined in various ways and by making use of various case markers. The suffix *-ka* is the iterative suffix.

- | | |
|------------------------------|-------------------------------|
| (139) a. <i>noiz behin</i> | ‘lit.: when once’ |
| b. <i>noiz behin-ka</i> | ‘lit.: when once-ka’ |
| c. <i>noizean behin</i> | ‘lit.: when-ines once’ |
| d. <i>noiz-ean behin-ka</i> | ‘lit.: when-ines once-ka’ |
| e. <i>noiz-ik behin</i> | ‘lit.: when-part once’ |
| f. <i>noiz-ik behin-ean</i> | ‘lit.: when-part once-ines’ |
| g. <i>noiz-ik behin-ka</i> | ‘lit.: when-part once-ka’ |
| h. <i>noiz edo behin</i> | ‘lit.: when or once’ |
| i. <i>noiz edo noiz</i> | ‘lit.: when or when’ |
| j. <i>noiz-ean noiz</i> | ‘lit.: when-ines when’ |
| k. <i>noiz-ik noiz-era</i> | ‘lit.: when-part when-allat.’ |
| l. <i>noiz-etik noiz-era</i> | ‘lit.: when-abl when-allat.’ |
| m. <i>behin edo behin</i> | ‘lit.: once or once’ |

⁴⁶ *Gehiengo-a* ‘majority-D’ could replace *gehienbat* in (137).

- (i) Emakumeen gehiengo-ak Obamaren alde bozkatu zuten.
 women-D.pl-gen majority-D.sg-erg Obama-gen side vote aux
 ‘Women voted mostly for Obama’

However, as we have already seen in the previous section, *gehiengo* is not an adverb.

⁴⁷ *Eskuarki* can also be used as the equivalent of English *certainly* or *surely*.

- (i) Futbolari hau ez da ligako onena izango eskuarki.
 football-player this no is league-rel best-D.sg be surely/certainly
 ‘This football player will certainly/surely not be the best of the league’

n. <i>behin edo beste</i>	‘lit.: once or other’
o. <i>aldi-an behin</i>	‘lit.: occasion-ines once’

To express *rarely* there are three options in Basque.

(140) a. <i>inoiz edo behin</i>	‘lit.: ever or once’
b. <i>neke-z</i>	‘lit.: tiredness-inst’
c. <i>oso gutxi-tan</i>	‘lit.: very few-loc’

We get a similar expression with: *ozta-ozta* ‘hardly’, *ia(-ia)* ‘hardly, rarely (lit.: almost-almost)’; in both negative and positive contexts *apenas*, borrowed from Spanish, can also be used with the *hardly* meaning: (i) *Ez du apenas irakurtzen* ‘S/he hardly reads’; (ii) *Apenas irakurtzen du* ‘S/he hardly reads’.

3.5 Follow up questions

3.5.1 Definite NPs

Definite determiner:

The Basque D is a bound morpheme that takes the phonetic forms [-a] (when singular) and [-ak] (when plural) and which is historically derived from the distal demonstrative (see below).⁴⁸ In western varieties there is also a proximate plural D *-ok*.⁴⁹

(141) a. <i>gizon-a</i>	b. <i>gizon-ak</i>
man-D.sg	man-D.pl
‘the man’	‘the men’
c. <i>gizon txiki-a</i>	d. <i>gizon txiki-ak</i>
man small-D.sg	man small-D.pl
‘the small man’	‘the small men’

One very interesting property of Basque is that bare nouns cannot appear as arguments and the overt presence of the Basque D is obligatory for sentences to be grammatical, as the examples in (142-143) show (cf. Laka, 1993; Artiagoitia, 1997, 1998, 2002; Etxeberria 2005, 2010a among others).^{50, 51, 52}

⁴⁸ Some authors argue that the plural form of the Basque D [-ak] is a single element (cf. Goenaga 1978, 1991, Euskaltzaindia 1993, Artiagoitia 1997, 1998, 2002, 2003, 2004, Rodriguez 2003, Trask 2003). Etxeberria (2005, in prep), on the other hand, defends that singular [-Ø] and plural markers [-k] and D are base-generated in different syntactic positions; see also Eguren (2006b). Be that as it may, for ease of exposition, I will refer to [-a] and [-ak] as the singular and the plural D respectively.

⁴⁹ Although there is no proximate singular in modern Basque, *-ori*, *-or*, *-au* or *o* are attested in early texts; it is still possible to find *-o* in actual Bizkaian in *hemen bertan* ‘right here’, along with *hemen bertan*.

⁵⁰ It is important to note that the presence of an indefinite determiner or a value judgment cardinal or any other weak quantifier (cf. section 2.4) also makes the sentence grammatical.

(i) Mutil bat/asko/batzuk berandu iritsi zen.
 boy one/many/some late arrive aux.past
 ‘A/Many/Some boy(s) arrived late’

⁵¹ When Basque definite DPs (plurals and masses) fill the direct object slot, the definite DP can but need not make reference to a specific set and can obtain the so-called existential interpretation (i) (cf. the gloss in (143b)).

(i) a. *Amaiak goxoki-ak jan ditu* b. *Izarok ardo-a edan du*
 Amaia-erg candy-D.pl-abs eat aux Izaro-erg wine-D.sg-abs drink aux
 ‘Amaia has eaten (the) candies’ ‘Izaro has drunk (the) wine’

Subject position:

- (142) a. Irakasle*(-a) berandu etorri zen b. Irakasle*(-ak) berandu etorri ziren
teacher-D.sg late come aux teacher-D.pl late come aux
'The teacher came late' 'The teachers came late'

Object position:

- (143) a. Martxelek baloi*(-a) hartu zuen b. Martxelek baloi*(-ak) hartu zituen
Martxel.erg ball-D.sg take aux Martxel.erg ball-D.pl take aux
'Martxel took the ball' 'Martxel took (the) balls'

Demonstratives:

The standard use of the actual Basque adnominal demonstrative system is the following:

(144)	<i>singular</i>	<i>plural</i>
Proximal:	(h)au(r) 'this'	hauek 'these'
Medial:	(h)ori 'that' (just there)	horiek 'those' (just there)
Distal:	(h)ura 'that' (over there)	haiek 'those' (over there)

a. Proximal:

Mutil hau berandu etorri zen.
boy this late come aux.past
'This boy came late.'

b. Medial:

Neska gazte hori ez dut ezagutzen.
girl young that (just there) no aux.pres. know
'I don't know that young girl.'

c. Distal:

Emakume hura Errusiara bidali zuten bigarren mundu gerran.
woman that (over there) Russia-to send aux.past second world war-in
'They sent that woman to Russia during the 2nd WW.'

In general, the proximal demonstrative demonstrates proximity to the speaker, the medial demonstrative illustrates proximity to the addressee, and the distal demonstrative shows remoteness from both the speaker and the addressee. Sometimes, both the medial and the distal demonstratives can be used to indicate differing degrees of remoteness from the speaker. The three demonstratives make use of stem-suppletion for the oblique cases.

The examples in (i) are ambiguous between a specific and an existential interpretation: (ia) 'Amaia has eaten *the candies*' or 'Amaia has eaten *candies*'; (ib) 'Izaro has drunk *the wine*' or 'Izaro has drink *wine*'. (Cf. Etxeberria 2005, 2010a, to appear, for extensive discussion on this and a possible analysis)

⁵² Note that in Souletin (most eastern Basque dialect) BNs can appear in object position (only).

- (ii) a. Bortüan ikusi dut behi, ardi eta mando (Coyos, 1999: 232)
mountain.D-in see aux cow sheep and mule
'I've seen cows, sheeps, and mules in the mountain'
b. Manexek hur edan dizü. Peiok ogi jan dizü.
Manex-erg water drink aux Peio-erg bread eat aux
'Manex has drunk wine. Peio has eaten bread'

This paper will not consider this usage and will assume that the absence of the D makes the sentence ungrammatical; cf. Etxeberria (in prep) for a possible analysis.

(145) Oblique cases:

	<i>singular</i>	<i>plural</i>
Proximal:	(h)on-	(h)aue-
Medial:	(h)or-	(h)orie-
Distal:	(h)ar-	(h)haie-

a. Proximal:

Lagun honekin joan nintzen hondartzara.
friend this-with go aux.past beach.D-to
'I went to the beach with this friend.'

b. Medial:

Hegazkin zahar horretara ez naiz igoko.
airplane old that-to no aux.pres. get on
'I won't get on that old airplane.'

c. Distal:

Urte hartan gauza guztiak gaizki atera ziren.
year that-in thing all-D.pl wrong go out aux.past
'That year, everything went wrong.'

