## BARE INDEFINITES AND DISTRIBUTIVITY IN BASQUE

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#### 0. Introduction

Among the grammatical means to represent distributive relations, Basque has constructions such as those in (1):

 a. Nori berea da zuzenbidea who-Dat his-D is justice "Justice is (giving) his share to everyone" b. Nork bere ama maite du who-Erg his mother-D love Aux "Everyone loves his mother"

c. Athletic-eko 11 jokalariak zelaira atera dira. Zein/nor bere Athletic-of 11 players-D field-into came are which/who his tokian jarri da. place-D-loc placed Aux
"The 11 players from Athletic de Bilbao came into the field. Each of them/ everyone took his place"

In (1), phrases phonologically identical to whitems (nori, nork, nor/zein) function as key terms (Choe 1987) in a distributive quantification when they are not uttered with interrogative intonation. In that case, they are obligatorily followed by a possessive phrase with a pronominal subject, which functions as the share of the distributive structure. As the wh-items themselves do not necessarily carry a distributive force, it must be the case that the quantificational import of those structures is (at least in part) contributed by the syntactic context in which they are found. In this paper, I will try to elucidate that contribution, and shed some light in the way in which the clausal architecture combines with morphologically underspecified elements to build up quantificational meanings. The analysis defended here will strongly support recent views (Beghelli 1995; Beghelli & Stowell 1997, Szabolcsi 1997, 2001) in which quantification is directly represented in the clause structure. Under this view, quantifiers acquire their quantificational force by associating to functional heads that display the relevant quantificational values. Finally, I will analyse similar structures where the auxiliary does not agree with the bare wh-item. I will claim that those cases are the Basque counterpart of floating each.

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## 1. On the quantificational force of bare wh-elements in Basque

In Basque, forms identical to whitems can also occur in the absence of any interrogative intonation, in which case they take on different quantificational values:

(2) a.	Nor etorri	da?	b. Bisitariak	nor	oinez	nor	autoz	etorri d	lira
	Who come	Aux	The visitors	who	by-walk	who	by-car	come .	Aux
	"Who came	?"	"The visitor	s can	ne some	walki	ing, so	me by c	ar"
с.	Nor bere et	xean	sartu da						
	who his hou	1se-D-loc	enter Aux(3persor	n-sing	g)				

- "Everyone went into his house" d. Nor gure etxean sartu gara
- who our house-D-loc enter Aux(1person-pl) "We all went into our house"
- e. Nor bere etxean sartu gara(1person-pl) who his house-D-loc enter Aux "We each went into his house"

(2a) represents a partial wh-question in Basque, with a typical raising intonation. (2b) is a so-called "multiple partitive structure" (Haspelmath 1997: 177-179; Liptak 2001: chapter 4): a structure where each of the wh-items has existential import, and they must necessarily occur together:

(3) \*Nor oinez etorri da who by-walk come Aux "Some came walking"

The two occurrences of *nor* jointly exhaust (and divide up) the set denoted by the subject antecedent (the visitors in (2b)). On the other hand, in both (2c), (2d) and (2e), the bare wh-item has a universal interpretation. The cases in (1) and (2) suggest that in Basque the bare wh-form should be considered as a basic component of an array of different complex quantificational structures, among which the interrogative one. This idea is supported by the fact that polarity items (4), as well as free-choice quantifiers (5) and free relatives with a universal interpretation (6), are also composed by a bare whitem plus a particle determining the relevant quantificational force in each case:<sup>1</sup>

(4)	zer "what" / e-zer "anything" (< ez "not" + zer)						
	nor "who" / i-nor "anyone" ( <ez "not"="" +="" nor)<="" td=""></ez>						
	zein "which" / e-zein "any" ( <ez "not"="" +="" td="" zein)<=""></ez>						

(5) edo-nor "anyone (free choice)" (<edo "or" + nor) edo-zer "anything (free choice)" (<edo "or" + zer) edo-zein "any (free-choice)" (<edo "or" + zein)</p>

<sup>&</sup>lt;sup>1</sup> Not all forms have the same status. *Ezein* only has literary use, and the forms in (6) also have a literary feeling, at least in western dialects.

