

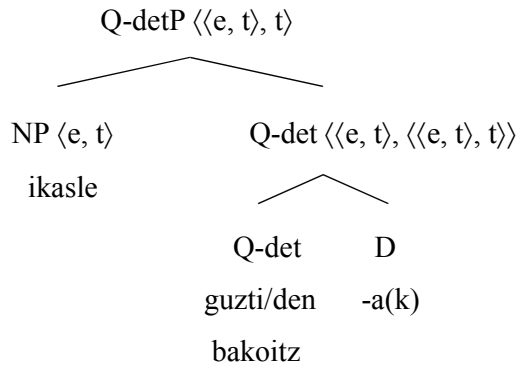
## CHAPTER 3

### WEAK QUANTIFIERS OR UNRESTRICTED QUANTIFICATION

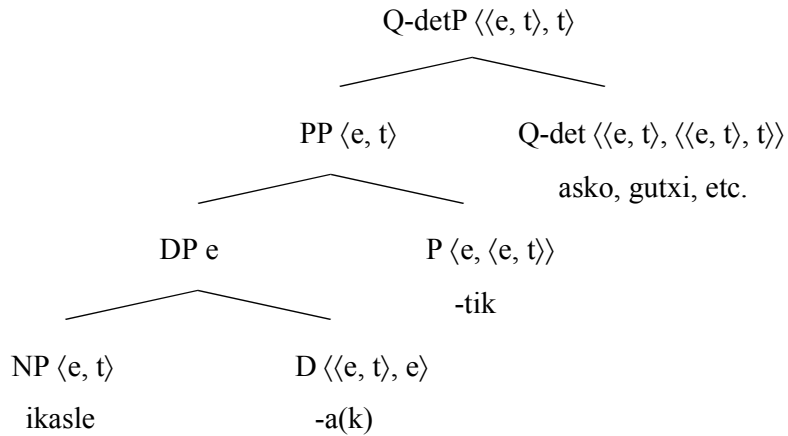
#### 3.1. Introduction:

Two types of quantifiers have been traditionally identified: strong quantifiers and weak quantifiers. In Chapter 2 I have proposed a compositional analysis of Basque strong quantifiers and offered further support for the conclusion that the standard analysis of Generalized Quantifiers is after all correct. Basque nominal quantification provides decisive evidence for the need of both Q-det domain restriction -with lexically strong quantifiers- (Westerståhl (1985), von Stechow (1994), Martí (2003)) as well as nominal restriction -with strongly (overtly partitive) interpreted weak quantifiers- (Stanley (2002), Stanley & Szabó (S&S) (2000)); as the examples (1) and (2) respectively show. Chapter 2 has shown that Giannakidou (2004)'s analysis as well as Etxeberria (2004)'s intuition for Basque is on the right track.

- (1) [Ikasle **guzti-ak**] berandu etorri ziren.  
[student all-D.pl(abs)] late come aux.past.pl  
'all of the students came late.'



- (2) [Ikasle-**etatik asko**] berandu iritsi ziren.  
 [student-the.D/of many] late arrive aux.pl.past  
 ‘Many of the students arrived late.’



The aim of this Chapter is to propose an analysis for Basque weak quantifiers<sup>1</sup>. Crucially in Basque, the definite determiner (-A) that functions as a domain restrictor (inside quantificational phrases) only appears with strong-proportional quantifiers (lexically strong quantifiers and weak quantifiers with overt partitive constructions), but it is excluded from weak-cardinal quantifiers (except numerals, see section 3.4.1.1.).

<sup>1</sup> See Chapter 1, footnote 20.

This must be taken as evidence for the fact that the latter are neither quantifiers nor contextually restricted in agreement with what has been standardly defended in the literature (cf. Milsark (1974, 1977), Partee (1988), Cooper (1996), von Stechow (1998)). For situations where there is no overt definite determiner but still the proportional interpretation is available, I assume Büring (1996)'s proposal. In this proposal, the partitive interpretation is explained in terms of the role that the Topic/Focus/Background Structure plays in the interpretation of weak quantifiers. This way we avoid the covert partitive as well as the ambiguity approach to weak quantification. Weak quantifiers are proposed to be base generated in the predicative type, in the functional projection NumP (either in [Spec, NumP] or in [Head, NumP]).

The chapter is organised as follows: Section 3.2 presents the different interpretation that weak quantifiers can get as well as two possible approaches to these readings: semantic (Partee (1988), Diesing (1992), de Hoop (1992)) and pragmatic (Büring (1996)); the latter is argued to be the preferred one. Section 3.3 tries to give evidence in favour of the fact that weak quantifiers, if really weak and cardinal, are contextually unrestricted. In section 3.4, it is argued that weak quantifiers are base-generated below DP and that this is why they can not appear with the definite article in Basque. In this section I also account for the reasons why Basque weak quantifiers can be prenominal/postnominal (normally not both). Section 3.5 notes some differences that appear between Basque weak quantifiers when the common noun accompanying them is elided; in such a situation some are necessarily interpreted proportionally. These facts will be explained along the lines of Büring (1996)'s proposal. Section 3.6 concludes the chapter.

## **3.2. Weak Quantifiers and Different Interpretations:**

### **3.2.1. Proportional and Cardinal Interpretation:**

#### **3.2.1.1. The Semantic Approach (Partee (1988), Diesing (1992), de Hoop (1992)):**

The idea that weak quantifiers might have a special category in the domain of quantification is not a novel one. Milsark (1974, 1977) distinguishes two types of quantifiers, strong and weak, and gives a syntactic diagnosis for distinguishing them (see Chapter 1). Weak quantifiers are those that can appear in *there*-insertion contexts (also known as *definiteness effect* contexts), whereas strong quantifiers are excluded and anomalous in this situation.

- (3a) There are some/few/many/three/no superheroes playing in our garden.  
(3b) \* There are every/all/most superheroes playing in our garden.

The sentence in (3a) demonstrates that the English quantifiers *some*, *many*, *three*, and *no* are to be considered weak quantifiers. Among the strong quantifiers on the other hand, it is possible to include (among others) *every*, *all*, and *most* which lead to ungrammaticality in *there*-insertion contexts (see Chapter 1).

Weak quantifiers have often been assumed to be ambiguous<sup>2</sup> between a proportional (partitive) and a cardinal (non-partitive) reading as Milsark (1974, 1977)

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<sup>2</sup> cf. among others Milsark (1974, 1977), Partee (1988), Diesing (1992), de Hoop (1992, 1995), Ladusaw (1994), Cohen (2001), Zucchi (1995) and references therein.

pointed out<sup>3</sup>. According to this approach, these two readings of weak quantifiers are fixed from the lexicon. The example in (4) exemplifies the two possible interpretations of *some* (see fn. 3).

(4) Some superheroes are playing in our neighbour's garden.

On its strong interpretation, the meaning of *some* can be paraphrased as *some, but not others*, and it is said to be synonymous with the partitive *some of the superheroes* as in (5). This interpretation is felicitous only when the set of superheroes is already under discussion, that is, *of the superheroes* denotes the set of all contextually relevant superheroes (Ladusaw (1982)).

(5) Some of the superheroes are playing in our neighbour's garden.

On its cardinal reading *some superheroes* is not paraphrasable as a partitive. In (6) (a *there*-insertion existential context), the subject *some superheroes* cannot get a partitive

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<sup>3</sup> There is evidence that a two-way distinction between proportional (partitive) and cardinal interpretations of weak quantifiers is insufficient to account for all the possible readings that these quantifiers can force. Herburger (1993, 1997, 2000) realises that weak quantifiers can get a third reading: *focus-affected* reading. This reading only appears with contrastive stress indicating focus on the nominal. The phenomenon of focus-affected reading is illustrated in (i).

(i) Few COOKS applied.

The sentence in (i), with a weak quantifier in the subject position of a stage level predicate, should be able to have exactly the two readings: a weak-cardinal one and a strong-proportional one. According to Herburger, on both these readings the focus on *cook* is contrastive (contrasting cooks with non-cooks), but in neither case does the focus have an effect on the truth-conditions of the sentence. The focus-affected reading would be the third reading of a sentence like (i), a reading where focus does have an effect on truth-conditions and where the interpretation can be paraphrased as follows: "few that applied were cooks". The focus-affected reading of (i) means that few (a small proportion) of the individuals that applied were cooks; the reading is proportional, but the restriction of *few* is constituted by those that applied, rather than by cooks, and conversely, the nuclear scope is made up by cooks, rather than by those that applied. Focus-affected readings will not be treated in this dissertation.

reading with the meaning “some of the superheroes exist, as opposed to others”. Rather, the interpretation would be something like *some in number*.

- (6) There exist some superheroes.

This behaviour is available to all the weak quantifiers (such as *many*, *few*, *three*, etc.).

Partee (1988) argues that these two interpretations (proportional / cardinal) differ truth-conditionally, and that this difference cannot be attributed to an inherent vagueness of the quantifiers (contra i.e. Bennett (1974), Hoeksema (1983), or Lappin (2000)).

Under the proportional reading weak quantifiers behave as strong quantifiers: They do not obey the symmetry condition or the intersection condition (see Chapter 1, section 1.2.1.1.1.). Two other arguments from Partee (1988) are the following: The first is that when quantifiers like *many* or *few* appear in so-called adjectival position<sup>4</sup> (as in *the many N* or *the few N*) their interpretation is always cardinal. The following example shows both the cardinal and the proportional readings, the first *many* can be interpreted cardinally or proportionally, although the second interpretation is preferred; the second *many* on the other hand must be interpreted cardinally (the example is taken from Partee (1988: 13)).

- (7) Many of the many protestors advocated violence.

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<sup>4</sup> See section 3.4.1.2.2 where it is shown that the Basque counterparts of *many* and *few* do not behave like adjectives and can not combine with the definite article (except *gutxi* ‘few’ that can but only in some specific contexts).

Another difference between the cardinal and the proportional interpretation is that the cardinal reading of the weak quantifier *few* i.e. in a sentence like (8) allows the possibility of *few* being all (provided they are few in number). In other words, it is possible for *few superheroes* in (8) to amount to all the superheroes there are in our neighbour's garden.<sup>5</sup>

(8) Few superheroes are playing in our neighbour's garden.

On the other hand, *few* can never mean "all" in the strong(-like) proportional interpretation. Due to the fact that on its strong interpretation the weak quantifier in (8) is synonymous with the partitive *few of the superheroes*, and it would not be truthful to utter *few of the superheroes are playing in our neighbour's garden* in a situation where all the superheroes are playing in the neighbour's garden.<sup>6</sup>

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<sup>5</sup> Partee (1988: 13) attributes this observation to Huettner (1984).

<sup>6</sup> Apart from the existential sentences like the one in (3a), where only the cardinal interpretation of weak quantifiers is permitted; there are other contexts where the cardinal interpretation is optional. The subject position of stage-level predicates is one of those contexts; the reason why it is said to be an "optional definiteness effect context" is because both strong quantifiers and strongly interpreted weak quantifiers can appear in these configurations. Contrary to what occurs in stage-level predicates (which denote *states*), the subject position of individual-level predicates (which denote *properties* of the entities of which they are predicated) can only be occupied by strong quantifiers or weak quantifiers in their strong interpretation; cardinal readings are excluded in these contexts.

Thus, in (8), with a stage-level predicate (*play*) the subject *few superheroes* can be interpreted cardinally as "few in number" or with a strong-proportional reading as the partitive "few of the superheroes" (as already mentioned). When an individual-level predicate is used instead, as in (i), the only possible interpretation is the strong-proportional one: "a small percentage of (some implicit class of) superheroes", in other words, "few of the superheroes".

(i) Few superheroes love spinaches.

Therefore, *there*-insertion sentences can be said to be obligatory definiteness effect contexts, the subject position of stage-level predicates is a neutral context, and the subject position of individual-level predicates is considered an anti-definiteness effect context.

This dissertation does not adopt the standard assumption that weak quantifiers (when no partitive construction is made explicit) are ambiguous. Instead, following Büring (1996), it will claim that the proportional/strong interpretation is not obtained by means of a covert partitive construction but rather pragmatically, as a product of the relation between intonation and context.<sup>7</sup>

### **3.2.1.2. The Pragmatic Approach:**

Büring (1996)<sup>8</sup> approaches the covert partitive phenomenon from a pragmatic point of view. In contrast to the Semantic (Ambiguity) Approach, he proposes that weak quantifiers are not ambiguous: their proportional (and therefore presuppositional) interpretation depends on the Topic/Focus/Background Structure (TFBS) and therefore there is no need to postulate a covert partitive structure.