Note that excluding the absolutive case (examples (144a-c)), the rest of the cases take *hon-*, *hor-*, and *har-* as stems (examples (145a-c)).

In Bizkaian, and only in this dialect, the demonstratives may occur either preceding the nominal expression or in both positions (preceding and following) simultaneously. Thus, Bizkaian has constructions like *hori mutila* 'lit.: that boy-D.sg' or *hori mutilori* 'lit.: that boy that' to mean 'that boy (just there)' and *a mutila* 'that boy (over there)' (cf. Artiagoitia 1998, Zuazo 2008). These take double case-marking, as in *horrek mutilorrek* (ergative) 'lit.: that.erg boy that.erg' and *honeri mutilori* 'lit. that.dat boy.that.dat' (dative). Note also that the plural forms use the proximate article *-ok*, not a form of the demonstrative: *hónek mutilok* 'lit.: these boy-D.prox'.⁵³ None of these are possible in other varieties. It is also only in Bizkaian where the demonstrative can appear preceding the noun plus the D: *ori mutila* 'lit.: that boy.D.sg'.

Proper nouns:

Proper nouns in Basque can be both monomorphemic (e.g. *Xabier*, *Aritz* 'oak', *Urtzi* 'sky, firmament', *Nikolas*, etc.) or multimorphemic (e.g. *Aizpea* 'lit.: rock below', *Maitagarri* 'charming; lit.: beloved-incentive suffix' (cf. de Rijk 2008: 335), *Eneko* 'lit.: my-diminutive suffix', *Joxe Mari* 'm. Joseph Mary', *Mari Joxe* 'f. Mary Joseph', etc. The last two names are borrowed from Spanish.

On the other hand, Basque surnames can be said to be generally multimorphemic (and mostly geographical in nature): *Etxeberri(a)* 'lit.: house new (the)', *Etxepare* 'lit.: house in front of', *Iturriotz* 'lit.: spring cold', *Oyharzabal* 'lit.: wood wide', *Uralde* 'lit.: water beside', *Gibelalde* 'lit.: liver (back) side', etc. It is also possible to find monomorphemic surnames: *Zabala* 'the broad one', *Urruti* 'far', etc.

3.5.2 Generic NPs

As already shown at the beginning of §5.1 Basque does not accept bare nouns as arguments. Generic NPs are not an exception and as a consequence, they need to appear with the D. Thus, so-called characterizing sentences are normally (and more naturally) expressed by using the

⁵³ Thanks to an anonymous reviewer for pointing this out to me.

plural version of the D (146), although the singular D can also be used (147) in some situations.

- (146) a. Txakurrek zaunka egiten dute.
 dog-D.pl.erg bark do.prog aux
 ‘Dogs bark’
 b. Medikuek gaixotasunak ikertzen dituzte.
 doctor-D.pl.erg disease-D.pl.abs investigate aux
 ‘Doctors investigate diseases’
- (147) a. Txakurrak zaunka egiten du.
 dog-D.sg.erg bark do.prog aux
 ‘Dogs bark’
 b. Medikuak gaixotasunak ikertzen ditu. [only specific]
 doctor-D.sg.erg disease-D.pl.abs investigate aux
 ‘The doctor investigates diseases’

The sentence in (147a) can be used with a generic interpretation, whereas the one in (147b) can only get a specific reading.

In order to get the kind interpretation, i.e. when nominals are combined with kind-level predicates (e.g. *evolve*, *become extinct*, *be common*, etc.; cf. Carlson 1977; cf. also Krifka et al. 1995), the presence of the D is again obligatory.

- (148) a. Dinosauruak aspaldi desagertu ziren.
 dinosaur-D.pl long time ago disappear aux
 ‘Dinosaurs disappeared a long time ago’
 b. Arrainak orain duela 390 milioi urte agertu ziren.
 fish-D.pl now million year appear aux
 ‘Fishes appeared 390 million years ago’

The D in both the examples in (148) is plural, but it is also possible to use the singular version of the D to get the kind reading, as in Romance languages or in English.⁵⁴

- (149) Lehoia desagertu egingo da.
 lion-D.sg disappear do.fut aux
 ‘The lion will become extinct’

3.5.3 Morphological complexity of quantifiers

A-quantifiers:

These are the Basque monomorphemic A-quantifiers:

- (150) *beti* ‘always’
asko ‘many times, a lot’
ugari ‘many times, a lot’
maiz ‘often’
sarri ‘often’

⁵⁴ The question that immediately arises is why a language accepts two different ways of expressing kinds. The most common answer is that singular and plural kind-denoting expressions are not alike (see Kleiber (1990), Krifka et al. (1995), Chierchia (1998), Dayal (2004) and references therein).

<i>ardura</i>	‘often’
<i>usu</i>	‘often’
<i>gutxi</i>	‘few times’

All the rest of the Basque A-quantifiers can be said to be multimorphemic. They are created by adding the indefinite locative marker *-tan*, by adding the noun *aldi* ‘time, occasion’ (plus the instrumental, or the locative), or by adding a weakened form of the quantifier *oro* ‘all’, the suffix *-ero*; in all these cases, they are multimorphemic but just one phonological word. The A-quantifiers created by means of combining the noun *behin* ‘once’ with other nouns such as *beste* ‘other’, *noiz* ‘when’, etc. are multimorphemic.

D-quantifiers:

Among the monomorphemic Basque D-quantifiers we can list the following:

- (151) a. Universal Qs (cf. §2.3):
oro ‘all’, *guzti* ‘all’, *den* ‘all’⁵⁵
 b. Value judgment cardinals (cf. §2.4):
asko ‘many’, *ugari* ‘abundant, copious’, *franko* ‘many’, *anitz* ‘many’, *hainbat* ‘quite a few’, *gutxi* ‘few’
 c. Proportional Qs:
erdi ‘half’⁵⁶

Among multimorphemic Basque D-quantifiers that are phonologically one word I include those quantifiers that cannot appear by themselves; this is the reason why *guzti*, *den*, and *bakoitz* are also included here:

- (152) a. Universal Qs:
bakoitz ‘each’ (cf. note 55)
 a. Existential Qs:
batzuk ‘some’, *zenbait* ‘some’, *hainbat* ‘some’
 b. Proportional Qs (cf. §4):
gehi-en-ak ‘most’, *gehiengo-a* ‘majority’, *gutxiengo-a* ‘minority’,
heren ‘third’, etc.

Multimorphemic Basque D-quantifiers that are not phonologically one word:

- (153) a. Value judgment cardinals:
pila bat ‘a lot’, *gutxi batzuk* ‘a few’, *pixka bat* ‘a little’, *apur bat* ‘a little’

Some extra information:

- Monomorphemic *all*: *oro*, *guzti*, *den*.
- Monomorphemic *one*: *bat* (identical to the numeral *bat* ‘one’ and probably originated from it. It is possible to differentiate these two through accentuation; when we focus *bat* the interpretation we get is that of the numeral).
- Basque has several monomorphemic Qs translating as *many* (cf. §2.4).
- Basque does not have a monomorphemic equivalent to English ‘no’ (cf. end of §2.3).

⁵⁵ Note that except for *oro*, the rest of Basque universal Qs need to appear with the D (cf. §3).

⁵⁶ The fraction word *erdi* ‘half’ can never appear by itself in Basque and it needs the presence of the D or of some other quantifier or numeral (cf. §4).

- Universal D-quantifiers: oro, guzti, den.
- D-quantifiers are morphologically simpler than the A-quantifiers, although some of them are also monomorphemic (see above).

3.5.4 Selectional restrictions

The two existential quantifiers that we have treated in §2.1, i.e. *batzuk* ‘some’, and *zenbait* ‘some’ are unable to combine with mass nouns. When they combine with a possibly mass noun, the mass noun is coerced into a count term and the construction can only make reference to different types or glasses of beer (in (154)). So, it is possible to conclude that these quantifiers are count quantifiers.