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 (6) a. nor/zein ere etortzen baita...
 who/which ever come-Asp Comp-Aux "Who/whichever comes..."
 b. Zer ere gertatzen baita...
 what ever happen-Asp Comp-Aux
 "Whatever happens..."

Basque thus turns out to be typologically similar in this regard to other languages in which polarity items, certain quantificational structures (such as free-relatives and universal quantifiers), and wh-forms share a common core (Huang 1982; Nishigauchi 1985; Cheng 1991; Hagstrom 1998, among many others). This common core is always an indefinite. It can be shown that those indefinites denote plural sets (as proposed by Hagstrom 1998, for other languages). Consider for instance the following contrasts in multiple partitive constructions:

- (7) a. #Bi lagun etorri ziren. Nor lurrean, nor aulkian eseri ziren. Two friends come Aux Who on-the-floor, who on-the-chair sit Aux "Two friends arrived. Some sit on the floor, some on the chair"
  - b. 10 lagun etorri ziren. Nor lurrean, nor aulkian eseri ziren. Ten friends come Aux Who on-the-floor, who on-the-chair sit Aux "Ten friends arrived. Some sit on the chair, some on the floor.

If the denotation of the bare indefinites is that of a plural set, the contrast is easily explained: given that the two indefinites divide up the set denoted by their antecedent, in (a) each indefinite will be linked to a set containing a single element, hence not a plural entity. In (b) on the other hand, each indefinite will be linked to a plural entity, with which an anaphoric relation can be established.

I will take the bare forms common to all structures in (1)-(7) to be indefinites. Those indefinites combine with other elements to yield different quantificational expressions: questions, polarity items, free-choice universals and universal free-relatives. This hypothesis is unproblematic for cases (4) to (6). There, the morphological make up of the quantificational expressions directly shows their complex compositional nature. It is perhaps less obvious for (2c), (2d) and (2e), where the universal force of the bare forms seems to be a function of clause-structural context.<sup>2</sup> I will call those constructions "universal indefinite constructions". It is precisely those cases which will be the main concern of this paper.

#### 2. Some semantic properties of the universal indefinite constructions

#### 2.1. Distributivity and pseudodistributivity

Etxepare (in press) shows that in constructions such as (2c), where the auxiliary agrees with the bare indefinite, and the possessive pronoun is third person, the "universal indefinite constructions" have a strong distributive reading. Beghelli (1995)

<sup>&</sup>lt;sup>2</sup> Obviously, there is another possible view on this, namely that the structure of universal indefinites is identical to the overtly complex quantificational structures cited:  $[Q_{dic}[nor]]$ . We would then have to extend that view to existential indefinites such as those in (2b):  $[Q_{ex}[nor]]$ . To that we would have to add interrogative forms:  $[Q_{int}[nor]]$ .

shows that distributive relations must be divided into two types, that he calls, respectively, "strong distributivity" and "pseudodistributivity". Pseudodistributivity is the distributive pattern that holds between collective expressions denoting plural sets, such as *all, some*, definite expressions (see Krifka 1992), or phrases headed or modified by cardinal quantifiers. Collective quantifiers denoting plural sets allow more than one distributive relation to hold between the terms involved in the distribution. Consider in this regard (8a) and its Basque equivalent (8b):

(8) a. The children received three presents b. Haurrek hiru opari jaso dituzte

Something like (8) may have more than one distributive reading: (i) the children may have received a total of three presents, that divide the children set in three groups (say those who received a football, those who got a train, and those who got a bycicle); or (ii) thay received three presents all in all, but in a collective fashion, so that the whole children set possesses the three presents; or (iii), each of the children received three presents. This distributive pattern, where more than one distributive relation can be established, is called pseudodistributivity, and typically happens with group denoting antecedents (see also Link 1998; Lasersohn 1996 or Landman 1996, among others for thorough discussion of the semantic intricacies of those relations). Strong distributivity, on the other hand, only licenses one distributive relation. Consider (9a) and its corresponding Basque sentence:

(9) a. Each/every child received three presents

b. Haur bakoitzak hiru opari jaso zituen

In (9), only one distributive relation is possible. The one in which each child receives three presents. It seems that the universal distributives of the sort in (2c) correspond to that type of distribution. Consider for instance the contrast between (10a) and both (10b,c):

- (10) a. Haur guztiek beren oparia jaso dute: child all-D-Erg their present get Aux Jonek eta Mirenek trena, Peruk eta Aitorrek baloia... Jon-erg and Miren-erg train-D, Peru and Aitor ball-D "All children received their present: Jon and Miren (got) the train, Peru and Aitor the football..."
  - b. Haur bakoitzak bere oparia jaso du: child each-D-erg his present get Aux Jonek eta Mirenek trena, Peruk eta Aitorrek baloia... Jon-erg and Miren-erg train-D, Peru-erg and Aitor-erg ball-D "Each/every child received his present: Jon and Miren (got) the train, Peru and Aitor the train..."

c. Nork bere oparia jaso zuen: who-erg his present got Aux Jonek eta Mirenek trena, Peruk eta Aitorrek baloia... Jon-erg and Miren-erg train-D, Peru-erg and Aitor-erg football-D "Each child received his present: Jon and Miren (got) the train, Peru and Aitor the football..."

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Whereas (10a) can have an interpretation where both Jon and Miren, and Peru and Aitor share a single present (the train or the football), (10b,c) can only have an interpretation where there are as many presents as children, and each of them has one.

In structures of the sort of (2d), the finite auxiliary agrees not with the bare indefinite, but with an implicit 1<sup>st</sup> person plural subject, and the possessive pronoun is not third person singular, but 1<sup>st</sup> person plural, agreeing with the auxiliary. Those constructions are not strongly distributive: they pattern with *all* in this regard, not with *each* (11).

(11) Nork gure oparia jaso dugu: who-erg our present get Aux Jonek eta Mirenek trena; Peruk eta Aitorrek baloia... Jon-erg and Miren-erg train-D Peru-erg and Aitor-erg football-D "We all received our present: Jon and Miren got the train; Peru and Aitor the football...

A perfectly natural interpretation of (11), unlike (10), is one in which a single train and a single football are shared by the relevant children. On the other hand (2e), which seems to be a hybrid of (2c) and (2d) (as it has  $3^{rd}$  person possessive pronoun, but not agreement with the auxiliary) actually behaves as (2c), and is also strongly distributive:

(12) Nork bere oparia jaso dugu: who-erg his present get Aux Jonek eta Mirenek trena, Peruk eta Aitorrek baloia Jon-erg and Miren-erg train-D, Peru-erg and Aitor-erg football-D...

The only interpretation of (12) is one where each children has a present for himself. There is another fact that also points towards a distinction between (2c) and (2e) on the one hand, and (2d) on the other. Only (2d), the collective universal, admits plural shares which are interpreted cumulatively. Consider the following sentences:

- (13) a. Nork bere opariak jaso ditu
   who-erg his presents get Aux(3<sup>rd</sup>-sing)
   "Each/every chidren got his presents"
   c. Nork gure opariak jaso ditugu
   who-erg our presents get Aux
   "We all got our presents"
  - b. Nork bere opariak jaso ditugu who-erg his presents get Aux(1<sup>st</sup>-pl) "We got each his presents"

Whereas (13c) can be understood cumulatively, that is, as meaning that all the people involved got an unspecified number of presents, both (12a) and (12b) can only mean that each person involved had more than one present. Similarly for (14):

- (14) a. #Nork bere etxeetan egin du lo c. Nork gure etxeetan egin dugu lo who-erg his house-pl-loc do Aux sleep "We all slept in our houses" "Each one slept in his houses"
  - b. #Nork bere etxeetan egin dugu lo who-erg his house-pl-loc do Aux sleep "We slept each in his houses"

Only (14c) can have an interpretation where houses are collectively associated to owners. In both (14a) and (14b) a strong distributive reading is forced, yielding pragmatically odd situations in which each person sleeps in more than one house.