In the Hamblin/Karttunen tradition, the denotation of a question is a set of propositions, which constitutes the set of its possible answers. Following Rooth (1985, 1992), this set is called the *Focus Value* of the sentence. Thus, a question like *what did Aritz drink?* denotes the set of all propositions expressed by sentences like *Aritz drank x*. A declarative sentence can therefore be understood as answering an implicit question, which can also be taken to be part of the context.

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<sup>7</sup> Alonso-Ovalle & Menendez-Benito (2002) argue that both approaches are needed in order to account for the behaviour of two Spanish plural determiners (*unos* (≈some) and *algunos* (≈some)). See also Gutierrez-Rexach (2001) for an analysis of these elements.

<sup>8</sup> See also Partee (1991a) where she claims “that there is a significant correlation between restrictive clause and focus-frame on the one hand and nuclear scope and focus on the other”.



- (9a) Aritz drank BEER.  
(9b) {[[Aritz drank wine]], [[Aritz drank tea]], [[Aritz drank whisky]], etc.}

Now, the sentence in (10), with what Büring calls a contrastive topic accent on the subject and narrow focus on the object is different from the previous sentence in that the subject *Aritz* is substituted for its contextually relevant alternatives (in (11)).

- (10) ARITZ drank BEER.  
  
(11a) [[What did Mattin drink?]]  
    {[[Mattin drank beer]], [[Mattin drank tea]], etc.}  
(11b) [[What did three boys drink?]]  
    {[[Three boys drank beer]], [[Three boys drank tea]], etc.}  
(11c) [[What did Maia and Aritz drink?]]  
    {[[Maia and Aritz drank beer]], [[Maia and Aritz drank tea]], etc.}  
    ...

Büring (1996) extends this analysis of alternatives to quantificational expressions (Rooth (1985, 1992)) and argues that sentences of the kind in (12) also involve two accents, the first of which is not a focus accent, but a contrastive topic accent. Such a sentence triggers the reconstruction of a particular set of potential contexts, the ones obtained by substituting *some* for its contextually relevant alternatives given in (13).

- (12) SOME students drank BEER.

(13a) What did all of the students drink?

(13b) What did every students drink?

(13c) What did few students drink?

(13d) What did many students drink?

....

No matter which of the previous contexts might have been the actual Discourse-Topic, all of the alternatives in (13) give rise to elements able to occupy a topic position and as a consequence the existence of a group of students is presupposed. Thus, it is possible to know upon hearing (12) -even in a discourse initial context- that it requires a discourse context that has to do with students. The partitive interpretation of *some students* in (12) results from the fact that the noun, but not the weak quantifier, is part of the background, that is to say, the partitive/presuppositional reading emerges as a result of the contexts required by the sentence.<sup>9</sup>

What we do when we come across such an out of the blue sentence is “to try to construct a context by means of whatever information the pertinent sentence itself provides. And the best source of information we have -apart from lexically based presuppositions- is the TFBS” Buring (1996: 19)<sup>10</sup>.

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<sup>9</sup> Buring (1996) generalizes his analysis even to strong quantifiers. According to him, in out-of-the-blue sentences, the Contextual Domain Variable heavily relies on Topic/Focus/Background structure. I only assume his analysis for those weak quantifiers that are strongly interpreted without the overt version of the partitive form. For strong quantifier (both lexically strong and strongly interpreted (through partitive) weak quantifiers) I defend that the role of the contextual domain restrictor is overtly played by the definite determiner, as a consequence, no pragmatic account is needed for them (see Chapter 2).

<sup>10</sup> Buring’s proposal coincides with the so-called *accommodation of presupposition*. See Karttunen (1973), van der Sandt (1992).

### 3.2.2. Basque Weak Quantifiers and their Proportional / Cardinal Interpretations:

Basque non overtly partitive weak quantifiers can also get proportional (partitive-like) as well as cardinal (non-partitive) readings when the word order of the clause is Subject-Object-Verb, that is to say, the basic word order in Basque. Thus, a sentence like (14) can be interpreted in two different ways, but as mentioned, these readings depend on the accent pattern.

- (14) Superheroi batzu(e)k garagardoa edan zuten.  
superhero some beer-D.sg drink aux.past  
'Some superheroes drank beer.'

On its strong-proportional reading, the meaning of *batzu(e)k* can be paraphrased as *some, but not others*, and is synonymous with the partitive *some of the superheroes* as in (15). The sentence in (14) is then interpreted as though there was a covert version of the partitive *-etatik*.

- (15) Superheroi-**etatik** batzu(e)k garagardoa edan zuten.  
superhero-D.pl/of some beer-D.sg drink aux.past  
'Some of the superheroes drank beer.'

In order to obtain this interpretation (proportional, presuppositional, partitive) the weak quantifier *batzu(e)k* must get what Büring calls the *topic accent* and the object *garagardoa* must get the focus accent. This interpretation is felicitous when the set of superheroes is already under discussion; when the sentence is uttered in an out of the

blue situation, we make use of the TFBS in (16)<sup>11</sup> and a set of potential contexts will be created as in (17).

(16) Superheroi [BATZU(E)K]<sub>T</sub> [GARAGARDOA]<sub>F</sub> edan zuten.  
 superhero some beer-D.sg drink aux.past  
 ‘SOME superheroes drank BEER.’

(17a) Zer edan zuten superheroi guztiek?  
 What drink aux.past superhero all-D.pl.erg  
 ‘What did all the superheroes drink?’

(17b) Zer edan zuten superheroi askok?  
 What drink aux.past superhero many.erg  
 ‘What did many superheroes drink?’

(17c) Zer edan zuten superheroi gutxik?  
 What drink aux.past superhero few.erg  
 ‘What did few superheroes drink?’

There is also a cardinal reading of *superheroi batzu(e)k*, this is in fact the reading we get in *there*-insertion contexts. The cardinal would indeed be the (only) reading we obtain in the following existential sentence.

(18) Badira superheroi batzu(e)k gure bizilagunaren lorategian.<sup>12</sup>  
 yes-be.pl superhero some our neighbour.gen garden.loc  
 ‘There are some superheroes in our neighbours’ garden.’

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<sup>11</sup> Pitch accent is marked by means of capital letters. Recall again that following Büring (1996), it is assumed that these kinds of sentences involve two accents: Topic accent and Focus accent. Note also that in Basque, focus phrases occur immediately to the left of the verb. For different analyses of focus in Basque, see de Rijk (1978), Ortiz de Urbina (1989a, 1999), Etxepare (1997), Elordieta (2000), Etxepare & Ortiz de Urbina (2003), Arregi (2003), Irurtzun (2004) among many others

<sup>12</sup> See Chapter 1: footnote 15.

Therefore, and as the example in (14) (repeated here as (19) for convenience) shows, the subject position of stage-level predicates can be described as an optional definiteness effect context (see fn. 6), both the cardinal and the proportional interpretations are possible. Since for both interpretations a different accentual pattern is assumed, no semantic ambiguity is needed and, as mentioned above, it is the pragmatics that makes the partitive-like interpretation possible.

- (19) Superheroi batzu(e)k garagardoa edan zuten. (=14)  
 superhero some beer-D.sg drink aux.past  
 ‘Some superheroes drank beer.’

As expected, the subject position of individual-level (*maite* -love- in (20a) and *jakin* -know- in (20b-c)) predicates cannot be occupied by weak quantifiers in their cardinal interpretation and only strong quantifiers (20c) --see Chapter 2, section 2.6.1.1.-- and weak quantifiers in their proportional interpretation (20a-b), with a topic accent in the subject, can appear in these contexts.

- (20a) Nerabe BATZU(E)K musika klasikoa maite dute. (weak - proportional)  
 teenager some music classical love aux.pres.pl  
 ‘Some (of the) teenagers love classical music.’
- (20b) Sukaldari ASKOK batxuri zopa prestatzen dakite<sup>13</sup>. (weak - proportional)  
 cook many-erg garlic soup prepare know  
 ‘Many (of the) cooks know how to prepare garlic soup.’

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<sup>13</sup> The verb *jakin* (know) is one of Basque transitive verbs which possesses synthetic verbal forms. The synthetic form in (16b-c) is *dakite*, translated as ‘they know’. See Hualde (2003) for a detailed description of Basque synthetic verbs.

(20c) *Aktore guztiek negar egiten dakite.* (strong)  
actor all-D.pl.erg cry make know  
'All of the actors know how to cry.'

Both the weak subjects in (20a-b), *nerabe batzu(e)k* and *sukaldari askok* respectively, can only be interpreted proportionally, with meanings similar to *some of the teenagers* and *many of the cooks* respectively (again, obtained à la Büring). Proportionally is the only way the strong quantifier in (20c) can be interpreted.

Thus, Büring (1996)'s analysis provides an account for the supposedly ambiguous interpretations of weak quantifiers reducing the adduced ambiguity to pragmatic principles that are needed independently.

The same analysis applies to the rest of Basque weak quantifiers that were presented in Chapter 1 (repeated here for convenience):

(21)

**Weak Quantifiers:** *batzu(e)k* (some), *zenbait* (some), *hainbat* (some), *asko* (many), *gutxi* (few), *ugari* (many), numerals, *numeral baino gehiago* (more than numeral), *numeral baino gutxiago* (less than numeral), etc.

### 3.3. Unrestricted Quantification:

#### 3.3.1. Unrestricted Quantification in Basque:

Chapter 2 has shown that Basque strong quantifiers (*guzti* (all), *den* (all), *bakoitz* (each)<sup>14</sup>) must necessarily appear with the article -A(K), which I claim merges directly with the quantifier and functions as a contextual domain restrictor.

(22a) [Ikasle **guzti-ak**] berandu etorri ziren.  
[student all-D.pl(abs)] late come aux.past.pl  
'All of the students came late.'

(22b) \* [Ikasle **guzti**] berandu etorri ziren.

(23a) [Ikasle **den-ak**] berandu etorri ziren.  
[student all-D.pl(abs)] late come aux.past.pl  
'All of the student came late.'

(23b) \* [Ikasle **den**] berandu etorri ziren.

(24a) [Ikasle **bakoitz-ak**] goxoki bat jan zuen.<sup>15</sup>  
[student each-D.pl(abs)] candy one eat aux.past.sg  
'Each student ate a candy.'

(24b) \* [Ikasle **bakoitz**] goxoki bat jan zuen.

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<sup>14</sup> Recall from section 2.6.2.1.1 of Chapter 2 that *gehien* has been argued not to be a quantifier, but a superlative. This is the reason why it does not appear in this paradigm.

<sup>15</sup> Due to its inherent distributive properties, *bakoitz* is grammatical only in those situations where there is an element (a distributee which can not be the event variable) deeper in the structure over which to distribute (cf. Etxeberria (2002b)). This is the reason why the example in (24a) is different from (22a) and (23a). Would we use *bakoitz* in a sentence like (22), the result would have been ungrammatical

(i) \* Ikasle bakoitz-a berandu etorri zen  
student each-D.abs.sg late come aux.sg.past  
'Each student came late.'

Strongly interpreted weak quantifiers, as is the case in i.e. English, Greek, Catalan or Spanish, restrict their nominal expression overtly (or otherwise through pragmatics with no need to postulate covert partitives --as claimed by Büring (1996), see previous section--) with partitive *of+the* (Basque *-etatik*), which consists of the definite determiner (plus a plural marker in Basque) plus the preposition *of*.

(25) [Ikasle-**etatik gutxi**] iritsi ziren berandu.<sup>16</sup>  
 [student-D.pl/of few] arrive aux.pl.past late  
 ‘Few (of the) students arrived late.’

(26) [Ikasle-**etatik asko**] berandu iritsi ziren.  
 [student-D.pl/of many] late arrive aux.pl.past  
 ‘Many (of the) students arrived late.’

(27) [Ikasle-**etatik batzu(e)k**] berandu iritsi ziren.  
 [student-D.pl/of some] late arrive aux.pl.past  
 ‘Some (of the) students arrived late.’