- (154) a. Ane-k garagardo batzuk dastatu zituen.
 Ane-erg beer some-abs taste aux.pl
 ‘Ane tasted (different types of/glasses of) beers’
 b. Ane-k zenbait garagardo dastatu zituen.
 Ane-erg some beer-abs taste aux.pl
 ‘Ane tasted (different types of/glasses of) beers’

Among the value judgment cardinals on the other hand, with the exception of *gutxi batzuk* ‘a few’ and *hainbat* ‘quite a few’,⁵⁷ which can only combine with count terms, all of the other quantifiers discussed in §2.4 can combine with mass terms. Hence, these quantifiers are ambiguous between count ‘many’ and ‘few’ and mass ‘much’ and ‘a little’. As expected, in order for these quantifiers to permit mass readings, they must agree with the verb in ‘singular’ (an agreement that *gutxi batzuk* does not accept), since agreement in plural eliminates mass interpretations.

- (155) Iزارo-k esne asko / ugari / franko / anitz / pila bat/ *hainbat edan zuen.
 gutxi / *gutxi batzuk / pixka bat /apur bat
 Iزارo-erg milk drink aux.sg
 ‘Iزارo drank much / much / much / much / much / *quite a few milk.’
 little / *a few / a little / a little

On the other hand, *pixka bat* ‘a little’ and *apur bat* ‘a little’ can only be combined with mass terms; hence their ungrammaticality when combined with count terms (156).

- (156) *Amaiak goxoki pixka bat / apur bat jan ditu.
 Amaia-erg candy little one-abs crum one eat aux.pl
 ‘*Amaia has eaten a little/a little candies.’

When it comes to universal D-quantifiers, *bakoitz* ‘each’, in opposition to the rest of the Basque universal quantifiers, can only appear with the singular version of the D – remember that the presence of the D is necessary for the construction to be grammatical, cf. §3–, not with the plural one (examples repeated from (114) for convenience).

- (157) a. *Ikasle bakoitz-ek izozki bat jan zuten.

⁵⁷ Note that when *hainbat* is interpreted ‘as many/much as that’ can combine with mass terms.

(i) Toki haietan ez zuten hainbat hotz, ezta piztien beldurrik ere. (Sarasola 2007: 669)
 place those-in no aux hainbat cold either beast-gen afraid-part even
 ‘In those place they were not afraid neither of the cold, nor of beasts’

Thanks to an anonymous reviewer for pointing this out to me.

- student each-D.pl.erg ice-cream one-abs eat aux.pl
 b. *Ikasle bakoitz-ak izozki bat jan zuen.*
 student each-D.sg.erg ice-cream one-abs eat aux.sg
 ‘Each student ate an ice-cream’

Another property shown by *bakoitz* is that it cannot combine with mass nouns. In case it is combined with a possibly mass noun, the mass noun is coerced into a count term.

- (158) *Jonek ur bakoitzari ardo tanta bat bota zion.*
 Jon.erg water each.D.sg.dat wine drop one throw aux
 ‘Jon threw a drop of wine to each (bottle, glass, etc.) water’

3.5.5 Decreasing NPs

Basque decreasing NPs are formed by using the value judgment cardinal *gutxi* ‘few’; except for *gutxi batzuk* ‘a few’.

- (159) a. *Ikasle gutxi etorri ziren.*
 student few come aux.pl
 ‘Few students came’
 b. *Bost ikasle baino gutxiago etorri ziren.*
 five student than less come aux.pl
 ‘Less than five students came’

As opposed to what happens in English, Basque decreasing NPs do not license NPIs as the ungrammaticality of the following examples show.

- (160) a. **Ikasle gutxi izan da/dira inoiz Errusian*
 student few be aux.sg/aux.pl ever Russia.in
 b. **Bost ikasle baino gutxiago izan dira inoiz Errusian*
 five student than less be aux.pl ever Russia.in

3.5.6 Boolean compounds

Boolean compounds created by D-quantifiers were described in §2.6. In what follows, I provide some examples of boolean compounds of A-quantifiers.

- (161) a. *Gutxienez bi aldiz eta gehienez hamar aldiz izan naiz jatetxe horretan.*
 at.least two time.inst and at most ten time.inst be I.am restaurant that-loc
 ‘I’ve been to that restaurant at least two and at most ten times.’
 b. *Klasea huts egin du gutxienez bi aldiz baina ez bost aldiz*
 class fail do aux at.least two time.inst but no five time.inst
 baina gehiagotan.
 than more.loc
 ‘S/he missed class at least twice but not more than five times’

Note that the instrumental case added to the noun *aldi* ‘time, occasion’ can be changed by the indefinite locative marker *-tan* in both the examples in (161).

3.5.7 Exceptives

The most common way to form exception phrases in Basque is by means of the word *ezik* ‘except’ (created by adding the suffix *-(r)ik* to the negation *ez* ‘no’) to which we can add the copula *izan*, the word *salbu* ‘except; lit.: save’, or the participial *kenduta* ‘taken off’ (created by adding the suffix *-ta* to the verb *kendu* ‘take off’).

- (162) a. *Ikasle guztiak etorri ziren festara, Jon (izan) ezik/salbu/kenduta.*⁵⁸
 student all-D.pl come aux party-to Jon be except
 ‘All of the student came, except for Jon’
 b. *Jon (izan) ezik/salbu/kenduta, ikasle guztiak etorri ziren festara.*
 Jon be except student all-D.pl come aux party-to
 ‘All of the student came, except for Jon’
 c. **?Ikasle guztiak, Jon (izan) ezik/salbu/kenduta, etorri ziren festara.*⁵⁹
 student all-D.pl Jon be except come aux party-to

The examples in (162) clearly show that exception expressions in Basque do not form a constituent with the quantifier.

One other form, which is frequently used in both written and spoken Basque, has a more complex structure: [DP + *ez* ‘no’ + *beste* ‘other’ + NP-*guztiak* ‘NP-all’].

- (163) *Jon ez beste ikasle guztiak etorri ziren festara.*
 Jon no other student all-D.pl come aux party.to
 ‘All the students but John came to the party’

There is also another exceptive form which is not so much used in present day Basque: [DP-instr. + *beste* ‘other’ + NP-part].⁶⁰

- (164) *Guk Jainkoaz beste aitarik ez dugu.* (Sarasola 2007: 213)
 we.erg God.instr other father.part no have
 ‘We do not have a father, except for God’

Note that Basque doesn’t have an equivalent form for English exception constructions such as: *No student but John*. This makes complete sense considering that Basque does not have a monomorphemic ‘no’ (cf. end of §2.3).

3.5.8 Only

There are three ways to express the equivalent of ‘only’ in Basque: (i) by means of *bakarrik* ‘alone’, created from the combination of *bakar* ‘unique’ and the suffix *-ik* (165); (ii) by means of *besterik ez* ‘lit.: other.part no’ (166); and (iii) by means of *soilik* ‘only’, created from the combination of *soil* ‘bare’ and the suffix *-ik* (167).

- (165) a. *Martxel bakarrik etorri zen.*
 Martxel alone come aux

⁵⁸ The universal quantifiers *den* ‘all’ and *oro* ‘all’ could replace *guzti* in (162) with no change in meaning. *Bakoitz* ‘each’ gives an ungrammatical result.

⁵⁹ The sentence in (162c) becomes grammatical when the exceptive phrase is moved from the focus position (cf. fn.1 and end of section 2.4); in (i) the element that occupies the focus position is *festara* ‘to the party’.

(i) *Ikasle guztiak, Jon (izan) ezik/salbu/kenduta, festara etorri ziren.*
 student all-D.pl Jon be except party-to come aux

I don’t have anything interesting to say about it right now and will leave it for future research.

⁶⁰ Thanks to an anonymous reviewer for pointing this out me.