#### 2.2. The pronoun in the distributive share

The possessive pronoun in the distributive share is clearly a bound pronoun in both (2c) and (2e), but not in (2d). That the pronoun in (2d) is not a bound pronoun is clearly shown by the fact that it can be any person and plural. The fact that the pronoun in both (2c) and (2e) is third person singular, in a distributive quantificational context such as this one, shows that it is bound. This conclusion is strengthened by an additional fact. Basque has two sets of possessive pronouns, that I will call "simple" and "complex" which are distinguished precisely in whether they can be bound or not. Consider in this regard the following contrast:

- (15) a. Gizon bakoitzak bere ahuleziak ditu man each-D-erg his weaknesses has "Each man has his weaknesses"
  - b. Gizon bakoitzak beraren ahuleziak ditu man each-D-erg his weaknesses has NOT"Each<sub>i</sub> man has his<sub>i</sub> weaknesses" "Each<sub>i</sub> man has his<sub>i</sub> weaknesses"

Whereas the simple pronoun in (15a) *bere* "his", can be bound by the quantifier *each*, supporting distribution, the complex pronoun *beraren* "his" (*ber* "self" + *haren* "obviative his") in (14b) cannot. A distributive reading for the sentence is thus impossible. The only available reading for (15b) is one where every man has someone else's weaknesses. If we now turn to the bare indefinite cases, we find exactly the cut we expect: sentences like (2c) and (2e) only admit possessive pronouns that can be bound, whereas (2d) also admits the complex pronoun:

- (16) a. Nork bere/\*beraren lana bukatu du who-erg his/his work-D finish Aux "Everyone finished his work"
  - b. Nork bere/\*beraren lana bukatu dugu who-erg his/his work-D finish Aux "We finished each his work"
  - c. Antzezlariek, nork bere/beraien senideak ekarri zituzten actors-erg who-erg his/their relatives bring Aux "The actors/actresses they all brought their relatives"

#### 2.3. Summary

We have found the following three main configurations for universal indefinite constructions, together with following interpretations. The two subindices represent (a distinct selection of) person and number features:

- (17) a. [indef<sub>a</sub> pronoun<sub>a</sub> ... Aux<sub>a</sub>] Strong Distributive
  - b. [indef<sub>a</sub> pronoun<sub>a</sub> ... Aux<sub> $\beta$ </sub>] Strong Distributive
  - c. [indef<sub>a</sub> pronoun<sub> $\beta$ </sub> ... Aux<sub> $\beta$ </sub>] Pseudodistributive

In the next section, I will show that each of those configurations corresponds to a different syntactic structure. I will claim that in (17a), the bare indefinite is associated to a distributive quantificational head whose scope is the whole sentence. (17b) corresponds to the case where the bare indefinite is associated to a distributive head whose scope is just the possessive phrase. In (17c) the bare indefinite is associated to an adverbial distributive quantifier *each*, as proposed by Hoekstra et alia (1989), Beghelli (1995: 171), and Junker (1995) for floating *each*. I will claim that in this case, the adverbial distributes over events (an idea defended by Junker 1995).

#### 3. The syntax of universal indefinite constructions

#### 3.1. On the origin of the quantificational force of bare indefinites

Interpreting the bare indefinite as denoting a plural set does not solve the issue of how those constructions get their (universal) quantificational force. I will adopt the syntax of quantification proposed by Beghelli (1995), Beghelli and Stowell (1997) and Szabolcsi (1997, 2001) according to which the architecture of the clause, together with standard projections for Tense or phi-features, also displays functional heads that have different quantificational values, or serve as the locus where such values are checked. Beghelli and Stowell's explicit proposal is the following (abstracting away from Tense, Agreement, Neg or Comp projections):

(18) [Ref Ref [Distr Distr [Share Share [VP...V0...]]]]