Crucially in Basque, the D domain restrictor (-A(K)) only appears with lexically strong and strongly interpreted weak quantifiers (see Chapter 2), but it is excluded from weak-cardinal quantifiers. I take this as conclusive evidence for the fact that weak quantifiers must be contextually non-restricted (unless the above mentioned specific accentual pattern is used).

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<sup>16</sup> Note that *gutxi* appears before the verb. See Chapter 1, footnote 22.



Some semanticists have argued that natural languages do also have room for non-restricted quantification (i.e. Cooper (1996), von Stechow (1998)). Basque is in this regard a language that overtly shows the difference between those nominal quantificational expressions that are contextually restricted (by means of D) and those that are not. As presented in the following examples (28-30), Basque cardinal weak quantifiers can not appear with the domain restrictor -A(K), no matter where the definite determiner is placed (in the nominal or in the weak quantifier itself).

(28a) [Politikari **gutxi**] iritsi ziren berandu.

[politician few] arrive aux.pl.past late

‘Few politicians arrived late.’

(28b) \* [Politikari(-ak) **gutxi(-ak)**] iritsi ziren berandu.

[politician(-D.pl) few(-D.pl)] arrive aux.pl.past late

(29a) [Politikari **asko**] berandu iritsi ziren.

[politician many] late arrive aux.pl.past

‘Many politicians arrived late.’

(29b) \* [Politikari(-ak) **asko(-ak)**] berandu iritsi ziren.

[politician(-D.pl) many(-D.pl)] late arrive aux.pl.past

(30a) [Politikari **batzu(e)k**] berandu iritsi ziren.

[politician some] late arrive aux.pl.past

‘Some politicians arrived late.’

(30b) \* [Politikari(-ak) **batzu(e)k(-ak)**] berandu iritsi ziren.

[politician(-D.pl) some(-D.pl)] late arrive aux.pl.past

Taking into consideration that natural language quantifiers must be contextually restricted and that quantification-internal determiners are overt contextual domain

restrictors (as claimed in Chapter 2), these weak quantifiers are proposed not to be base generated at the quantificational type  $\langle\langle e, t \rangle, \langle\langle e, t \rangle, t \rangle\rangle$ , but rather at the predicative type  $\langle e, t \rangle$ . As a consequence, they are not to be considered (real) quantifiers (cf. Milsark (1977), Partee (1988), van Geenhoven (1996), Landman (2000)). Note that these indefinite-like weak quantifiers can in fact appear in predicative position (in (31)); strong quantifiers on the other hand, can not appear in this position and render ungrammatical sentences as the examples in (32) and (33) show.

(31a) Gonbidatuak [neska **asko**] ziren.

guest.D.pl [girl many] be.past

‘The guests were many girls.’

(31b) Gonbidatuak [neska **batzu(e)k**] ziren.

guest.D.pl [girl some] be.past

‘The guests were some girls.’

(31c) Gonbidatuak [neska **gutxi**] ziren.

guest.D.pl [girl few] be.past

‘The guests were few girls.’

(32) \* Gonbidatuak [neska **guzti-ak/den-ak/bakoitz-a**] ziren.

guest.D.pl [girl all-D.pl/all-D.pl/each-D.sg] be.past

‘The guests were all of the girls/all of the girls/each of the girls.’

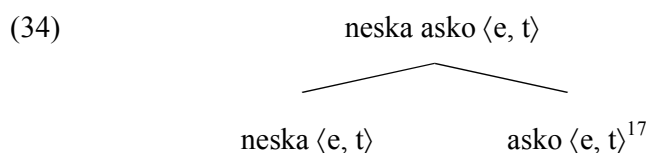
(33) \* Gonbidatuak [nesketatik **asko/batzu(e)k/gutxi**] ziren.

guest.D.pl [girl-D.pl/of many/some/few] be.past

‘The guests were many of the girls/some of the girls/few of the girls.’

Thus, the combination of a cardinal-weak quantifier like i.e. *asko* with an NP predicate like *neska* (which -following standard assumptions again- is also of type  $\langle e, t \rangle$ )

will be carried out through intersection (see i.e. Landman (2002)), yielding an element of type  $\langle e, t \rangle$  as a result. When in predicative position, this is the way they will be interpreted and their structure will be the one in (34).



But the predicative interpretation is not the only interpretation that cardinal weak quantifiers may get since they can also appear in argument position, position in which  $\langle e, t \rangle$  type objects are not allowed and either an entity type  $e$  element or a quantificational type  $\langle \langle e, t \rangle, t \rangle$  element is needed. In this situation, depending on the accentual pattern of the sentence (see section 3.2.2.) weak quantifiers can get a cardinal and a proportional (with contrastive topic accent on the subject) interpretation.

(35) Ikasle askok goxokiak jan zituzten.  
 student many.erg candy-D.pl eat aux.pl  
 ‘Many students ate candies.’

⇒ CARDINAL: many in number

⇒ PROPORTIONAL: many of the students

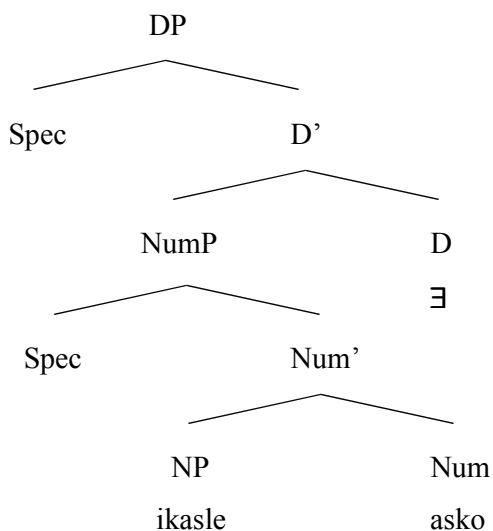
In order to get the cardinal interpretation we will make use of existential closure ( $\exists$ -cl) which allows combining two  $\langle e, t \rangle$  type elements (the weak quantifier *asko* and

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<sup>17</sup> To see where exactly these elements are base-generated see section 3.4.

the NP predicate *ikasle* in (35)) binding the free variable associated to the noun and giving it existential force. The  $\exists$  quantifier introduced by the  $\exists$ -cl will be of quantificational type  $\langle\langle e, t \rangle, \langle e, t \rangle, t\rangle$  and in combination with *ikasle asko* (which is of type  $\langle e, t \rangle$  as already postulated) creates an existential (indefinite) generalized quantifier of type  $\langle\langle e, t \rangle, t\rangle$  that can combine with the VP (*goxokiak jan*) to yield a truth value. (See section 3.4.).

(36) [ [  $\exists x$  [ *ikasle(x) & asko(x)* ] ] & *goxokiak jan(x)* ]



Therefore, cardinal argument interpretations of indefinite noun phrases are derived from predicative interpretations through a type-lifting process by means of the existential closure (see Landman (2001)). This operation takes a set of individuals  $x$  and maps it onto a generalized quantifier, that is, the set of all sets that have a non-empty intersection with  $x$ .

For the proportional interpretation (without the overt partitive construction) on the other hand the weak quantifier must bear a specific accentual pattern (see section 3.2.2.). Semantically it will work just as the weak interpretation, the change comes on pragmatic grounds due to the intonational structure, that is to say, the subject weak quantifier will get the contrastive topic accent while the object will get narrow focus accent. Therefore, this partitive-like interpretation will have nothing to do with the weak quantifier being ambiguous, but rather, pragmatics will decide whether the weak quantifier is interpreted in a proportional manner.

We have claimed (not yet proven) that weak quantifiers in their weak-cardinal interpretation are contextually unrestricted. If, as I claim, quantificational contextual restriction in Basque goes hand in hand with the appearance of the definite determiner (see chapter 2), then, it seems natural to argue that the base-position of weak quantifiers must be below the definite determiner, that is to say, below the DP. This is exactly what we show in section 3.4, where it is claimed that weak quantifiers are base generated in the functional projection NumP<sup>18</sup> associated with the morphological category number (see Ritter (1991), Vangsnes (2001) among many others<sup>19</sup>).

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<sup>18</sup> Artiagoitia (2003) also assumes this intermediate position between the NP and the DP. However (as will be made explicit in the following sections as well as in Chapter 4) although similar in the basic idea, my implementation differs from Artiagoitia (2003)'s in various points and there are some differences among the uses we give to this functional projection.

<sup>19</sup> Many authors have proposed and defended the possibility that (i) weak-cardinal quantifier and strong-proportional quantifiers are base generated in different structural position and that (ii) the ambiguity of weak quantifiers is syntactically expressed, see for example: Hudson (1989), Giusti (1991), Muromatsu (1998)).

More evidence supporting the prediction that weak (cardinally interpreted) quantifiers are unrestricted comes from the fact that, in opposition to strong quantifiers, weak-cardinal quantifiers do not presuppose that the set denoted by the NP (*akats* ‘mistake’ in the following example) is a non-empty domain, salient in the discourse<sup>20</sup>. In the examples in (37), it might well be the case that there are no mistakes to be found.<sup>21</sup>

- (37a) *Akats asko aurkitzen badituzu, goxoki bat emango dizut.*  
 mistake many find if-aux. candy one give aux.  
 ‘If you find many mistakes, I’ll give you a candy.’
- (37b) *Akats gutxi aurkitzen badituzu, goxoki bat emango dizut.*  
 mistake few find if-aux. candy one give aux.  
 ‘If you find few mistakes, I’ll give you a candy.’
- (37c) *Akats batzu(e)k aurkitzen badituzu, goxoki bat emango dizut.*  
 mistake some find if-aux. candy one give aux.  
 ‘If you find some mistakes, I’ll give you a candy.’

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<sup>20</sup> For more discussion on presupposition of determiners, see Matthewson (1998).

<sup>21</sup> Vangsnes (2001: 258-259) claims that in opposition to what happens with so-called indefinite-*this* which appears to be presuppositional, “the examples in (i) and (ii) show that these determiners (weak determiners) may occur in the predicate internal argument of both negated and non-negated existential sentences, suggesting that the noun phrases do not presuppose the existence of its referent.

- (i) a. There was a linguist at the meeting.  
 b. There wasn’t a linguist at the meeting.
- (ii) a. There were many linguists at the meeting.  
 b. There weren’t many linguists at the meeting.”

### 3.3.2. Whether Weak Quantifiers are Really Unrestricted or Not:

Some other authors (i.e. von Fintel (1998), Stanley & Szabó (2000)) have also raised similar questions: Which quantifiers show domain restriction? Are all quantificational expressions domain restricted?

Von Fintel (1994, 1998) assumes that the quantificational covert implicit domain restrictor appears in the quantificational determiner, not in the nominal expression (see Chapter 2, §2.4). According to him, natural language examples show that “contextual domain restriction is a well-rehearsed manoeuvre for definite NPs and for universally quantified NPs (von Fintel (1998: 6))”, but at the same time, it is not that clear whether domain restriction also applies to other quantifiers.

Some examples by van Deemter (1992) argue that in fact, other quantifiers can also be restricted (examples taken from von Fintel (1998: 5))<sup>22</sup>.

- (38) A herd of elephants was visible in the rear window. **Two sick elephants** were lying somewhere in the middle.
- (39) When we arrived in the village, **several houses** were abandoned.
- (40) My desk is a mess. **Many papers** are covered with cigar-ash.
- (41) I came into the room. **At least three students** were asleep.<sup>23</sup>

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<sup>22</sup> Note that for von Fintel (1998), all these sentences (38-41) are ambiguous between a contextually restricted and a non-restricted interpretation.

<sup>23</sup> *At least three* in example (41) is an upward monotonic quantifier in its first argument and for these class of quantifiers it is harder to detect whether they are contextually restricted or not. Von Fintel (1998: 6) claims that they can also be shown to be contextually restricted: “If *at least three students in this room are asleep* is true, then *at least three students in Prague* is true as well and so will an entirely unrestricted

In the examples above, the implicit domain restrictor behaves anaphorically in that it is claimed to be bound by the previous discourse: *a herd of elephants*, *the village*, *my desk*, and *the room* respectively. Thus, these examples would show that the phenomenon of implicit contextual domain restriction extends beyond universal quantifiers and definites, and that, contra what is being claimed and defended in this dissertation, not only strong quantifiers but weak quantifiers too can be contextually restricted.