- ‘Only Martxel came’
- b. *Ikasleak bakarrik agertu ziren bilerara.*
 student-D.pl alone appear aux meeting.to
 ‘Only students attended the meeting’
- (166) a. *Martxel besterik ez zen etorri.*
 Martxel other.part no aux come
 ‘Only Martxel came’
- b. *Ikasleak besterik ez ziren agertu bilerara.*
 student-D.pl other.part no aux appear meeting.to
 ‘Only students attended the meeting’
- (167) a. *Martxel soilik etorri zen.*
 Martxel only come aux
 ‘Only Martxel came’
- b. *Ikasleak soilik agertu ziren bilerara.*
 student-D.pl only appear aux meeting.to
 ‘Only students attended the meeting’

3.5.9 Partitives

Basque partitive quantifiers are syntactically complex. Proportional quantifiers, fractional expressions as well as percentage expressions were described in §4. Now, apart from the proportional expressions shown in §4, the most typical way to express partitivity in Basque is by means of the plural version of D plus the ablative marker *-tik* ‘of’. The quantifier in a partitive construction can be cardinal (168a), interrogative (168b), or negative (168c) (although remember there is no monomorphemic *no* in Basque). There is no equivalent of the English ‘all of the NP’.⁶¹

- (168) a. *Ikasle-etatik asko/gutxi/batzuk/hamar berandu iritsi ziren.*
 student-D.pl.abl many/few/some/ten late arrive aux.pl
 ‘Many/few/some/ten of the students arrived late.’
- b. *Ikasle-etatik zein iritsi zen berandu?*
 student-D.pl.abl which arrive aux late
 ‘Which of the students did arrive late?’
- c. *Ikasle-etatik batere ez zen iritsi berandu.*
 student-D.pl.abl one even no aux arrive late
 ‘None (lit.: not even one) of the students arrived late’

Note that the negation that appears in (168c) can be separated from *batere* ‘lit.: one even’ and moved to the sentence initial position: *Ez zen ikasleetatik batere etorri berandu.* This would show that in opposition to the partitives formed with cardinals and interrogatives the negative does not form a single constituent with *batere* (cf. end of §5.10).

⁶¹ Etxeberria (2005, 2009), Etxeberria & Giannakidou (2010) argue that QP internal D is a contextual domain restrictor; partitives also behave as contextual restrictors. Now, the reason why (i) in Basque is ungrammatical is due to the fact that double contextual restriction yields ungrammaticality.

(i) **Ikasleetatik guztiak berandu iritsi ziren.*
 student-D.pl.abl all-D.pl late arrive aux

The reason these sentences are ungrammatical is that domain restriction is already fulfilled by means of the D that composes with the Q and additional contextual restriction is *redundant*.

Now, one may ask: where is the D that we see in the English ‘of the’ in its Basque equivalent *-etatik*? As evidence for the fact that D is included in the partitive form *-etatik*, note that in Basque, case is marked by means of suffixes and it is possible to distinguish between the indefinite and the definite paradigms morphologically. *Etxe* means ‘house’.

(169)

	Indefinite	definite sg.	definite pl.
ergative	<i>etxe-k</i>	<i>etxe-ak</i>	<i>etxe-ek</i>
ablative	<i>etxe-ta-tik</i>	<i>etxe-tik</i>	<i>etxe-eta-tik</i>

It is known that partitive constructions like the ones we are considering denote the set of all contextually relevant houses (in this case) and the presence of the D is assumed to be obligatory for such constructions. Now, in principle it would seem possible to create a partitive with the indeterminate form of the ablative, but this is completely impossible.

- (170) a. **etxe-ta-tik* asko
house-pl-abl many
b. *etxe-eta-tik* asko
house-D.pl-abl many

Thus, *-eta* should be taken as a portmanteau morpheme that marks both number and definiteness features in a single morpheme.⁶²

3.5.10 NPIs

NPIs in Basque are built by from adding the prefix *e-* (related to negation) to wh-words:

- (171) a. *i-nor* ‘anybody’
b. *e-zer* ‘anything’
c. *i-noiz* ‘ever’
d. *i-non* ‘anywhere (location)’
e. *i-nora* ‘anywhere (direction)’

Despite the presence of a negative element, for most speakers, these NPIs do not have a negative value by themselves and need the presence of an independent clausemate negation.

- (172) a. *Nor ikusi zuen?* Inor *(ez).
who see aux anybody not
‘Who did s/he see? Noone’
b. *Zer erosi zenuen?* Ezer *(ez)
what buy aux anything not
‘What did you buy? Nothing’

The behaviour of Basque NPIs is then different from English *any-* forms in that they cannot be used as ‘free-choice’ items: **Ezer edango nuke* ‘I would eat anything (intended)’.⁶³ In

⁶² Cf. Etxeberria (2005) for an extended explanation of these facts.

⁶³ Some Basque speakers accept Basque NPIs with a free choice reading, provided certain conditions are met: if the matrix verb is in the future, if modals are added, and also if the matrix verb is focalized (cf. Laka 1990: 206).

(i) *Lekukoek ukatu egingo lukete nik esandako ezer.* (Laka 1990: (48))
witness-D.pl-erg deny aux.fut would I-erg say anything
‘The witnesses would deny anything that I would say’

order to get a free-choice reading, the prefix *edo-* ‘or’ or the noun *nahi* ‘desire’ must be added to wh-elements *zer* ‘what’, *nor* ‘who’ and *zein* ‘who, which’: *edozer/zernahi* ‘anything/whatever’, *edonor/nornahi* ‘anyone/whoever’, *edozein/zeinnahi* ‘anyone/whoever’ (cf. Etxeberria in prep for discussion).

There is another inanimate negative word almost equivalent to *ezer: deus*. They both can appear in exactly the same context when negation is present (173a). However, *deus*, in opposition to *ezer* (see (172b)) does not need the presence of a negative element (173b).

- (173) a. Ez dut ezer ikusi = Ez dut deus ikusi
 no aux see no aux see
 ‘I haven’t seen anything’
 b. Zer erosi zenuen? Deus.
 what buy aux nothing
 ‘What did you buy? Nothing’

Polarity items have a different shape in eastern dialects (Mitxelena 1961:304), where they can directly convey a negative meaning (174a).

- (174) Western Eastern
inor *nehor* ‘anybody’
inoiz *nehoiz* ‘ever’
inon *nehon* ‘anywhere’
inora *nihora* ‘anywhere’ (direction)

- a. Nor joan da? Nehor.
 who go aux anyone
 ‘Who left? No one’

One other element that is used as an NPI is the partitive marker *-(r)ik* (cf. Larramendi 1927, Azkue 1905, 1923; cf. de Rijk 1972 for historical references; cf. also Etxeberria 2010b). The partitive marker only attaches to DOs (175) or to subjects of intransitives (176).

- (175) a. Anek ez du baloi-rik ekarri
 Ane.erg not aux ball.part bring
 ‘Ane didn’t bring any ball’
 b. Maiak ez du ardo-rik edan
 Maia.erg not aux wine.part drink
 ‘Maia didn’t drink any wine’
 c. *Katu-rik ez du xagu-rik jan
 cat.part no aux mouse.part eat

- (176) a. Mendian ez da hildako animalia-rik azaldu
 mountain-D.sg.in no aux dead animal.part appear
 ‘No dead animal appeared in the mountain’
 b. Bilerara ez da irakasle-rik etorri
 meeting.to no aux teacher.part come
 ‘No teacher came to the meeting’

And it behaves as a polarity item in that it appears in polarity contexts: e.g. negative contexts

In general, however, most speakers would use other variants (see above) to express free choice.

(175-176), interrogative clauses (177a), conditional clauses (177b), etc. (cf. de Rijk 1996, Etxepare 2003b, Etxeberria 2010b, in prep).

- (177) a. Goxoki-rik nahi al duzu?
 candy.part want aux
 ‘Do you want any candy?’
 b. Taxi-rik lortu nahi baduzu, hobe duzu ilara honetatik ez mugitu.
 taxi.part get want if.aux better aux queue this.from no move
 ‘If you want to get a(ny) taxi, you better not move from this queue’

Basque possesses another negative word that works as a scalar modifier: *batere* (lit.: one even) ‘at all’. This element is only licensed by negation.

- (178) a. Ez dago batere garbi.
 not is at.all clear
 ‘It is not clear at all.’
 b. *Batere garbi dago.
 at.all clear is

3.5.11 Quantifiers as predicates

In Basque, only cardinal (weak) quantifiers –existentials, value judgment cardinals, numerals– can be predicative (179a,b). Strong quantifiers as well as proportional (partitive) quantifiers are not allowed in this context as shown by (179c,d).

- (179) a. Gonbidatu-ak [ikasle asko/gutxi/batzuk] ziren.
 guest-D.pl student many/few/some be.pl
 ‘The guests were many/few/some students.’
 b. Gonbidatu-ak [bost ikasle] ziren.
 guest-D.pl five student be.pl
 ‘The guests were five students.’
 c. *Gonbidatu-ak [ikasle guzti-ak/den-ak/bakoitz-a/oro/gehienak] ziren/zen.
 guest-D.pl [student all-D.pl/all-D.pl/each-D.sg/all/most-D.pl] be.pl/be.sg
 d. *Gonbidatuak [ikasle-eta-tik asko/gutxi/batzuk/bost] ziren.
 guest.D.pl [student-D.pl-abl many/few/some/five] be.pl
 ‘*The guests were many of the students/some of the students/few of the students.’