In (18) RefP is supposed to host referential expressions that have the widest scope, such as specific indefinites, definite expressions or proper names. DistP is a Distributive Phrase, which encodes distributive quantification. Lexically distributive quantifiers, such as each, are supposed to check features in its Spec. Others, such as every, which can have collective interpretations (see Beghelli and Stowell 1997) can be associated to the Distributive head, in which case they are interpreted as distributive. Quantifiers can in principle be associated to more than one position, and change their quantificational value accordingly (Szabolcsi 1997, for Hungarian). ShareP hosts those group-denoting quantifiers which are interpreted as the share in a distributive quantification. Collective presuppositional interpretations of group-denoting quantifiers are associated to RefP, whereas cardinal quantifiers, when interpreted non-collectively, do not raise to any quantificational head, but remain in the VP or some Agr projection. In this system, there is a straightforward way of accounting for the distributive universal value of indefinites: it is not the indefinites themselves which carry such a quantificational force; rather, they are associated to a functional head that carries that force, namely the Distributive Head. The indefinites provide the restriction for such a quantification. Observe that different interpretations for the bare indefinite are perfectly possible in this system: the existential interpretation will be associated to the predicative layer

whereas the distributive interpretation will be linked to the Distributive Phrase. (19) represents the syntactic structure that gives rise to the distributive interpretation.<sup>3</sup>

(19)  $\left[ \sum_{\text{DistrP}} \text{nor } D^0 \left[ \sum_{\text{ShP}} \left[ \sum_{\text{DP/PP}} \text{bere } \text{NP} \right]_i \text{Sh}^0 \left[ \sum_{\text{VP}} \dots t_i \dots V^0 \right] \right] \right]$ 

### 3.2. The role of focus

The various functional heads in (18)-(19) and the checking relations they give rise to, are a matter of abstract syntax in English (but see Kayne 1998). Szabolcsi 1997, 2001), however, and Puskas (1999), claim that in languages like Hungarian, quantifiers overtly move to those positions, yielding the expected interpretations. As a consequence, the preverbal domain in Hungarian always shows unambiguous scope relations.<sup>4</sup> Szabolcsi shows that in the clausal architecture of Hungarian, shares show the same syntactic behavior as foci, inducing inversion between the verb and the preverb. Referential expressions, on the other hand, seem to occupy the same position as topics. In between, one finds distributive quantifiers. Thus, the Hungarian version of (18) is (20):

# (20) [RefP/TopP Ref/Top<sup>0</sup> [Distr<sup>D</sup> Distr<sup>0</sup> [ShareP/FocP Share/F<sup>0</sup> [VP...V<sup>0</sup>...]]]]

Turning to Basque, we found that first, Basque quantifiers show unambiguous scope (as defended by Etxeberria 2002, Elordieta 2001; but see Etxepare, in press, for some exceptions), and then, that shares in Basque are clearly focused in the indefinite universal constructions. An intriguing fact about those constructions is that the bare indefinite and the possessive phrase (which represents the share) must be adjacent to each other. Consider the following cases:

- (21) a. Nori [bere etxea ederrena dela] iruditzen zaio wh-dat his house prettiest is-Comp seems Aux "His house seems to everyone to be the most beautiful"
  - b. \*Nori iruditzen zaio [bere etxea ederrena dela] who-dat seems Aux his house prettiest is-Comp "his house seems to everyone to be the most beautiful"

But orders such as (21b) are perfectly normal outside those cases of distributive quantification:

(22) a. Joni [ bere etxea ederrena dela] iruditzen zaio Jon-dat his house prettiest is-Comp seems Aux "His house seems to John to be the prettiest"

<sup>&</sup>lt;sup>3</sup> I will abstract over the issue of the right-/left headedness of Basque. It is not relevant for my present analysis. Basque is traditionally considered head-final (e.g. Ortiz de Urbina 1989; Laka 1990). For an analysis combining Kayne's more recent insight with Koopman and Szabolcsi's view on morphological complexes and word order, see Haddican (2000).