There is no doubt that the quantifiers (in bold) in all of the above sentences have an implicit contextual variable and quantify over a restricted domain. However, what I would like to argue is that the interpretation of the weak quantifier (when interpreted as contextually restricted) is partitive-like. Since there is no overt partitive construction, the only way (as has already been mentioned) that these weak quantifiers can quantify over a restricted domain is by means of the information provided by the TFBS, which creates a set of potential contexts where the existence of the nominal expression is presupposed.

In (39), for example, the most prominent (and probably the only possible interpretation if the conversation is going to be cooperative) reading of *several houses* is one where these houses are understood to be belonging to the houses of the village already under discussion. Hence, the interpretation of the quantifier is equal to the partitive *several of the houses*. If this is so, the apparently cardinally interpreted weak quantifier becomes quantificational and restricted by means of pragmatics (à la Büring

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*at least three students (whatsoever) are asleep. [...] to show that the quantifier here can be read as contextually restricted, we have to show that someone could object to the second sentence with That's false. They were all wide awake. (It seems to me that such a response is quite in order)."*



(1996)) since there is no overt partitive (hence no overt definite determiner) to restrict the quantificational expression. The same applies to the rest of the examples

Note that in all four examples the weak quantifier appears in subject position, a position that has been argued to be a topic position; recall that following Büring's hypothesis, the partitive interpretation is obtained by means of an intonation pattern where the weak quantifier bears the topic accent. It is then this topic accent (and not a covert version of the partitive construction) which makes the proportional/strong interpretation of these sentences possible, the contrastive topic accent triggers the reconstruction of a particular set of potential contexts, the ones we obtain substituting the weak quantifiers for its contextually relevant alternatives. All these contexts would presuppose the existence of a group of elephants, houses, papers, and students respectively in case the sentences were uttered out of the blue; however, note that in all these examples the set of elephants, houses, papers, and students is already under discussion in the previous discourse.

Stanley & Szabó (2000) also dispute the standard assumption that weak quantifiers are not contextually restricted. One of the examples they offer is the following.

(42) In most of John's classes, he fails exactly three Frenchmen.

In (42), the domain of the second quantifier expression (a weak quantifier expression) varies with the values of the quantificational expression in the first sentence. Thus, (42) expresses the proposition that "for most  $x$  such that  $x$  is a class of

John's, John failed exactly three Frenchmen in x". As a consequence, the weak quantifier expression *three Frenchmen* (apparently in its cardinal interpretation) is claimed to have an implicit contextual variable that restricts its domain and is bound by the upstairs quantifier *most of John's classes*.

The example in (42) is a bit more problematic for the claim that weak quantifiers in its cardinal interpretation are not contextually restricted, but I still believe Stanley & Szabó are using one of the two possible partitive-like interpretations described next: (a) the one where the set of Frenchmen is presupposed to exist and the following partitive-like interpretation is obtained: *three of the Frenchmen in John's class*; (b) a second more likely interpretation is one where the presupposed set is the set of students in John's class. In such a case, the partitive-like interpretation would be *three of the students/men that were French in John's class* (observe the similarity in interpretation with sentence (38)). Observe that in both interpretations the set of Frenchmen as well as the students that are part of John's class are presupposed. For the second partitive interpretation it helps to have stress on *three* (Bill Haddican p.c.). If we assume that (i) this intonational pattern is that of focus, and (ii) an alternative approach to focus (à la Rooth); then, we would be just at the same situation that we have assumed topic accents create: we would have to substitute the focused element by alternatives available in the discourse, which gives the proportional/partitive interpretation.<sup>24</sup>

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<sup>24</sup> Stanley (p.c.) also suggests that a sentence like (i) must necessarily be contextually restricted, and that there is no situation where the sentence in (i) can be contextually unrestricted.

- (i) Many students are from Madrid.

I agree with him on that this sentence is necessarily contextually restricted (interpreted proportionally). However, note that the subject position of individual-level predicates cannot be occupied by weak quantifiers in their cardinal interpretation and only strong quantifiers and weak quantifiers in their proportional interpretation can appear in these contexts (see Milsark (1974, 1977)). In Büring's terms (that I assume), this sentence can only have a single accentual pattern, that where *many* bears the so called

Now that it has been shown that weak-cardinal quantifiers are contextually unrestricted and that a pragmatic account of the partitive reading of weak quantifiers is plausible (à la Büring (1996)), the next section tries to prove (in order to prevent weak quantifiers to appear with the definite determiner unless a partitive construction is formed) that these weak-cardinal quantifiers are base generated below DP and function as cardinality predicates.

### **3.4. Weak Quantifiers are Base Generated below DP:**

As has been claimed extensively in Chapter 2 as well as in the previous sections 3.3.1 and 3.3.2, in Basque, (i) contextual restriction goes hand in hand with the appearance of the definite determiner, (ii) the definite determiner only appears with strong quantifiers (restricting the Q-det in lexically strong quantifiers and the noun with strongly interpreted weak partitive quantifiers), (iii) weak quantifiers have been shown (see previous sections) to exclude the definite determiner and as a consequence to be

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contrastive topic accent which allows the weak quantifier to be contextually restricted and interpreted proportionally. Furthermore, an example like one in (ii) with a stage-level predicate can be easily interpreted in a non-restricted way:

- (ii) Many students went to the Radiohead concert.

If we assume a domain of 10 students in the semantics class, the statement in (ii) can be true in a situation where more than half of them came to the concert, say 6. This would be the proportional reading and we would need Büring's intonational pattern. But 6 are not many in absolute terms. The question then is: would we like to utter (ii) in absolute terms at all? The answer, I think, seems to be positive. Thanks to Anastasia Giannakidou for discussion on this matter.

contextually unrestricted (unless there is a special intonational/accentual pattern that allows to interpret the quantifier partitive-like).

In this section, I would like to argue that weak quantifiers are syntactically base generated below the definite determiner, that is to say, below the DP projection, in order to prevent weak-cardinal quantifiers to appear with determiners.

I will show that the base-position of weak quantifiers is the functional projection NumP associated with the morphological category number (see Ritter (1991), Vangsnes (2001) among many others; see Artiagoitia (2003) for Basque<sup>25,26</sup>).

As has been argued by scholars that have analysed the Basque definite article (i.e. Goenaga (1991), Euskaltzaindia (1993), Ticio (1996), Artiagoitia (1998, 2003), Rodriguez (2003), Trask (2003), among others), this element is realised in two different forms: -A in the singular and -AK in the plural. I also agree with all these authors that the plural form is composed of the determiner -A and the plural marker -K. However, they have (apparently) all assumed that both the -A and the -K are base generated together in the same syntactic position, that is, at the DP head<sup>27</sup>, the same position where the singular -A is claimed to be base generated.

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<sup>25</sup> Eguzkitza (1993) and Artiagoitia (1998) applied Abney (1987)'s proposal of the DP Hypothesis to Basque.

<sup>26</sup> See Chapter 4 for an extended analysis of the Basque definite article.

<sup>27</sup> Or, according to Artiagoitia (2003), at NumP head depending on whether it gets a definite or an indefinite interpretation --see Chapter 4, section 4.6.4--.

The proposal that this section wants to put forward is that the definite determiner -A and plural marker -K are base generated in different syntactic position: the plural marker -K will be claimed to be base generated in NumP while the definite determiner -A will be defended to be base generated where it has standardly been assumed to be generated, in the DP<sup>28</sup>.

One of the arguments in favour of this proposal is based on coordination; let us take the following pair of nouns, *etxe* (house) and *baserri* (farm)<sup>29</sup>, and see what happens when we coordinate them.<sup>30</sup>

- (43) Aldi berean, etxe eta baserria da eraikin hori.  
 period same.loc house and farm-D.sg is building that  
 ‘That building is house and farm at the same time.’

In (43), the singular definite determiner takes scope over the whole coordinated structure as expressed in the example (43’).

- (43’) [ [ etxe ] eta [ baserri ] ] -a

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<sup>28</sup> Artiagoitia (2003) claims that the Basque article can be base generated in two different syntactic positions, NumP and DP (Artiagoitia suggests one is “some kind of Number Phrase”), due to the indefinite (as well as the definite) interpretation that this element can obtain in some particular contexts. See Chapter 4 for discussion on this point.

<sup>29</sup> Note that in Basque nouns are not marked for number and that the determiner has been claimed to be what makes the difference between singular and plural number. Larramendi (1729) claims the following: “el Bascuence tiene al nombre invariable, y solo el articulo haze la diferencia del singular, y plural, v.g. *guizon-á guizon-ac*” [=The noun is invariable in Basque, and only the article makes the difference between the singular and the plural, *guizon-á guizon-ac*] (quotation taken from Azkarate & Altuna (2001: 47))

<sup>30</sup> Thanks to Ricardo Etxepare (p.c.) for extensive discussion on this point.

In (44), we introduce the plural marker -K to the previous construction.

(44) Etxe eta baserriak  
house and farm-D.pl

In this example, the houses, as well as the farms must necessarily be more than one, that is, they must be plural. Due to the fact that the common noun *etxe* in (44) --as well as in the previous example-- does not appear with an overt number marker, it seems as though the plural marker does again take scope over the whole coordinated structure. Of course, this is not unexpected if we consider that the plural marker -K comes after the definite determiner -A and that in Basque, being to the right (in case you are a head) usually means that you take scope over the phrase that appears to your left. Let us suppose that the construction in (44) has the following structure:

(44') [ [ [ etxe ] eta [ baserri ] -a ] -k ]

Let us change the example a little bit and introduce a definite determiner that combines with the first noun in the coordination.

(45) Etxea eta baserriak  
house-D.sg and farm-D.pl

Here too, the plural number marker would apparently take scope over the whole coordinated construction, that is, over both *etxea* and *baserria*.


(45') [ [ [ [ etxe ] -a ] eta [ [ baserri ] -a ] ] -k ]


However, as opposed to the example in (44) a problem arises, since in this construction we can only make reference (unexpectedly) to just a single house (in opposition to the interpretation in (44)).

On the contrary, if we assume that the number marker is base-generated below the definite determiner we would obtain the following structure (in an abstract way).

(46) [ [ [ etxe ] Num ] -a ] eta [ [ [ baserri ] Num ] -a ]

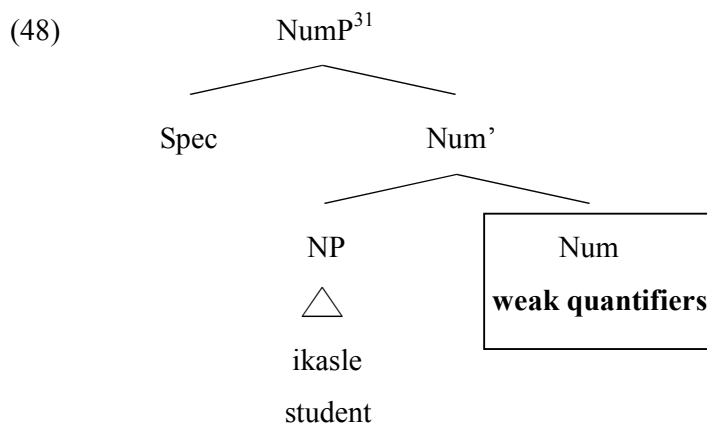
What we have in this example is DP coordination. Each DP will have its own number: the first common noun will be singular (with an empty number marker  $\emptyset$ ) while the second common noun will be plural (with the plural marker -K); hence, we will be able to interpret the construction properly, a single house and more than one farm. To get the final surface word order, the Number head will have to move up adjoining to the D head.

(47a) Singular: [ [ [ etxe ]  $\emptyset$  ] -a ]  $\emptyset$   $\Rightarrow$  etxe-a  


(47b) Plural: [ [ [ etxe ] -k ] -a ] -k  $\Rightarrow$  etxe-a-k  


The plural marker -K can be considered a suffix, and as such it is dependent phonologically as well as categorically on another category (in opposition to clitics which are only phonologically dependent (see Zwicky (1977, 1985)), and this category seems to be a D° head. Therefore, it is possible to postulate that this last movement of the plural marker to the final position of the DP will be due to morphology. The fact that the plural marker is a suffix prevents us from having to assume that weak-cardinal quantifiers, those that I'm proposing base generate in NumP, would also have to move to the DP position; weak quantifiers are not affixes.