3.5.12 Determiners functioning as NPs

Now, when instead of the sequence [weak quantifier + noun] what we have is just the weak quantifier by itself, that is, when the common noun is made silent, not all of the (so-called) Basque weak quantifiers behave alike and some differences emerge.

Thus, the examples in (180) are completely grammatical and the only possible interpretation is the predicative one; the proportional interpretation is, as predicted, completely out.

- (180) Gonbidatuak [asko/gutxi/bost/bost baino gehiago] ziren.
 guest.D.pl [many/few/five/more than five] be.past
 ‘The guests were many/few/five/more than five’

Things change when we use the existential weak quantifiers *batzuk* ‘some’ and *zenbait* ‘some’. With these quantifiers the sentences with the common noun silent become ungrammatical.⁶⁴

- (181) a. *Gonbidatuak [batzu(e)k] ziren.⁶⁵
 guest.D.pl [some] be.past
 b. *Gonbidatuak [zenbait] ziren.
 guest.D.pl [some] be.past

Universal quantifiers as well as the proportional *gehien* ‘most’ follow their well-established pattern and continue being ungrammatical in these contexts.

- (182) *Gonbidatuak [guzti-ak/den-ak/bakoitz-a/oro/gehienak] ziren/zen.
 guest.D.pl all-D.pl/all-D.pl/each-D.sg/all/most-D.pl be.pl/be.sg
 ‘The guests were all/all/each/all/most’

3.5.13 Distribution

Quantified nominal expressions can occur in all grammatical functions:

- (183) a. Peruk hiru galdera erantzun zituen.
 Peru.erg three question answer aux
 ‘Peru answered three questions’
 b. Peruk galdera guztiak/gehienak erantzun zituen.
 Peru.erg question all-D.pl/most-D.pl answer aux

⁶⁴ The same behaviour can be observed in languages such as English or Spanish as the following examples show.
English:

- (i) a. The guests were many/few students. b. The guests were many/few.
 (ii) a. The guests were some students. b. *The guests were some.

Spanish:

- (iii) a. Los invitados eran muchos/pocos estudiantes.
 the.pl guest.pl be.past many/few students
 ‘The guests were many/few students.’
 b. Los invitados eran muchos/pocos.
 the.pl guest.pl be.past many/few
 ‘The guests were many/few.’
 (iv) a. Los invitados eran algunos/unos estudiantes.⁶⁴
 the.pl guest.pl be.past some/some students
 ‘The guests were some students.’
 b. *Los invitados eran algunos/unos.
 the.pl guest.pl be.past some/some
 ‘The guests were some.’

Cf. Etxeberria (2005, in prep) for an extensive presentation of the data and for a possible analysis.

⁶⁵ It might seem at first sight that the sentences in (181) are grammatical since sentences with the same word order in the overt syntax can be grammatical.

- (i) Gonbidatuak, batzuk/zenbait ziren.
 guest-D.pl some/some aux.past
 ‘Some were guests.’

Note however that for the sentence to be grammatical a pause after *gonbidatuak* is always necessary (as in the example in (i)), and on the other that in this kind of example the element that is the predicate is *gonbidatuak*, and not *batzuk*. In fact, *gonbidatuak* in (i) has been moved to the front from sentence final position, and the natural word order is (ii).

- (ii) Batzuk/Zenbait ziren gonbidatuak.
 some/some aux.past guest-D.pl
 ‘Some were the guests.’

- ‘Peru answered all of the/most of the questions’
- c. Peru galderen hiru laurdenak erantzun zituen.
Peru.erg question.gen three quarter-D.pl answer aux
‘Peru answered three quarters of the questions’
- d. Bi ikasleren medikuak atxilotuak izan ziren.
two student.gen doctor-D.pl arrest be aux
‘Two student’s doctors were arrested’
- e. Ikasle bakoitzaren medikua aditua da.
student each-D.sg.gen doctor-D.sg expert-D.sg is
‘Each student’s doctor is well qualified’
- f. Anek ikasle gehienen/denen medikuak elkarrizketatu zituen.
Ane.erg student most-D.pl.gen/all-D.pl.gen doctor-D.pl interview aux
‘Ane interviewed most of the/all of the students’ doctors’
- g. Anek ikasle guztiei/orori goxoki bat eman zien/zion.
Ane.erg student all-D.pl.dat/all.dat candy one give aux.pl/aux.sg
‘Ane gave a piece of candy to all of the students’

There is one exception: *bakoitz* ‘each’. Quantified expressions formed with *bakoitz* ‘each’ can appear neither in the subject position of intransitive sentences (184a) nor in the object position of transitive sentences (184b), nor in the direct object position that appears syntactically below the indirect object (184c).

- (184) a. *Ikasle bakoitz-a berandu etorri zen.
student each-D.sg.abs late come aux.sg
‘Each student came late.’
- b. *Ikasle batek liburu bakoitz-a irakurri zuen.
student one-erg book each-D.sg.abs read aux.sg
‘One student read each book.’
- c. *Irakasleak ikasle bati liburu bakoitz-a eman zion.
teacher-D.sg-erg student one-dat book each-D.sg.abs give aux.sg
‘The teacher gave one student each book.’

3.5.14 Scope ambiguities

In general, Basque speakers interpret sentences with two quantifiers unambiguously with the leftmost quantifier having wide scope (cf. Etxeberria 2001, in prep). However, as soon as different intonation patterns are used, scope ambiguities seem to be more plausible (in Basque, and crosslinguistically; cf. Etxeberria & Irurtzun 2004, in prep). The way different intonation patterns affect the way in which sentences with two or more quantifiers are interpreted will not be treated in this paper, and the reader is referred to Etxeberria & Irurtzun (in prep).

To begin with, the sentence in (185), with an indefinite existential in subject position and a universal D-quantifier in object position can only be interpreted with SWS.^{66,67}

⁶⁶ As the attentive reader will have already noticed, Basque does not have a universal D-quantifier parallel to English *every*, *oro* does not behave as such either. This, one may think, can have an effect on the unambiguous readings that we obtain in Basque, however, (and maybe unexpectedly) *bakoitz*, the equivalent of *each* also doesn’t force ambiguous interpretations; see below, cf. also §3.

⁶⁷ I will not talk about the scopal behaviour shown by the universal D-quantifier *oro* ‘all’ due to the fact that the data that I’ve collected are not conclusive. Thus, I’ll leave both the collection of more data as well as a possible conclusion about the scopal behaviour for future research. However, the first impression that I have is that [NP

- (185) Argitaratzailearen batek eskuizkribu guztiak irakurri zituen.
 editor-gen one-erg manuscript all-D.pl read aux
 ‘Some editor read all of the manuscripts’

In (186), with numerals in both subject and object position, the group reading and the SWS reading are the more prominent readings. The OWS interpretation is also possible, although much more difficult to get.

- (186) Hiru irakaslek ehun azterketa zuzendu zituzten.
 three teacher.erg 100 exam correct aux
 ‘Three teachers corrected 100 exams’

Group: there is a group of 3 teachers who corrected a group of 100 exams

SWS: there are 3 teachers each of whom corrected 100 exams

OWS: there are 100 exams such that 3 teachers each corrected them

Now, as soon as we introduce *artean* ‘between’ –the NP that accompanies this adverb needs to appear in genitive case–, the only possible interpretation is the collective one, i.e. the group reading (187a). Of course, we get exactly the opposite interpretation when we introduce the distributive marker *-na* (which attaches to the numeral) on the object (187b) (cf. §5.15).

- (187) a. Hiru irakasleren *artean* hamar azterketa zuzendu zituzten.
 three teacher.erg among 10 exam correct aux
 ‘Three teachers corrected 10 exams between them’
 b. Hiru irakaslek hamar-*na* azterketa zuzendu zituzten.
 three teacher.erg 10-dist exam correct aux
 ‘Three teachers corrected 10 exams each’

Just like in English, modified numerals in object position force narrow scope readings. Thus, whereas in (188a) the object *Atxagaren liburu bat* ‘one Atxaga book’ can be interpreted in a specific (wide scope) and a non-specific (narrow scope) way, the modified numeral in (188b) can only get a narrow scope interpretation. *Bakoitz* ‘each’ shows a different behaviour from *guztiak* and *denak* (see below).