<sup>&</sup>lt;sup>4</sup> This only holds for the preverbal domain in Hungarian. In the postverbal domain, things look a bit more complicated: Szabolcsi (1997: 145-150) claims that the behavior of quantifiers in the postverbal domain in Hungarian is essentially that of English quantifiers, which allow ambiguous scope relations, whereas Puskas (1999: 108-109) claims that linear order invariably fixes scope also in the postverbal domain.

 b. Joni iruditzen zaio [bere etxea ederrena dela] Jon-dat seems Aux his house prettiest is-Comp "His house seems to John to be the most beautiful one"

That the obligatory adjacency in (21) is the product of a syntactic transformation is clearly shown by (22), where the share is moved from an embedded clause:

(23) Joni [bere etxea]<sub>i</sub> iruditzen zaio [t<sub>i</sub> ederrena dela] Jon-dat his house seems Aux prettiest is-Comp "His house seems to John to be the prettiest"

And by cases such as (24), where the neutral order of the arguments is reversed:

(24) Nor bere amak maite du who his mother-erg love Aux "everyone, is loved by his, mother"

There are several reasons to think that the moved share is actually a focus: (i) it can be moved long-distance (25; cf. (23)); (ii) it triggers pied-piping (26); and (iii) it requires the adjacency of the verb (27):

- (25) Nork bere taldeak pentsatzen du [tirabaziko duela] who-erg his team-erg think Aux win-fut Aux-Comp "Everyone thinks that his team will win"
- (26) a. Nork [bere ugazabak agintzen duenean] esan du [t joango dela] who-erg his boss-erg orders Aux-when say Aux go-fut Aux "Everyone said that he will go when his boss orders it"
  - b. Nork [[bere ugazabak agintzen duenean] joango dela]<sub>i</sub> esan du t<sub>i</sub> who-erg his boss-erg order Aux-when go-fut Aux-Comp say Aux "Everyone said that he will go when his boss orders it"
- (27) a. ??Nork bere ama atzo goizean ikusi zuen who-erg his mother yesterday morning see Aux "Everyone saw his mother yesterday in the market"
  - b. Jonek bere ama atzo goizean ikusi zuen Jon-erg his mother yesterday morning see Aux "Jon saw his mother yesterday"

If so, and similarly to the Hungarian distributive constructions, Basque shares sit in the Spec of a Focus Phrase:<sup>5</sup>

 (i) a. Ikasle bakoitzak, esan zuen [bere, irakaslea gaiso zegoela] student each-erg say-asp Aux his teacher sick was-Comp "Each student said that his teacher was sick"

<sup>&</sup>lt;sup>5</sup> However, this is only the case for *nor...bere...* distributive constructions. The lexical quantifier *ba-koitz* "each" doesn't trigger the adjacency of the share:

b. ??Ikasle bakoitzak; [bere, irakaslea]; esan zuen [t, gaiso zegoela] student each-erg his professor said Aux sick was-Comp "Each student said that his professor was sick"

(28) [nor...[ $_{PP}$  [ $_{DP/PP}$  bere NP] F<sup>0</sup> [ $_{VP}$  ...V...]

If Share/Focus Phrases are selected by Distributive Phrases, then the adjacency between the distributive quantifier and the share in Basque is just a consequence of selection:

(29)  $[_{\text{DistrP}} \text{ nor } D^0 [_{\text{FP}} [_{\text{DP/PP}} \text{ bere } \text{NP}] F^0 \dots$ 

#### 4. Two structures for strong distributivity

We noted in section 2 that there are two distributive constructions that correspond to the strong distributivity pattern (30). The two constructions differ on whether the auxiliary agrees with the bare indefinite or not. See (31) for actual cases:

- (30) a. [indef<sub>a</sub> pronoun<sub>a</sub> ... Aux<sub>a</sub>] Strong Distributive
  - b. [indef<sub> $\alpha$ </sub> pronoun<sub> $\alpha$ </sub> ... Aux<sub> $\beta$ </sub>] Strong Distributive
- (31) a. Nork bere lana bukatu du who-erg his work-D finish Aux(3<sup>rd</sup> sing)
   "Everyone finished his work"
   b. Nork bere lana bukatu dugu who-erg his work finish Aux(1<sup>st</sup>-pl)
   "We finished each his work"

The two cases differ in their syntactic configuration. More concretely, they differ in the scope of the distributive quantifier. Whereas in the (b) cases the distributive head is in a position internal to the DP object, in the (a) cases it is in the main clause. The intended basic configurations are in (32).