Thus, the syntactic structure of a weak-cardinal expression in predicative position will be the one that follows. This structure is of predicative type ⟨e, t⟩.



<sup>31</sup> Note that I am assuming a head final structure. The Specifier position will always be to the left. See among others Ortiz de Urbina (1989a), Laka (1990), Elordieta (2001), and Artiagoitia (2000). Ortiz de Urbina (1989a) and Laka (1990) claim that left periphery projections (focus, negation, wh head, etc.) are head initial; this differentiation creates an asymmetry in Basque syntax. On the contrary, Haddican (2001, 2004, 2005) suggests, following Kayne (1994), that Basque is a head initial language.



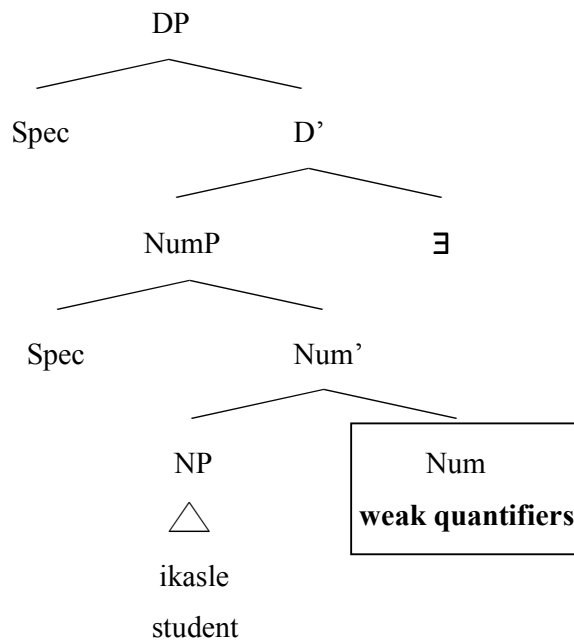
However, weak-cardinal quantifiers can also appear in argument position, a position in which  $\langle e, t \rangle$  type objects are not allowed and either an entity type  $e$  element or a quantificational type  $\langle\langle e, t \rangle, t\rangle$  element is needed. It has already been claimed too (in section 3.3.1) that weak quantifiers, in order to be able to appear in argument position need make use of the existential closure ( $\exists$ -cl), which allows combining two  $\langle e, t \rangle$  type elements binding the free variable and giving it an existential meaning. The  $\exists$  quantifier introduced by the  $\exists$ -cl will be of quantificational type  $\langle\langle e, t \rangle, \langle\langle e, t \rangle, t\rangle\rangle$  and in combination with a predicate of type  $\langle e, t \rangle$  creates an existential (indefinite) generalized quantifier of type  $\langle\langle e, t \rangle, t\rangle$  that can combine with the VP to give a truth value. This implicit existential quantifier will be placed in  $D^{32}$  and the logical form that we will get for a sentence like the one in (35) is (36) --both examples repeated here as (49) and (50) for the reader's convenience--.

(49) Ikasle askok goxokiak jan zituzten.  
 student many.erg candy-D.pl eat aux.pl  
 ‘Many students ate candies.’

(50) [ [  $\exists x$  [ ikasle(x) & asko(x) ] ] & goxokiak jan(x) ]

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<sup>32</sup> Longobardi (1994) --and subsequent work-- claims that DPs with an empty D node will be given universally an existential interpretation by default. The fact that there is an existential quantifier that fills the empty D head could be related to this idea. However, note that (in opposition to Artiagoitia (2003) who assumes this analysis for simple DPs) I don't assume this to be the case with the Basque definite article which I suggest is always head of DP.



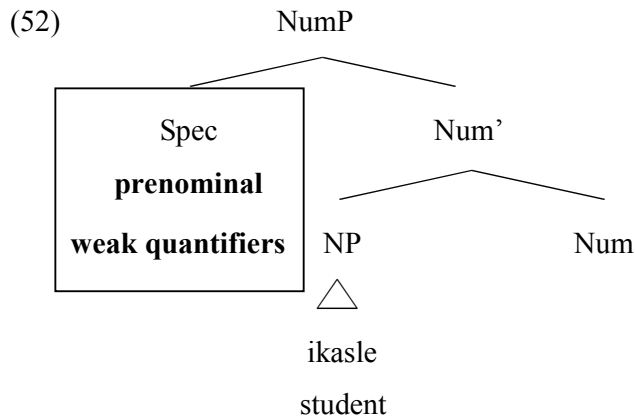
The weak-cardinal quantifiers that have been (mainly) used in the examples up until now have the property of always appearing in postnominal position, i.e. *asko*, *gutxi*, *batzu(e)k*, etc. Yet, there are also other Basque weak quantifiers that appear in prenominal position, preceding the common noun<sup>33</sup> (see also some examples in Chapters 1 and 2).

(51a) **Zenbait** ikaslek goxokiak jan zituzten.  
 some student.erg candy-D.pl eat aux.pl  
 ‘Some students ate candies.’

(51b) **Hainbat** ikaslek goxokiak jan zituzten.  
 some student.erg candy-D.pl eat aux.pl  
 ‘Some students ate candies.’

<sup>33</sup> All of the Basque numerals, except *bat* ‘one’ and in some dialects *bi* ‘two’, are prenominal. See fn.38.

These prenominal weak quantifiers (following Artiagoitia (2003)) will be claimed to occupy the specifier position of NumP to the left of the noun as the structure in (52) exemplifies.



The fact that these weak-cardinal quantifiers have a phrase-like flavour is evidence in support of the claim that they fill the specifier position<sup>34</sup>: *zenbait* and *hainbat* both derive from the genitive *\*zeren* (of it) and *\*haren* (of it) (respectively) + the numeral *bat*.<sup>35</sup>

<sup>34</sup> More complex weak quantifiers also appear in the prenominal position (only), hence, at the [Spec, NumP] position. *Honenbeste* (as many of this), *horrenbeste* (as many of that), *hainbeste* (as many of that -distal-) can also appear in this position; they are all complex: *honen+beste*, *horren+beste*, *haren+beste*. I do not treat these elements in this dissertation, however, I think that the proposal that is being put forward in this section/chapter can also be applied to them.

<sup>35</sup> Note that *zenbait* is also accepted in postnominal position; in this case, *zenbait* does not behave as a complex expression and it will be taken to be a simple phrase instead.

- (ia) **Zenbait** ikaslek goxokiak jan zituzten.  
 some student.erg candy-D.pl eat aux.pl  
 ‘Some students ate candies.’
- (ib) Ikasle **zenbait-ek** goxokiak jan zituzten.  
 student some.erg candy-D.pl eat aux.pl  
 ‘Some students ate candies.’

### 3.4.1. Numerals vs. Other Weak Quantifiers in Basque:

Not all Basque prenominal weak quantifiers are of a complex nature since numerals can also appear in this position.

- (53) **Zazpi ikaslek** goxokiak jan zituzten.  
seven student.erg candy-D.pl eat aux.pl  
'Seven students ate candies.'

There is a further property that makes numerals different from both complex weak quantifiers as *zenbait*, *hainbat*, etc., as well as from postnominal weak quantifiers (*asko*, *gutxi*, *batzu(e)k*, etc.): Numerals can appear with the definite determiner while the others can not as the examples in (54) show (see more on this below).

- (54a) **Zazpi ikasle-ek** goxokiak jan zituzten.  
seven student-D.pl.erg candy-D.pl eat aux.pl  
'The seven students ate candies.'
- (54b) \* **Zenbait ikasle-ek** goxokiak jan zituzten.  
some student-D.pl.erg candy-D.pl eat aux.pl  
'The some students ate candies.'
- (54c) \* **Hainbat ikasle-ek** goxokiak jan zituzten.  
some student-D.pl.erg candy-D.pl eat aux.pl  
'The some students ate candies.'

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The ergative case marker in (ib) is just -k, the -e- in between makes the combination of two consonants possible; that is, -e- is used to avoid the combination of *t* and *k*, an unavailable combination in Basque. So, -ek in (ib) is not the plural determiner. See i.e. Euskaltzaindia (1993: 191).

(54d) \* **Politikari asko-ak** berandu iritsi ziren.  
politician many-D.pl late arrive aux.pl.past  
'The many politicians arrived late.'

(54e) \* **Politikari batzu(e)k-ak** berandu iritsi ziren.  
politician some-D.pl late arrive aux.pl.past  
'The some politicians arrived late.'

The question to ask now is: what makes them different? The answer that I would like to propose is that numeral weak quantifiers can be definite and referential, contrary to the rest of Basque weak quantifiers that cannot get these interpretations. All of them (numerals and others) are claimed to be expression of cardinality, the only difference between pure cardinal words (numerals) and the rest of weak quantifiers is that in the latter the exact number is unspecified (as asserted in Milsark (1977)).

#### **3.4.1.1. Numerals in Basque:**

Assuming that numerals are base generated in the [Spec, NumP] position (just like the rest of pronominal weak quantifiers) and following the argumentation presented in this chapter; the most natural assumption for constructions such as those in (55a) where the numeral appears with the definite article plus the plural marker is that the plural marker -K is base-generated (as already defended) in the head position of NumP. Now, the main assumption that we need to make is that the presence of the plural marker -K makes the presence of the definite article<sup>36</sup> obligatory in the DP projection.

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<sup>36</sup> Recall that the Basque plural marker -K has been claimed to be a suffix that must necessarily be adjoined to a category.

Taking into account that the definite article will always be head of DP (see Chapter 4), the presence of the existential quantifier ( $\exists$ ) that allows indefinite interpretations for weak quantifiers --as claimed for (50)-- will be lexically blocked and hence the interpretation of the expression *zazpi ikasleak* (lit.: seven student the.pl) will obligatorily be definite and referential<sup>37, 38</sup>.

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<sup>37</sup> Contra Barwise & Cooper (1981) and many others that claim that constructions such as *zazpi ikasleak* ‘the seven student’ are quantificational rather than referential. See also Landman (2001).

<sup>38</sup> There is one numeral that can not be combined with the definite determiner: *bat* ‘one’.

- (i) \* Jonek liburu bata irakurri zuen.  
 Jon.erg book one-D.sg read aux.past  
 ‘Jon read the one book.’

Alternatively, *bat* can be claimed not to be a numeral but an indefinite article, of category D, which is in complementary distribution with the definite article -A. Furthermore, what would be expressed by *liburu bata* is already expressed by the necessarily definite *liburua* in (ii).

- (ii) Jonek liburua irakurri zuen.  
 Jon.erg book-D.sg read aux.past  
 ‘Jon read the book.’

It seems as though the ungrammaticality of *liburu bata* is similar to the ungrammaticality of English *\*the a book* or the Spanish *\*el un libro*.

In some dialects *bi* ‘two’ is also postnominal (see fn. 33). This might be problematic for the proposal that this chapter is putting forward since postnominal *bi* does unexpectedly accept to be combined with the definite article and apparently both *bi* and the plural marker -K would be base-generated at the same syntactic slot, that is, [Head, NumP].

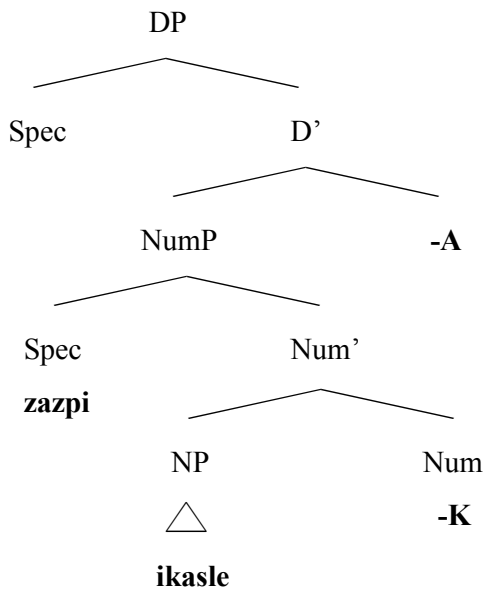
- (iii) Mutil biak berandu iritsi ziren.  
 boy two-D.pl late come aux.past.  
 ‘The two boys arrived late.’

It could be claimed that (iii) *bat/bi* are not numerals but indefinite articles: *bat* ‘one’ would be the indefinite article while *bi* ‘two’ would be the dual article, and that (ii) Basque uses the indefinite articles in order to express the numerals ‘one’ and ‘two’. For more discussion on different number values, see Corbett (2000).