- (188) a. Ikasle guztiak Atxagaren liburu bat irakurri zuten.
 student all-D.pl Atxaga.gen book one read aux
 ‘All the students read one Atxaga book’
 b. Ikasle guztiak gutxienez Atxagaren liburu bat irakurri zuten.
 student all-D.pl at least Atxaga.gen book one read aux
 ‘All the students read at least one Atxaga book’

Decreasing quantified expressions are interpreted in situ.

- (189) a. Politikari bakar batek ere ez zituen ume guztiak musukatu.
 politician single one.erg even no aux child all-D.pl kiss
 ‘Not even one politician kissed all of the children’
 b. Politikari guztiak ez zuten ume bakar bat ere musukatu.

oro] –plus agreement with the verb in singular– behaves almost like *bakoitz*, i.e. like a distributive Q, and that [NP-D oro] –plus agreement with the verb in plural– behaves like *guzti* and *den*.

politician all-D.pl no aux child single one even kiss
 ‘All the politician kissed not even one baby’

As mentioned, different quantifiers lend themselves to different judgments of scope (non-)ambiguity. While (190a) – repeated from (185) – is grammatical and gives us a SWS reading, the sentence in (190b), with *bakoitz* ‘each’ is completely ungrammatical.

- (190) a. Argitaratzailereren batek eskuizkribu guztiak irakurri zituen.
 editor-gen one-erg manuscript all-D.pl read aux
 ‘Some editor read all of the manuscripts’
 b. *Argitaratzailereren batek eskuizkribu bakoitza irakurri zuen.
 editor-gen one-erg manuscript each-D.pl read aux
 ‘Some editor read all of the manuscripts’

In fact, *bakoitz* ‘each’ has been described as the Basque inherently distributive quantifier (cf. Etxeberria 2001, 2002, 2008, in prep) and in opposition to the other Basque universal quantifiers *bakoitz* ‘each’ always forces SWS distributive interpretations (191b).

- (191) a. Ikasle guzti-ek/den-ek abesti bat abestu zuten.
 student all-D.pl.erg/all-D.pl.erg song one-abs sing aux.pl
 ‘All/all of the students sang a song.’
 √ distributive √ collective
 b. Ikasle bakoitz-ak abesti bat abestu zuen.
 student each-D.sg-erg song one-abs sing aux.sg
 ‘Each student sang a song.’
 √ distributive * collective

In fact, QPs formed with *bakoitz* ‘each’ can appear neither in the subject position of intransitive sentences (192a) nor in the object position of transitive sentences (192b) –see example (190)–, nor in the direct object position, that following the basic Basque word order [S-IO-DO-V] appears below the indirect object (192c) (cf. de Rijk 1969, Ortiz de Urbina 1989, Elordieta 2001).⁶⁸

- (192) a. *Ikasle bakoitz-a berandu etorri zen.
 student each-D.sg.abs late come aux.sg
 ‘Each student came late.’
 b. *Ikasle batek liburu bakoitz-a irakurri zuen.
 student one-erg book each-D.sg.abs read aux.sg
 ‘One student read each book.’
 c. *Irakasleak ikasle bati liburu bakoitz-a eman zion.
 teacher-D.sg-erg student one-dat book each-D.sg.abs give aux.sg
 ‘The teacher gave one student each book.’

What seems to be going on is that *bakoitz* ‘each’ is grammatical only in those situations where it has an element syntactically deeper in the structure over which to distribute; and this element cannot possibly be the event variable (cf. Etxeberria 2001, 2002). Thus, the intransitive sentence in (192a) with no element to be distributed over cannot be

⁶⁸ According to some Basque speakers, the sentences in (192) are grammatical if *bakoitz* ‘each’ is interpreted as ‘each and every one of the students’. However, most Basque speakers agree with the judgement given for (192).

recovered. However, a change in the word or a change in the object (IO or DO) that contains *bakoitz* ‘each’ does correct the ungrammaticality of both the sentences in (192b) and (192c).⁶⁹

- (193) a. *Liburu bakoitz-a, ikasle batek irakurri zuen.*
 book each-D.sg.abs student one-erg read aux.aux
 ‘Lit.: Each book, one student read.’
 b. *Irakasle-a-k ikasle bakoitz-a-ri liburu bat eman zion.*
 teacher-D.sg-erg student each-D.sg-dat book one-abs give aux.sg
 ‘The teacher gave each student one book.’

Note also that *bakoitz* cannot occur with **collective predicates**, in opposition to what happens with other universal D-quantifiers.

- (194) a. **Ikasle bakoitza tabernan elkartu da.*
 student each-D.sg bar.in gather aux
 ‘*Each student gathered in the bar’
 b. *Ikasle guztiak/denak tabernan elkartu dira.*
 student all-D.pl/all-D.pl bar.in gather aux
 ‘All of the students gathered in the bar’

Furthermore, while in (195a) we expect to find as many pictures as there are students, in the most salient interpretation of (195b) we will look for a single picture with all the students in it (although the distributive reading is also available, although much less salient).

- (195) a. *Ikasle bakoitzaren argazki bat zegoen mahai gainean.*
 student each-D.sg.gen picture one be.egon table over
 ‘A picture of each students (was on the table)’
 b. *Ikasle guztien argazki bat zegoen mahai gainean.*
 student all-D.pl.gen picture one be.egon table over
 ‘A picture of all students (was on the table)’

The following examples show the scope possibilities in **wh-questions**.

- (196) a. *Zein ikaslek erantzun zituzten galdera gehienak?* √SWS *OWS
 which student.erg answer aux question most-D.pl
 ‘Which student answered most of the questions?’
 b. *Zein ikaslek erantzun zituzten galdera guztiak?* √SWS *OWS
 which student.erg answer aux question all-D.pl
 ‘Which student answered all of the questions?’
 c. **?Zein ikaslek erantzun zuen galdera bakoitza?* *SWS *OWS⁷⁰

⁶⁹ According to some Basque speakers, the sentence in (i) –where the subject *ikasle batek* ‘one student’ appears in (preverbal) focus position and *liburu bakoitz* ‘each book’ is part of the “theme” (cf. Vallduví 1993 and references therein)– makes the sentence in (192b) grammatical and gives us a OWS reading.

(i) *Ikasle batek irakurri zuen liburu bakoitz-a.*
 student one-erg read aux.sg book each-D.sg.abs
 ‘One student read each book.’

I don’t have anything interesting to add right now; the reader is referred to Etxeberria & Irurtzun (in prep).

⁷⁰ According to some Basque speakers (the author included), this question becomes grammatical when the object *galdera bakoitza* ‘each question’ appears in topic position (left dislocated), as in (i). The only possible reading for (i) is OWS.

(i) *Galdera bakoitza, zein ikaslek erantzun zuen?*
 question each-D.sg which student.erg answer aux

which student.erg answer aux question each-D.sg
 ‘Which student answered each question? (intended)’

- (197) a. Zein galdera erantzun zuen ikasle bakoitzak? √SWS *OWS
 which question answer aux student each-D.sg.erg
 ‘Which question did each student answer?’
 b. Zein galdera erantzun zuten ikasle guztiek? *SWS √OWS
 which question answer aux student all-D.pl.erg
 ‘Which question did all of the students answer?’

In **self-embedding QNPs**, the scopings we obtain depend on the quantifier that appears on the possessor.

- (198) a. senatari bakoitzaren lagun bat [√distributive: many friends / *collective]
 senator each-D.sg.gen friend one
 ‘a friend of each senator’
 b. senatari guztien lagun bat [??distributive / √collective: same friend]
 senator all-D.pl.gen friend one
 ‘a friend of all senator’

Ambiguity between nominal and verbal quantifiers.

- (199) Bi mutilek hiru aldiz abestu zuten.
 two boy-D.pl.erg three time.inst sing aux
 ‘Two boys sang three times’
 √SWS: there are two boys who sang three times each
 *OWS: on three occasions there were two boys who sang

Quantifier-negation interaction.

No matter whether negation appears syntactically above or below the universal D-quantifier, negation always take wide scope (recall that Basque does not have an equivalent of *not every*).