(32) a.  $[A_{grS} \text{ nor } AgrS/T^0 [DisP(nor) D^0[_{FP} [DP bere lana]F^0 [...]]]]$ 

b. [AgrS DP/proSUB AgrS/T<sup>0</sup>...[AgrP [DP[DisP nor [bere lan]]a] AgrO<sup>0</sup>[...]]]]

In (32a) the indefinite checks both the distributive feature in the Distributive Head, and the phi- and Case features in Spec of AgrS. In (32b), an overt or tacit (pro) subject checks the Case and phi-features in Spec of AgrS (thus agreeing with the auxiliary), while the Distributive Phrase is buried inside the DP object. Let us see some syntactic differences between the (30a) and (30b) patterns.

#### 4.1. Coordination

Consider the following sentences:

(33) a. Hemen, nork bere ideiak ditu here who-erg his ideas Aux
"Here, everyone has his (own) ideas"
b. Hemen, nork bere ideiak ditugu here who-erg his ideas Aux
"Here, we have each his (own) ideas"

If we try to conjoin at the possessive level, we get a different result in each case:

- (33) a. Hemen, nork bere projektuak eta bere ideiak ditu here who-erg his projects and his ideas Aux "Here, everyone has his own projects and his own ideas"
  - b. \*Hemen, nork bere proiektuak eta bere ideiak ditugu Here, who-erg his projects and his ideas Aux "Here, we have each his projects and his ideas"

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The same holds for other parallel structures, such as comparatives:

- (34) a. Nor bere etxean baino hobe bere lantokian who his house-loc than better his workplace-loc "Everyone is better in his workplace than in his house"
  - b. \*Gu, nor bere etxean baino hobe bere lantokian
    us, who his house-loc than better his workplace-loc
    "\*We are happier each in his house than in his workplace"
- (35) a. Nor bere etxean bezain pozik bere lantokian who his house-loc as happy his workplace-loc "Everyone is as happy in his worplace as in his house"
  - b. \*Gu, nor bere etxean bezain pozik bere lantokian us who his house-loc as happy his workplace-loc "\*We are as happy each in his house as in his workplace

In configuration (30a) therefore, conjunction at the Possessive Phrase level is possible, whereas in structure (30b)it is not. In Etxepare (in press) I take the fact that *nor* and *bere* cannot be separated in coordination to show that they form a constituent. That idea cannot be held given cases such as (36):

(36) Guk, nork bere buruarengan sinesten dugu we-erg who-erg his head-in believe Aux

(36) contains a reflexive form *bere burua* "(literally)his head", equivalent to English "him/herself". Assuming that the full form of the reflexive is possessive (namely *bere burua*), the structure cannot be parsed as [[nork bere] [burua]]. The reason for the impossibility of conjunction must thus be a different one. I will suggest that the head of the focus phrase must cliticize onto the distributive head:

(37)  $[_{\text{DisrrP}} \text{ inodefinite } F^0 + D^0 [_{\text{FP}} [ \text{Possessive Phrase} ] (F^0) \dots$ 

If D attracts F, then the movement must be sensitive to the Head Movement Constraint (Travis 1984). However, if conjunction and disjunction head their own phrasal structure (as proposed by Munn 1993, and Kayne 1994), movement of the F head will have to cross the conjunction head or be extracted from a left branch (BP stands for "Boolean Phrase"):



If that is the reason why conjunction at ShP level is not allowed, then it should not be allowed for structure (17a) either, although here (cf. 33a) it seems to be possible. I will claim that (33a) is actually not a counterexample: the apparent conjunction at the ShP level is not such. Rather, conjunction is here at the DistrP level, but is masked by across-the-board raising of the indefinite to the subject Case position, to check the Case and phi-features of T/AgrS:

(39)  $[_{T/AgrS} \text{ nor } T/AgrS^0 [_{DisP} (\text{nor}) F^0 + Dis^0 [_{FP} [PossP] (F^0)...$ 

The relevant conjunction therefore happens at the DisP level, which contains the checking site of the F head. In structure (30b), across the board raising of the indefinite is not possible, since the Case and phi-features of Agr/T are checked by the overt antecedent of the indefinite, which shows agreement with the auxiliary.