There is only one situation where *bata* ‘the one’ is grammatical: explicit contrastive contexts. Once you eliminate *beste* ‘the other’ (the element that creates the contrast) in the second sentence in (iva), the result is out as the example in (ivb) demonstrates.

- (iva) Batak oilaskoa jan zuen, besteak patata frijituak.  
 one-D.sg chicken eat aux, other-D.sg potato fried  
 ‘The one ate chicken, the other chips.’  
 (ivb) \* Batak oilaskoa jan zuen.  
 one-D.sg chicken eat aux.  
 ‘The one ate chicken.’

- (55) [zazpi ikasle]-ak  
 seven student-D.pl  
 ‘The seven students.’



What the combination of *zazpi ikasle* and the definite determiner -A(K) yields is a plural individual of type *e*. In other words, the combination of the numeral and the common noun creates an  $\langle e, t \rangle$  type element, a set of seven students. On the other hand, the definite determiner will be of type  $\langle \langle e, t \rangle, e \rangle$ , that is to say, it takes a set of seven

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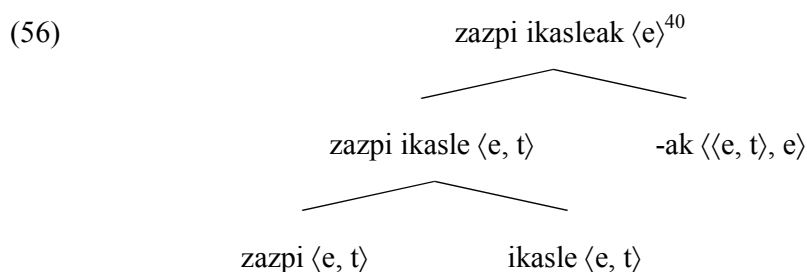
Note that constructions like (iva) are also grammatical in other languages, i.e. Spanish, French.

- (va) Spanish: El uno comió pollo, el otro patatas fritas.  
 the one ate chicken the other potatoes fried  
 (vb) French: L'un mange du poulet, l'autre des frites.  
 the'one ate chicken the'other chips

Again, once you make the contrast silent, the sentences become ungrammatical.

- (via) Spanish: \* El uno comió pollo.  
 the one ate chicken  
 (vib) French: \* L'un mange du poulet.  
 the'one ate chicken

students as an input and returns (in this case) a plural individual of type  $e$  as expressed in (56) (see chapter 4)<sup>39</sup>. This plural individual will refer to a contextually specified set of seven students, that is, it will be contextually restricted the same way a definite DP is taken to be. For the proportional interpretation the partitive construction is used, where the definite article combines with the noun and the numeral is claimed (together with the rest of weak quantifiers when in partitive constructions) to be of quantificational type. The interpretation of this construction might be specific (see Enç (1991)), but never definite and referential.



Muromatsu (1998: 132) claims that “even indefinite noun phrases present meaning differences: differences in reference and difference in specificity”. Definites will be exhaustive; indefinites induce the partitive meaning. Thus, I claim that numerals get definite (exhaustive) interpretation in [Numeral+Noun+AK] sequences. Sentence (54a) is interpreted as follows: the students were seven and all of them ate a candy. On the other hand, when the numeral appears in a partitive construction of the form [Noun+D.pl/of+Numeral] as in (57), the interpretation that we get is not one of

<sup>39</sup> In order to form generalized quantifiers of type  $\langle \langle e, t \rangle, t \rangle$ , weak quantifiers are assumed to be base-generated in Q-detP and be of quantificational type  $\langle \langle e, t \rangle, \langle \langle e, t \rangle, t \rangle \rangle$ . In these cases, the partitive construction (*-etatik* ‘of the’) must be necessarily overt. See Chapter 2.

<sup>40</sup> The syntactic structure has been simplified.



exhaustivity, but rather something like ‘seven students that ate a candy were a subgroup of the students’ (see Enç (1991), see Chapter 2 for an analysis of Basque partitives). Note that the definite interpretation is not allowed for partitives.<sup>41</sup>

- (57) *Ikasleetatik zazpik goxoki bat jan zuten.*  
 student-Dpl./of seven.erg candy one eat aux.past  
 ‘Seven of the students ate a candy.’

However, and in opposition to what seems to be the case when the definite article appears with numerals, the combination of the Basque definite determiner -A and the plural marker -K does not always create definite interpretations when merged with a common noun: It can also yield existential indefinite interpretations in some (not all) contexts<sup>42</sup>.

- (58) *Jonek liburuak irakurri zituen.*  
 Jon.erg book-D.pl read aux.past  
 Definite: ‘Jon read the books.’  
 Existential: ‘Jon read books.’

---

<sup>41</sup> According to Muromatsu (1998: 130), Inoue (1978) notes that in Japanese “an exhaustive/partitive meaning difference obtains when the noun phrases are definite, though when the noun phrase is indefinite, this is not the case”.

<sup>42</sup> An existential interpretation is also available for the definite article when it combines with a [noun+adjective] sequence.

- (i) *Aitorrek neska politak ikusi zituen Parisen.*  
 Aitor-erg girl pretty-D.pl see aux.past Paris.loc  
 ‘Aitor has seen pretty (the) girls in Paris.’

See Chapter 4 for a semantic analysis of the Basque definite determiner and its possible interpretations both in subject and object position.

In Chapter 4 it is argued that in order for a [Noun+A(K)] sequence to obtain the existential interpretation (cf. (58)) it must necessarily first go through the Kind denotation (see Carlson (1977), Chierchia (1998), Dayal (2004), Zamparelli (2002a, 2002b) and references therein). Note that [Numeral+Noun] sequences can not denote kinds (see the reply in (59)); they may denote generic interpretations, but crucially no definite determiner is required in this case. (The following example is taken from Buring (1996: 22); translation my own).

(59) Julen: Nola deitzen zaio **hiru musikari-k**<sup>43</sup> osatzen duten taldeari?  
 how call aux three musician.erg form aux group.dat  
 ‘What do you call a group of three musicians?’

Igor: Ez dakit<sup>44</sup>!! **Lau musikari-k** osatzen dutenari laukotea deitzen zaio.  
 no know four musician-erg form aux.to quartet-D.sg call aux  
 ‘I don’t know!! Four musicians you call a quartet.’

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<sup>43</sup> Note that there is no article in these [numeral+noun] sequence, the -k corresponds to the ergative case marking.

<sup>44</sup> See fn. 13.

### 3.4.1.2. Other Weak Quantifiers in Basque:

#### 3.4.1.2.1. Prenominal Weak Quantifiers:

We have seen in the examples (54b-c) that prenominal weak quantifiers can not be combined with the Basque definite article (except numerals, for reason that have been explained above).

(60a) \* **Zenbait ikasle-ek**      goxokiak    jan zituzten.      (=54b)  
      some    student-D.pl.erg candy-D.pl eat aux.pl  
      ‘The some students ate candies.’

(60b) \* **Hainbat ikasle-ek**      goxokiak    jan zituzten.      (=54c)  
      some    student-D.pl.erg candy-D.pl eat aux.pl  
      ‘The some students ate candies.’

If we just consider syntactic facts, this behaviour is completely unexpected since being these weak quantifiers prenominal as they are, the NumP head position is not occupied, and the plural marker -K should have no problem to be base-generated in that position.

However, the reason of the ungrammaticality of sentence (60) is not related to the base generating position of the plural marker, but rather to the fact that the presence of the Basque plural marker -K makes the presence of the definite article obligatory, and hence, the interpretation of the subjects in (60) would necessarily be definite and referential, an interpretation that these quantifiers can not obtain (see previous section).

Such a combination [WeakQ+Noun+AK] would provide a contextually restricted, definite, specific, and referential interpretation (one similar to a definite DP like *mutil-a* ‘the boy’); but the exact number of weak quantifiers (in contrast with numerals) is unspecified. In other words, numerals, as opposed to the rest of weak quantifiers, can make reference to a specific set. As I said before, when we utter something like *zazpi ikasle* ‘seven students’ we are usually speaking about a set of seven students (not seventy two) and when we want to refer to them as a plural specific/referential set we make use of the definite determiner. On the other hand, the rest of weak quantifiers (both prenominal and postnominal) can not make reference to a specific set the way numerals can, since their number is clearly unspecified; hence the impossibility to be combined with the definite determiner.

The only construction where these unspecified weak quantifiers allow the definite article (excluding numerals again) is the partitive construction where the definite plays the role of the contextual domain restrictor (Chapter 2). Recall that in these constructions, the interpretation that weak quantifiers force is the proportional one and that their behaviour is parallel to that of strong quantifiers. In such a case their base generating type is not of  $\langle e, t \rangle$ , but quantificational  $\langle\langle e, t \rangle, \langle\langle e, t \rangle, t \rangle\rangle$ , yielding as a result a generalized quantifier of type  $\langle\langle e, t \rangle, t \rangle$  when combined with the partitive construction (common noun plus the partitive) of predicative type  $\langle e, t \rangle$  (see chapter 2).

#### **3.4.1.2.2. Postnominal Weak Quantifiers:**

The explanation provided in the previous section (3.4.1.2.1) should be applied to every weak quantifier which is unspecified for number, that is, every weak quantifier

except numerals. Therefore, the weak quantifiers that appear in postnominal position (*asko*, *gutxi*, *batzu(e)k*, etc) are also included in this group.

(61a) \* **Politikari asko-ak** berandu iritsi ziren.<sup>45</sup> (=54d)  
 politician many-D.pl late arrive aux.pl.past  
 ‘The many politicians arrived late.’

(61b) \* **Politikari gutxi-ak**<sup>46</sup> berandu iritsi ziren.

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<sup>45</sup> Note that the ungrammaticality of these constructions shows that in Basque these elements do not seem to behave like adjectives contrary to what have been proposed for other languages; i.e. English: *the many*, *the few*; Spanish: *los muchos*, *los pocos* (see Higginbotham (1987), Partee (1988), Svenonius (1992) among many others). However, not every speaker accepts these constructions; those speakers that judge them as ungrammatical accept the definite determiner with English *few* or Spanish *pocos* only when they are accompanied by a relative clause. Constructions such as English *the few* and Spanish *los pocos* without the relative clause and English *the many* and Spanish *los muchos* in general (with or without relative clauses) are out according to these speakers.

- (ia) \* The many students arrived late.
- (ib) \* The few students arrived late.
- (ic) \* The some students arrived late.
  
- (iia) \* The many students that arrived late missed the bus.
- (iib) The few students that arrived late missed the bus.
- (iic) \* The some students that arrived late missed the bus.

Thanks to Bill Haddican and Brendan Costello for help with the English data. In this dissertation, weak-cardinal quantifiers are treated as cardinality predicates that are born in NumP. See section 3.5 for some exceptions to this rule.

<sup>46</sup> There is a problematic usage of *gutxi* for the analysis that it is being proposed in this chapter. Following the current proposal, if both *gutxi* and the plural marker -K are base generated at the same syntactic position (head of NumP), the result should not be grammatical, but contra prediction, it is.

- (i) Helmuga gurutzatu zuten txirrindulari **gutxiak** leher eginda iritsi ziren.  
 finish line cross aux cyclist few-D.pl burst do arrive aux  
 ‘The few cyclists that crossed the finish line did so exhausted.’

One of the specific characteristics of this usage of *gutxi* is that it is (almost) always used inside relative clauses (see fn.45). It does not seem to be a coincidence that i.e. Spanish *los pocos* or English *the few* are completely grammatical when in relative clauses and not that good (or even ungrammatical, just as in Basque) otherwise.

A possible way out of the problem would be to claim that the definite determiner that appears with *gutxi* in sentences like (i) is the definite determiner that is related to the relative clause. However, this does not solve the problem and it’s apparently a quite ad hoc solution since if this was the case, the rest of weak quantifiers should also allow the definite determiner in relative clauses, but they do not (this is also the case in English and in Spanish).

- (iia) \* Helmuga gurutzatu zuten txirrindulari **askoak** leher eginda iritsi ziren.  
 finish line cross aux cyclist asko-D.pl burst do arrive aux.

politician few-D.pl late arrive aux.pl.past

‘The many politicians arrived late.’