- (200) a. Nere gelako ikasle guztiek ez dute erretzen. √neg > all *all > neg
 my class.gen student all-D.pl no aux smoke.prog
 ‘All the students in my class do not smoke’
 b. Ez dute nere gelako ikasle guztiek erretzen. √neg > all *all > neg
 no aux my class.gen student all-D.pl smoke.prog
 ‘Not all the students in my class smoke’
 ≈ ‘It is not the case that all the students in my class smoke’

With other quantifiers: Imagine a situation in which there are 14 teachers, exactly 6 of whom sign the petition. Then (201a) is true, since the number that did not sign is 8, which is more than 4. But (201b) is false since more than 4 signed, in fact 6 did.

- (201) a. Lau irakasle baino gehiagok ez zuten sinatu eskaria.
 four teacher than more.erg no aux sign petition-D.sg

‘Each question, which student answered?’

- ‘More than four teachers did not sign the petition’
 b. Ez zuten lau irakasle baino gehiagok sinatu eskaria.
 no aux four teacher than more.erg sign petition-D.sg
 ‘Not more than four teachers signed the petition’
 ≈ ‘It is not the case that more than four teachers signed the petition’

3.5.15 Distributive numerals

Distributive numerals in Basque are formed by suffixing the distributive particle *-na* to any cardinal numeral. The sequence [numeral+*na*] occupies the same syntactic position (with respect to the nominal) as the corresponding numeral.

- (202) a. liburu bat → liburu ba-na
 book one book one-dist
 ‘one book’ ‘one book each’
 b. lau liburu → lau-na liburu
 four book four-dist book
 ‘four books’ ‘four books each’
 c. hamazazpi liburu → hamazazpi-na liburu
 seventeen book seventeen-dist book
 ‘seventeen books’ ‘seventeen books each’

When the numeral the particle *-na* combines with is *bat*, the distributive numeral can only appear in direct object position and it will not be able to appear in subject or indirect object position.⁷¹

- (203) a. Ikasleek irakasleari lan ba-na aurkeztu zioten.
 student-D.pl.erg teacher-D.sg.dat work one-na.abs present aux.sg
 ‘The students presented one work each to the teacher.’
 b. *Ikasle ba-na-k irakasleari lan bat aurkeztu zioten.
 student one-na.erg teacher-D.sg.dat work one.abs present aux.sg
 c. *Ikasleek irakasle ba-na-ri lan bat aurkeztu zioten
 student-D.pl.erg teacher one-na.dat work one.abs present aux.sg

However, when the distributive particle *-na* combines with any other numeral, the distributive numeral is able to appear in direct object position or in indirect object position, although never in subject position.

- (204) a. Ikasleek irakasleari zazpi-na lan aurkeztu zizkioten.
 student-D.pl.erg teacher-D.sg.dat seven-na work.abs present aux.pl
 ‘The students presented seven works each to the teacher.’
 b. *Zazpi-na ikaslek irakasleari lan bat aurkeztu zioten.
 seven-na student.erg teacher-D.sg.dat work one.abs present aux.sg
 c. Ikasleek zazpi-na irakasle-ri lan bat aurkeztu zioten
 student-D.pl.erg seven-na teacher.dat work one.abs present aux.sg
 ‘The students presented one work to seven teachers each.’

We can form adverbs adding the suffixes *-ka* or *-n* (the second one asks for reduplication) to these distributive numerals: e.g. *bina-ka* or *binan-binan* ‘two at a time’.

⁷¹ When the ergative marker attaches to the plural D *-ak*, the resulting form is *-ek*.

The suffix *-na* can also attach to fractional expressions or to the interrogative *zenbat* ‘how many’.⁷²

- (205) a. *zenbat* → *zenba-na*
how many → how many-dist
a. *erdi bat* → *erdi ba-na*
half one → half one-dist

3.5.16 Mass vs. count quantifiers

Mass and count quantifiers were described in §5.4.

3.5.17 The ‘indexing’ function of universal quantifiers

The domain of the universal D-quantifier *guztu* ‘all’, *den* ‘all’, *bakoitz* ‘each’ and the universal A-quantifier formed with the weakened form of the quantifier *oro* ‘all’, the suffix *-ero* (cf. §3, A-quantifiers) can be used as an index set for another set we are enumerating.

- (206) a. *Urtero (geroz eta) jende gehiagok erosten ditu Toyota autoak.*
year-every later and people more.erg buy.prog aux Toyota car-D.pl
‘More people buy Toyotas every year’
b. *Euri-tanta bakoitzeko lore bat hazten da.*
rain-drop each-gen flower one grow.prog aux
‘For every drop of rain a flower grows’
c. *Landatu genituen ezkur guztiak/denak haritz ederrak izan arte hazi ziren.*
plant aux.rel acron all-D.pl/all-D.pl oak beautiful be until grow aux
‘Every acron we planted grew into a beautiful oak tree’

It is important to note that these universal D/A-quantifiers cannot be interchanged. Thus, no universal D-quantifier can be used instead of the A-quantifier *urtero* ‘every year’ in the example in (206a); *bakoitz* is the only D-quantifier that can be used in (206b); *guztiak* and *denak* are the D-quantifiers that need to be used in (206c).

Rate phrases

- (207) a. *Tren hori orduko laurehun kilometroan doa.*
train that hour.gen four.hundred km.ines goes
‘This train goes at 400 kms per hour’
b. *Eguneko hogeit hamar kilometro korri egiten ditut.*
day.gen twenty km run do.prog aux
‘I run twenty kms a day’
c. *Jonek bere aurpegia egunean bitan/bi aldiz/bi alditan* (cf. §2.10)
Jon.erg his face-D.sg day-D.sg.in two.loc/two time.inst/two time.loc
egunero/egun guztietan (cf. §3)
day-every/day all-D.pl-in
garbitzen du.
clean.prog aux
‘Jon cleans his face twice a day/every day’

⁷² The interrogative *zenbat* loses its mass interpretation ‘how much’ due to the fact that *-na* is a distributive suffix and as a consequence can only attach to count term.

3.5.18 Type (2) quantifiers

In Basque, *wh*-quantifiers as well as adjectives which imply ‘different’ or ‘similar’ are possible: *berdin* ‘same’, *ezberdin* ‘different; lit.: no same’, *kontrako* ‘opposite, rival’, etc.

- (208) a. Zein ikaslek erantzun zituzten zein galdera?
which student.erg answer aux.pl which question
‘Which students answer which questions?’
- b. Ikasle guztiek galdera berdinak erantzun zituzten azterketan.
student all-D.pl.erg answer same-D.pl answer aux exam.in
‘All the students answered the same questions on the exam’
- c. Ikasle bakoitzak galdera ezberdin bat erantzun zuen azterketan.
student each-D.sg.erg answer different one answer aux exam.in
‘Each student answer a different question on the exam’
- d. Ikasle ezberdinek galdera ezberdinak erantzun zituzten.
student different-D.pl.erg question different-D.pl answer aux
‘Different students answered different questions’
- e. Peruk eta Ricardok kontrako alderdi politikoei babesten die.
Peru.erg and Ricardo.erg opposite side political-D.pl.dat support aux
‘Peru and Ricardo support rival political parties’
- f. Eraikuntza berdineko apartamentu ezberdinetan bizi dira.
building same.gen apartment different.loc live aux
‘They live in different apartments in the same building’
- g. Partehartzaile guztiek kolore berdineko gorbata zeramaten.
participant all-D.pl.erg color same.gen tie bring
‘All the participants wore the same color necktie’
- h. Peruk Mirenekin dantza egin zuen baina beste inork ez zuen beste
Peru.erg Miren.with dance do aux but other anyone.erg no aux other
inorekin dantza egin.
anyone.with dance do
‘Peru dance with Miren but no one else danced with anyone else’
- i. Margoak gela ezberdinetan edo gela bakar bateko horma ezberdinetan
painting-D.pl room different.loc or room single one.gen wall different.loc
zintzilikatu beharko lirateke.
hung must.rel aux.irrealis
‘The paintings should be hung in separate rooms or on different walls of the same room’
- j. Epaimahaikide ezberdinek ondorio ezberdinak atera zituzten argudio
juror different.erg conclusion different-D.pl take.out aux arguments
berdinetatik.
same-D.pl.abl
‘Different jurors drew different conclusions from the same arguments’

3.5.19 Type (1, (1, 1))

Comparative D-quantifiers

Basque comparative D-quantifiers do not have exactly the same distribution as other quantificational expressions and in some contexts, comparative quantification is expressed in the predicate by making use of something like ‘the quantity is more/less numerous’.