(61b) \* **Politikari batzu(e)k-ak** berandu iritsi ziren. (=54e)

politician some-D.pl late arrive aux.pl.past

‘The some politicians arrived late.’

Again, the reason why the definite article cannot be combined with weak quantifiers is due to the fact that weak quantifiers (by default) do not accept definite interpretations. Furthermore, note that in this case, the base-position of postnominal weak quantifiers is head of NumP, the position where the Basque plural marker -K has been claimed to be base-generated. Of course, these two elements can not be claimed to be generated in the same position and as a result, the construction ends up being ungrammatical.

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‘The many cyclists that crossed the finish line were exhausted.’

(ii) \* **Helmuga gurutzatu zuten txirrindulari zenbaitak** leher eginda iritsi ziren  
finish line cross aux cyclist asko-D.pl burst do arrive aux.

‘The some cyclists that crossed the finish line were exhausted.’

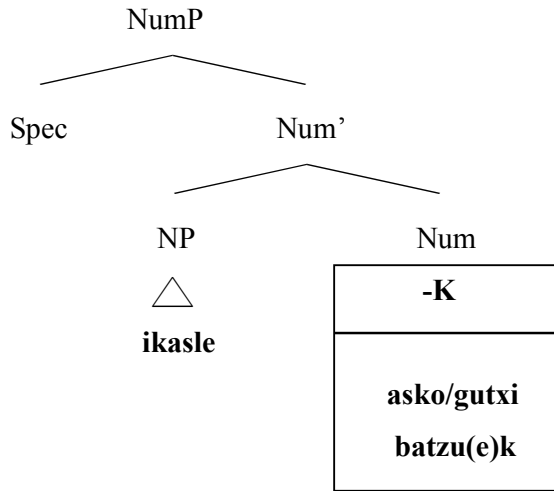
Another possible solution would be to argue that *gutxi+ak* is a strong quantifier just like *guztiak*, *denak*, etc. This would solve the problem of base generation since in this case, the complex *gutxi+a* would be base generated at Q-det and only the plural marker would appear at the NumP head; we would neither have to worry about the fact that the rest of weak quantifier do not appear with the definite determiner, we could always argue that they can not be strong quantifier unless a partitive construction is introduced. However, I’m not sure whether the semantic behaviour of *gutxiak* is equal to the one shown by *guztiak* and other real strong quantifiers.

A third possible option could be to claim that *gutxi*, contrary to other weak-cardinal quantifiers, and in accordance with numerals can be definite and referential. This explanation could be on the right track since in fact it seems as though the set denoted by *NP gutxiak/the few NP/los pocos NP* is indeed referential. However, this explanation would mean that these weak quantifiers can be specified for number, and it does not seem to be the case.

Be that as it may, I don’t have a satisfactory solution to the problem at the moment and I will leave it for future research.

Note that Artiagoitia (2003: 55) generalizes the use I’ve just described for *gutxi* to the rest of weak quantifiers, a generalization that I don’t agree with (neither does the vast majority of Basque speakers I’ve checked with). Note also that some speakers do not accept *gutxi+ak*; for the construction to be judged grammatical these speakers need to change the definite article by a demonstrative (thanks to Ricardo Etxepare for pointing this out to me).

(62) \* Ikasle asko-ak/gutxi-ak/batzuek-ak



Once it has been defended that the syntactic base position of weak quantifiers is NumP; the next section discusses some differences in interpretation that come out when the common noun beside weak-cardinal quantifiers is elided.

### 3.5. Weak-cardinal Quantifiers and Predicative Interpretations:

Up until now, the chapter has mainly concentrated in three things: (i) it has tried to show that weak-cardinal quantifiers are unrestricted, something that Basque language shows in the overt syntax since weak quantifiers, in opposition to strong ones, do not appear with the definite article which this dissertation has claimed (in line with Giannakidou (2004)) to be a contextual domain restrictor; (ii) it has proven that these weak quantifiers obtain different interpretations; these different interpretations are

however not due to their lexical ambiguity but to the intonational pattern that they follow and TFBS of the sentence (à la Büring (1996)); (iii) it has put forward and defended that so-called weak quantifiers are base-generated in the functional projection NumP (below DP, to avoid their appearance with definites) and that despite some differences between prenominal and postnominal, numerals and non-specific weak quantifiers, their base-generating position is always NumP.

So far, it seems as though all of the Basque weak-cardinal quantifiers have a similar behaviour. They have been grouped together because, in opposition to strong quantifiers, they are all predicative, non-presuppositional, etc. Furthermore, these properties apart from some language internal differences (i.e. Basque weak quantifiers can be prenominal and postnominal --not both normally--, English and Spanish weak quantifiers are always prenominal, etc.), seem to be applicable crosslinguistically (see chapter 1).

Thus, as expected, all [weak quantifiers + noun] sequences yield grammatical sentences when in predicative positions as the examples in (63) clearly demonstrate (some repeated from example (31) for convenience).

- (63a) Gonbidatuak [neska asko] ziren.  
 guest-D.pl girl many be.past  
 ‘The guests were many girls.’
- (63b) Gonbidatuak [neska gutxi] ziren.  
 guest-D.pl girl few be.past  
 ‘The guests were few girls.’
- (63c) Gonbidatuak [bost neska] ziren.  
 guest-D.pl five girl be.past  
 ‘The guests were five girls.’



- (63d) Gonbidatuak [bost neska baino gehiago] ziren.  
 guest-D.pl five girl comp. more be.past  
 ‘The guests were more than five girls.’
- (63e) Gonbidatuak [neska batzu(e)k] ziren.  
 guest-D.pl girl some be.past  
 ‘The guests were some girls.’
- (63f) Gonbidatuak [zenbait neska] ziren.  
 guest-D.pl some girl be.past  
 ‘The guests were some girls.’
- (63g) Gonbidatuak [hainbat neska] ziren.  
 guest-D.pl some girl be.past  
 ‘The guests were some girls.’

As already claimed too, the so-called Basque strong quantifiers are not acceptable in this kind of constructions.<sup>47</sup>

- (64a) \* Gonbidatuak [neska guzti-ak] ziren.  
 guest.D.pl girl all-D.pl be.past  
 ‘The guests were all of the students.’
- (64b) \* Gonbidatuak [neska den-ak] ziren.  
 guest.D.pl girl all-D.pl be.past  
 ‘The guests were all of the students.’
- (64a) \* Gonbidatuak [neska bakoitz-a] zen.  
 guest.D.pl neska each-D.sg. be.past  
 ‘The guests were each students.’

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<sup>47</sup> Note that weak quantifiers with overt partitive constructions, that is, strongly interpreted weak quantifiers, are also ungrammatical in predicative position.

- (i) \* Gonbidatuak [nesketatik asko] ziren.  
 guest-D.pl girl-D.pl/of many be.past  
 ‘The guests were many of the girls.’

However, a problem arises 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. In such a situation, quite unexpectedly, not all of the (so-called) Basque weak quantifiers behave alike and some differences emerge.

The examples (65a-d) are completely grammatical and the only interpretation they get is the predicative one; the proportional interpretation is, as predicted, completely out.

- (65a) Gonbidatuak [asko] ziren.  
guest.D.pl [many] be.past  
'The guests were many (in number)'
- (65b) Gonbidatuak [gutxi] ziren.  
guest.D.pl [few] be.past  
'The guests were few (in number)'
- (65c) Gonbidatuak [bost] ziren.  
guest.D.pl [five] be.past  
'The guests were five'
- (65d) Gonbidatuak [bost baino gehiago] ziren.  
guest.D.pl [five comp. more] be.past  
'The guests were more than five'

Things change when the weak quantifiers used are *batzu(e)k* (some) and *zenbait* (some). With these quantifiers, you can make the common noun silent and in case you do so, the sentences become automatically ungrammatical.

(66a) \* Gonbidatuak [batzu(e)k] ziren.<sup>48</sup>

guest.D.pl [some] be.past

‘The guests were some’

(66b) \* Gonbidatuak [zenbait] ziren.

guest.D.pl [some] be.past

‘The guests were some’

Strong quantifiers follow their well established pattern and continue being ungrammatical in these contexts.

(67a) \* Gonbidatuak [guzti-ak] ziren.

guest.D.pl all-D.pl be.past

‘The guests were all.’

(67b) \* Gonbidatuak [den-ak] ziren.

guest.D.pl all-D.pl be.past

‘The guests were all.’

(67a) \* Gonbidatuak [bakoitz-a] zen.

guest.D.pl each-D.sg. be.past

‘The guests were each.’

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<sup>48</sup> It might seem at first sight that the sentences in (66) are grammatical since sentences with the same word order in the overt syntax can be grammatical.

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

Note however that if the sentence is going 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 examples the element that is the predicate is *gonbidatuak*, and not *batzu(e)k*. In fact, *gonbidatuak* in (i) has been moved to the front from sentence final position, and the natural word order is (ii).

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

Now, since the possibility of appearing in predicative position is one of the tests used in the literature to separate strong from weak quantifiers (see i.e. Bowers (1975), Higginbotham (1987), Landman (2001)); what the data in (63) through (67) suggest is that *batzuek* and *zenbait* should be considered proportional/strong, and not cardinal/weak, as we initially thought. In other words, considering that their behaviour is equal to strong quantifiers when it comes to predicative interpretations, why should they be claimed to be something else?

This particular behaviour shown by Basque *batzuek* and *zenbait* does not only concern this language and the same behaviour can be observed in languages such as English or Spanish as the following examples show.

English:

(68a) The guests were many/few students.

(68b) The guests were many/few.<sup>49</sup>

(69a) The guests were some students.

(69b) \* The guests were some.

Spanish:

(70a) Los invitados eran muchos/pocos estudiantes.

the.pl guest.pl be.past many/few students

‘The guests were many/few students.’

(70b) Los invitados eran muchos/pocos.

the.pl guest.pl be.past many/few

‘The guests were many/few.’

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<sup>49</sup> The same applies to all the other weak quantifiers except for *some*. See next example.

(71a) Los invitados eran algunos/unos estudiantes.<sup>50</sup>

the.pl guest.pl be.past some/some students

‘The guests were some students.’

(71b) \* Los invitados eran algunos/unos.

the.pl guest.pl be.past some/some

‘The guests were some.’

It seems as though the English and Spanish counterparts of Basque *batzuek* and *zenbait* when the nominal expression is made silent also behave as strong quantifiers in that they can not appear in predicative position (see Higginbotham (1987)).<sup>51</sup>

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<sup>50</sup> Spanish has two plural existential determiners: *unos* ‘a-plural’, *algunos* ‘some-plural’. For more discussion on this see Gutierrez-Rexach (2001) and Alonso-Ovalle & Menendez-Benito (2002). Note that when *batzuek* and *zenbait* appear with the noun, they are translated as *unos*; when the noun is elided on the other hand, they are translated as *algunos*.

<sup>51</sup> There are also some other situations in which English *some* and Spanish *algunos/unos* differ from the behaviour shown by the rest of weak quantifiers and apparently behave the way strong quantifiers do. For example, they cannot follow the definite article.

English:

(i) The five/many/few students. (but see footnotes 45 & 46)

(ii) \* The some students.

Spanish:

(i) Los cinco/muchos/pocos estudiantes. (but see footnotes 45 & 46)  
the five/many/few students

(ii) \* Los algunos/unos estudiantes  
the some/some students

Note that not every speaker agrees with the claim that English *the many/few* and Spanish *los muchos/pocos* are completely grammatical unless a relative clause is introduced (see fn. 46 for a similar claim in Basque, Basque *asko* ‘many’ can never appear with the definite article though). In Basque, only numerals allow appearing with the definite article (*bost ikasleak* ‘lit.: five student D.pl’, and in such situations, the construction can only obtain a definite referential interpretation (see section 3.4.1.1)). Thanks to Bill Haddican and Brendan Costello for help with the English data.

Bowers (1975) called these properties (see also Higginbotham (1987), Svenonius (1992)) adjectival properties and based on the behaviour shown by the quantifiers in these contexts, he grouped *some* with *the* and *all*.

English:

(72a) \* The men are each.

(72b) \* The men are every.

Spanish:

(73a) \* Los estudiantes eran cada.

the students be.past each

‘The students are each.’

(73b) \* Los estudiantes eran todo.

the students be.past every

‘The students are every.’