Thus, we can have comparative D-quantifiers as:

- (209) a. *Subject*: Irakasle baino ikasle gehiago etorri zen festara.
 teacher than student more come aux party.to
 ‘More students than teachers came to the party’
- b. *Subject*: Gutxienez irakasle bezainbat ikasle etorri zen festara
 at least teacher as many as student come aux party.to
 ‘At least as many students as teachers came to the party’
- c. *DO*: Irakasle baino ikasle gehiago ezagutzen dut.
 teacher than student more know.prog aux
 ‘I know more students than teachers’
- d. *Obj prep*: Irakasle baino ikasle gehiagorekin lan egin dut.
 teacher than student more.with work do aux
 ‘I have worked with more students than teachers’
- e. *Raising*: Iduritzen zait emakume baino gizon gehiagok sinatu dutela eskaera.
 seem aux woman than man more.erg sign aux.that petition
 ‘It seems to me that more women than men signed the petition’

In possessive NPs, Basque uses comparatives in the predicate.

- (210) a. Lapurtutako bizikletetan ikasleen eta irakasleen kopurua
 stolen bicycle-D.pl-loc student-D.pl.gen and teacher-D.pl.gen quantity-D.sg
 berdina da.
 same is
 ‘Lit.: When it comes to stolen bicycles, the quantity of bicycles stolen to students
 and to teachers is the same’
 ‘Just as many students’ as teachers’ bicycles were stolen’

It is important to note that there is a tendency among Basque speakers to express comparative quantification in the predicate (by means of relative clauses) even in cases such as those in (209).

- (209’) a. Festara etorri ziren ikasleen kopurua irakasleena
 party.to come aux student-D.pl.gen quantity teacher-D.pl.gen
 baino handiagoa zen.
 than more aux
 ‘The quantity of students that came to the party is bigger than that of teachers’
- b. Festara etorri ziren ikasleen kopurua gutxienik irakasleena
 party.to come aux student-D.pl.gen quantity at least teacher-D.pl.gen
 bezainbatekoa zen.
 as many as.gen aux
 ‘The quantity of students that came to the party is at least as many as that of
 teachers’
- c. Ezagutzen dudan ikasleen kopurua irakasleena.
 know.prog aux.comp student-D.pl.gen quantity teacher-D.pl.gen
 baino handiagoa zen.
 than more aux
 ‘The quantity of students that I know is bigger than that of teachers’
- d. Nerekin lan egiten dudan ikasleen kopurua irakasleena
 I.gen.with work do.prog aux.comp student-D.pl.gen quantity teacher-D.pl.gen
 baino handiagoa zen.

- than more aux
 ‘The quantity of students that work with me is bigger than that of students’
 e. Iduritzen zait eskaera sinatu duten gizonen kopurua emakumeena
 seem aux petition sign aux.comp man-D.pl.gen quantity woman-D.pl.gen
 baino handiagoa dela
 than bigger aux.that
 ‘It seems to me that the quantity of men that signed the petition is bigger than that
 of women’

Combination with conjunction

- (211) a. Gizon, emakume eta ume guztiek/denek/orok uretara jauzi egin zuten.
 man woman and child all-D.pl.erg/all-D.pl.erg/all.erg water.to jump do aux
 ‘Every man, woman and child jumped to the water’
 b. Gizon, emakume eta ume bakoitzak salbamendu-jaka bat jantzi zuten.
 man woman and child each-D.sg.erg life-jacket one wear aux
 ‘Each man, woman and child wore a life-jacket’
- (212) Gizon, emakume edo ume-ren batek lan egiten du asteburuetan.
 man woman or child.gen one.erg work do.prog aux weekend.loc
 ‘Some man, woman or child works on weekends’

Predicates

Again, comparative quantification is expressed in the predicate by making use of something like ‘the quantity is more/less numerous’

- (213) Festara etorri ziren ikasleen kopurua ikasten gelditu zirenena
 party.to come aux student-D.pl.gen quantity study.prog stop aux.comp
 baino handiagoa da.
 than bigger aux
 ‘Lit.: The quantity of students that came to the party is bigger than (the quantity of
 students) that stayed at home to study’
 ‘More students came to the party than stayed at home to study’

3.5.20 Floating quantifiers

As a general rule, Basque can be said not to allow floating quantifiers, except for (a concrete use of) *oro* ‘all’ (cf. Artiagoitia 2003, Duguine 2003, to appear). Recall that *oro* is the only Basque universal D-quantifier that can appear without the D (214) or with the D combined with the nominal expression –not with the quantifier itself– (215a,b). The rest of universal D-quantifiers need to appear combined with the D in order to be grammatical (cf. section 3). Examples repeated from (103c), and (108a,b).

- (214) Ikasle oro-k lan bat egin zuen ikasgaia gaindi-tze-ko.
 student all-erg work one-abs make aux.sg subject-D.sg-abs pass-nom-gen
 ‘All of the students must write a paper to pass the subject.’
- (215) a. [Ikasle-ek oro-k] lan bat egin zuten ikasgaia gaindi-tze-ko.
 student-D.pl.erg all-erg work one-abs make aux.pl subj-D.sg pass-nom-gen
 ‘All the students must write a paper to pass the subject.’

- b. *[Ikasle oro-ek] lan bat egin zuten ikasgaia gaindi-tze-ko.
 student all-erg work one-abs make aux.pl subj.-D.sg pass-nom-gen

The D in (215) can be replaced by a demonstrative (216), repeated from (109).

- (216) a. [Ikasle hauek oro-k] lan bat egin zuten ikasgaia gaindi-tze-ko.
 student these.erg all.erg work one-abs make aux.pl subj-D.sg pass-nom-gen
 ‘All these students must write a paper to pass the subject.’
 b. [Lagun hauek-in oro-rekin] joango naiz.
 friend these-com all-com go.fut aux.sg
 ‘I’ll go with all these friends.’

A similar construction is also available to the Q *guzti* ‘all’ and *den* ‘all’. The difference between these two Qs and *oro* ‘all’ is that the former must necessarily appear with the D.

- (217) [Ume hauek guzti-ak/den-ak] berandu iritsi ziren.
 child these.abs all-D.pl.abs late arrive aux.pl
 ‘All these children arrived late.’

One very interesting property of the universal quantifiers that can combine with a [NP+dem] or [NP+D] sequence is that they behave as floating quantifiers, not adjacent to the N.

- (218) a. Ikasle hauek lan bat egin beharko dute orok.
 student these.erg work one make must aux all-erg
 ‘These students must write a paper to pass the subject all.’
 a’. Ikasleek lan bat egin beharko dute orok.
 student-D.pl.erg work one make must aux all-erg
 ‘These students must write a paper to pass the subject all.’
 b. Ume hauek berandu iritsi ziren guzti-ak.
 child these.abs late arrive aux.pl all-D.pl.abs
 ‘These children arrived late all.’
 c. Politikari hauek gezurak esan zituzten den-ek.
 politician these.erg lie-D.pl-abs say aux.pl all-D.pl.erg
 ‘These politicians told lies all.’

Apart from these universal D-quantifiers, there is no other quantificational element that can be floated in Basque.⁷³

- (219) a. Ikasle asko/batzuk etorri dira gaur.
 student many/some come aux today
 ‘Many/Some students came today’

⁷³ Artiagoitia (2003) claims that there are a few non-standard uses of floating *asko* ‘many, much’.

- (i) Perretxikoak mendian asko ikusi ditut.
 mushroom-D.pl mountain-in many see aux
 ‘I have seen many mushrooms in the mountain’

I fully agree with the data offered by Artiagoitia, however, the “floating” use of *asko* is restricted to some syntactic positions, a restriction that does not affect *oro*’s floated use.

- (ii) a. *Ikasleek askok ikusi dute hori. b. *Ikasleek hori askok ikusi dute.
 student-D.pl-erg many-erg see aux that student-D.pl-erg that many-erg see aux
 c. *Ikasleek hori ikusi dute askok.
 student-D.pl-erg that see aux many-erg

I do not have anything interesting to say about these cases right now, and I will leave it for future research.

- b. *Ikasle gaur asko/batzuk etorri dira
student today many/some came aux
 - c. *Ikasle gaur etorri dira asko/batzuk
student today came aux many/some
- (220)
- a. Bost ikasle etorri dira gaur.
five student come aux today
'Five students came today'
 - b. *Ikasle gaur bost etorri dira
student today five came aux
 - c. *Ikasle gaur etorri dira bost
student today came aux five

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