After we have seen the parallelism between Basque, English, and Spanish data, let us return to Basque. Apart from the property of not being able to appear in predicative position when without the common noun, strong quantifiers as well as *batzuek* and *zenbait* (with the noun made silent) do also share some other properties. For example, these weak quantifiers (just like strong quantifiers, see Chapter 2, sections 2.6.1.1 and 2.6.1.2) are presuppositional in that they presuppose the set denoted by the silent NP to be a non-empty familiar (or salient) domain. Of course, the noun being silent, a noun that is already mentioned in the previous discourse or a contextually relevant noun will be taken as antecedent; i.e. if we are talking about dogs, in the sentences in (74), the set of dogs is presupposed to be non-empty.

(74a) Batzu(e)k harrapatzen badituzu, saria emango dizut.

Some.erg catch if-aux. prize-D.sg give aux.

‘If you find some, I’ll give you the prize.’

(74b) Zenbait harrapatzen badituzu, saria emango dizut.  
Some.erg catch if-aux. prize-D.sg give aux.  
'If you find some, I'll give you the prize.'

Another interesting property of these weak quantifiers is that when combined with stage level predicates they can only be interpreted proportionally, and no cardinal interpretation is allowed.

(75a) Batzu(e)k afaria prestatu zuten.  
some.erg dinner prepare aux  
'Some cooked dinner.'

(75a) Zenbaitek afaria prestatu zuten.  
some.erg dinner prepare aux  
'Some cooked dinner.'

Both the sentences in (75) are interpreted as *some of the x cooked dinner, as opposed to others*; x denotes whatever relevant antecedent previous discourse or context provides.

One other property that provides further evidence in favour of the fact that these two hypothetically weak quantifiers behave in a real strong-proportional manner comes from sentences formed with individual level predicates. Subjects of individual level predicates must necessarily be proportional strong quantifiers, and as a consequence, no weak-cardinal quantifiers are allowed.

(76a) Batzu(e)k jazz-a maite dute.  
some-erg jazz-D.sg love aux.  
'Some love jazz.'

(76b) Zenbaitek jazz-a maite dute.  
some-erg jazz-D.sg love aux.  
'Some love jazz.'

Again, the sentences in (76), like those in (75), are interpreted as *some of the x love jazz, as opposed to others*; and again, the denotation of x is provided by previous discourse or by context.

Clearly then, all the examples so far show that the behaviour of these two supposedly weak-cardinal quantifiers matches better with the behaviour of strong quantifiers than with that of weak-cardinal quantifiers. However, note that in order to get the quantificational interpretation we would need to postulate a covert partitive construction (see the way sentences (75-76) are interpreted). But recall from sections 3.2.1.2 and 3.2.2 that I have assumed Büring's analysis to account for the partitive proportional interpretation of weak quantifiers when they appear without the overt partitive construction. Significantly, this interpretation is felicitous when there is a special intonational pattern (see below) and the set composed of x-s (in the examples above) is already under discussion, or otherwise, i.e. when the sentence is uttered in an out of the blue situation, we make use of the Topic/Focus/Background Structure (TFBS).

This assumption helps us keep our initial proposal intact: the one that claims that definite determiners inside quantificational phrases provide a contextual domain restriction. This restriction is done in the overt syntax in Basque (so it is the case in



other languages too, see Chapter 2) and when no definite article is overt, the partitive proportional interpretation is obtained by intonational means, with no need to postulate any covert *the+of* partitive construction.

Therefore, *batzu(e)k* and *zenbait* (as well as their English and Spanish counterparts) will be considered weak-cardinal quantifiers with no quantificational force on themselves (existential closure will be needed for them to be interpreted in argument position) and the proportional partitive interpretation that we obtain when the common noun is made silent (only with these two weak quantifiers<sup>52</sup>) will be due to the accentual pattern that the sentence gets as proposed by Büring.

Crucially, for the correct interpretation of all of the sentences that we have treated in this section, it is necessary to create a contrast. In other words, all these sentences are interpreted with a *as opposed to others* at the end of the sentence. It is exactly this contrast what we obtain through the TFBS. Note that in the examples above the weak-cardinal quantifiers *batzu(e)k* and *zenbait* (and their English and Spanish

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<sup>52</sup> For reasons that I'm not aware of at the moment *asko*, *gutxi* and the rest of weak quantifiers (can but) need not force a partitive interpretation when the noun is made silent. Note that *batzu(e)k/zenbait* do not obey the so called no-linking constraint; in the following example *hizkuntzalaritzako batzu(e)k/zenbait* 'some of linguistics' is necessarily related to a set of books already present in the discourse. See Gutierrez-Rexach (2001:119).

- (i) Matematikako liburuak kaxan daude, fisikakoak ohe gainean daude,  
 Mathematics.about book-D.pl box.loc be physics.about-D.pl bed over.loc be  
 eta hizkuntzalaritzako batzuk/zenbait mahai azpian.  
 and linguistics.about some/some table under.loc  
 'The books about mathematics are in the box, those about physics over the bed, and some about linguistics under the table.'
- (ii) Matematikako liburuak kaxan daude, fisikakoak ohe gainean daude,  
 Mathematics.about book-D.pl box be physics.about-D.pl bed over.loc be  
 eta hizkuntzalaritzako ??asko/??gutxi/??zazpi mahai azpian.  
 and linguistics.about many/few/seven table under.loc  
 'The books about mathematics are in the box, those about physics over the bed, and many/few/seven about linguistics under the table.'

More analysis is needed on this topic and I leave it for future research.

counterparts) appear in subject position, a position that is standardly assumed to be a topic position; if this is so, it is possible to relate the subject position with a contrastive topic accent that will trigger the reconstruction of a particular set of potential contexts (those contexts that we obtain substituting *batzu(e)k* and *zenbait* for its contextually relevant alternatives), and what all these contexts have in common is that they presuppose the existence of the set denoted by the NP. Since the common noun has been made silent in these examples, the previous discourse or the context will necessarily provide the denotation of the common noun we are making reference to. Thus, the subjects (*batzu(e)k* and *zenbait*) will be claimed to bear a contrastive topic accent in the sentences in (75-76) while the objects (in preverbal position --see footnote 11--)) will bear the focus accent.

(77) [BATZU(E)K/ZENBAITEK]<sub>T</sub> [AFARI-A]<sub>F</sub> prestatu zuten. (=75a-b)  
 some.erg/some.erg dinner prepare aux  
 ‘Some cooked dinner.’

(78) [BATZU(E)K/ZENBAITEK]<sub>T</sub> [JAZZ-A]<sub>F</sub> maite dute.<sup>53</sup> (=76a-b)  
 some.erg/some.erg jazz-D.sg love aux.  
 ‘Some love jazz.’

Although no example has been built with these weak-cardinal quantifiers in object position thus far, they can also perfectly fill this position as the following example shows.

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<sup>53</sup> T stands for Topic, F stands for Focus.

- (79) Izarok batzu(e)k/zenbait irakurri zituen.  
 Izaro.erg some/some read aux.past  
 ‘Izaro read some.’

Just as in the examples where *batzu(e)k* and *zenbait* appeared in subject position, the only possible interpretation of this sentence is one where “Izaro read some of the books, as opposed to others” (in case the elided noun is *books*). That is, the interpretation is necessarily partitive and proportional and a contrast is necessary if the sentence is going to be grammatical. So it seems possible to propose that this contrast, even when in object position, is due to some accentual pattern à la Büring (1996).

- (80) Izarok [BATZU(E)K/ZENBAIT] irakurri zituen.  
 Izaro.erg some/some read aux.past  
 ‘Izaro read some.’

Considering that in Basque focused phrases appear in preverbal position (see footnote 11) it is unlikely that *batzuek/zenbait* in (80) will bear a contrastive topic accent, and it is much more likely that these two weak quantifiers bear focal accent. Since focus also triggers the construction of an alternative set of potential contexts, it is possible to postulate that it is due to these alternative possibilities that we get the proportional partitive interpretation in the example (80). Hence, the only possible interpretation of these two weak quantifiers in (80) will be discourse-linked and

partitive, and the set denoted by the elided noun (let us say *books* in this case) will be presupposed.<sup>54</sup>

### **3.5.1. Subsection Conclusion:**

This section has shown that when the common noun that combines with weak-cardinal quantifiers is made silent some differences arise, at least in languages such as Basque (the language I concentrated on), English or Spanish. In such an environment, some Basque weak quantifiers, specifically *batzu(e)k* and *zenbait*, quite unexpectedly behave like strong quantifiers in that (i) they can not appear in predicative position, (ii) they are presuppositional, (iii) they can only be interpreted proportionally when combined with stage-level predicates, (iv) they can combine with individual level predicates that only accept strong-proportional subjects (Milsark (1977)).

The behaviour of these weak quantifiers has been explained in terms of Buring (1996). However, there are some unanswered questions: Why is it that the rest of weak quantifiers without nouns can appear in predicative situations? If *batzu(e)k/zenbait*

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<sup>54</sup> According to some speakers (the author excluded) *batzu(e)k* and *zenbait* can appear in existential sentences. Note that this is quite unexpected if the only possible interpretation that these weak quantifiers (when without common nouns) is the partitive proportional one.

- (i) Badira BATZU(E)K/ZENBAIT liburutegian.  
yes-are some/some library.loc  
'There are some in the library.'

Since some speakers (the author included) can only use these weak quantifiers (without noun) in locative constructions, one could be tempted to claim that the interpretation of the sentence in (i) is not existential, but rather, locative. This would solve the problem but the solution seems to be quite problematic too because if (i) was locative strong quantifiers like *guztiak*, *denak* or *bakoitza* should not create ungrammatical existential as they do.

Another possibility would be to claim that since the real nature of *batzu(e)k/zenbait* is weak, they can be interpreted cardinally (not partitively) in some particular contexts, i.e. such as existential sentences. The problem of this proposal is that these two weak quantifiers are not able to appear in predicative position (see example (69)), a position that just like existential only accept weak-cardinal quantifiers.

I have nothing interesting to add and will leave this problem for the future.

always force partitive interpretations, and this is the reason why they do not appear in predicative position, why are they happy in existential sentences? See footnote 56 for a possible answer.

### **3.6. Conclusions to Chapter 3:**

(i) Weak quantifiers are not ambiguous between a cardinal and a proportional interpretation. When no overt partitive is used to create proportional strong quantifiers weak quantifiers are not quantificational, but rather, they behave as cardinality predicates of type  $\langle e, t \rangle$  that are base-generated in NumP (specifier or head, normally not both).

(ii) The propositional partitive interpretation of weak-cardinal quantifiers when there is no overt partitive ‘of the’, is not due to the presence of a covert partitive construction as claimed by Partee (1988) and others; rather, this interpretation is explained in pragmatics terms (by means of the TFBS when in out of the blue sentences (Büring (1996)). With overt partitives, the weak quantifier will not be cardinal anymore and is claimed to be base-generated in Q-detP, together with the rest of strong quantifiers and will be of quantificational type.

(iii) In opposition to what has been claimed in the literature about the Basque definite determiner (-A/-AK), where it is assumed that both the -A and the plural marker -K are base generated together in the same syntactic position, in the DP head (or in

“some kind of Number Phrase” --see Artiagoitia (2003)--); this chapter has suggested that the definite determiner -A and plural marker -K are base generated in different syntactic positions: The base position of the plural marker -K is NumP, while the base generating position of the Basque definite determiner -A (as standardly assumed for definite determiners crosslinguistically) is head of DP.

(iv) Weak-cardinal quantifiers cannot appear with the definite determiner (except numerals) due to the fact that they are unspecified for number. This unspecificity makes them unable to obtain a definite and referential interpretation. The only construction that allows the definite article to appear with these unspecified weak quantifiers is the partitive construction where the definite plays the role of the contextual domain restrictor. Numerals on the other hand, can appear with the definite determiner [Numeral+Noun+AK] and as a consequence are able to get definite as well as referential interpretations; of course, they can also form partitive constructions where as predicted they are interpreted as quantifiers.

(v) When the common noun that combines with weak-cardinal quantifiers is made silent, *batzu(e)k* and *zenbait* and their counterparts in English (*some*) and Spanish (*algunos*) can only obtain proportional, partitive-like interpretations. I claim that this interpretation (extending Buring’s analysis to these cases) is the result of the Topic/Focus/Background Structure.