There is an additional fact that supports this conclusion: if the indefinite raises to T/AgrS in (30a), we should expect to find instances where the indefinite is not adjacent to the share. Observe that all cases of adjacency that we considered were those in which the relevant share belonged to an embedded clause. If the share must check features in a focus phrase selected by the Distributive head, then adjacency, in the sense of the examples in (21)-(23) is what we expect. A different matter is what happens if we consider the structure in between AgrS/TP and the distributive phrase. If the indefinite raises out of DisP into a subject agreement position, we would expect to be able to find cases where adjacency between the indefinite and the share is not respected. This is actually the case. Take (40):

(40) Nork<sub>i</sub> Mireni [bere<sub>i</sub> liburua] oparitu dio who-erg Miren-dat his book offer Aux "Everyone<sub>i</sub> offered his<sub>i</sub> book to Miren"

In (40), an indirect object occurs in between the indefinite and the share, and the sentence is good. Now take a configuration such as (30b). If the indefinite is part of a DP internal distributive structure, the prediction is that adjacency should be respected in cases analogous to (40). This prediction is borne out:

 (41) \*Nork, Mireni [bere, liburua] oparitu diogu who-erg Miren-dat his book offer Aux(1stpl)
 "We, each offered his, book to Miren"

#### 4.2. Two patterns for extraction

We saw that distributive quantifications with bare indefinites can be constructed across clauses, in which case the share moves from an embedded position to the Share Phrase selected by the matrix Distributive Phrase:

(42) [Nork D<sup>0</sup> [<sub>FP</sub> [bere aitona]<sub>i</sub> F<sup>0</sup> [pentsatzen du [<sub>CP</sub> t<sub>i</sub> hil dela]]]] who-erg his grandfather think Aux die Aux-Comp "Everyone<sub>i</sub> thinks that his<sub>i</sub> grandfather died"

This configuration can only be obtained under the assumption that the Distributive Phrase is generated in the matrix clause. We may now wonder which kind of extraction would correspond to the DP-internal pattern in (30b). The predictions are twofold: on the one hand, we expect that the constituent targeted for movement should be the whole DP that contains the distributive structure, since Basque DPs are absolutely opaque for extraction. That case would correspond to extractions of the sort in (43), where the whole distributive DP has focus-moved to the left periphery of the matrix clause:

(43) [[Nork] bere ama]<sub>i</sub> esan dute[<sub>CP</sub>t<sub>i</sub> maite dugula guk] who-erg his mother say aux love Aux-Comp we-erg "They said that we each love OUR MOTHER"

On the other hand, we also predict that if we force a configuration of the sort of (30b) in the matrix clause, any extraction of the (42) type will be impossible. This is so because movement would turn out to be non-cyclic (from the embedded clause to the inside of a DP in the matrix clause). This prediction is borne out too:

(44) \*Nork [bere ama]; uste dugu [t; etorri dela]
 who-erg his mother think Aux(1<sup>st</sup>-pl) come Aux-Comp
 "We each think that our mother came"

#### 5. Pseudodistributivity

Besides configurations (30a,b), we also have configurations like (17c), repeated here:

(45) [indef<sub> $\alpha$ </sub> pronoun<sub> $\beta$ </sub> ... Aux<sub> $\beta$ </sub>]

(45) only has a pseudodistributive interpretation, typical of floating *each* in English (Beghelli 1995). In those cases, I will claim that *nor* is the specifier of an adverbial distributive quantifier, adjoined to a maximal projection:

Semantically, the presence of a distributive operator in (45) is necessary: unlike what happens with group quantifiers such as *all*, indefinite universal structures in Basque must contribute some distribution. That is, the non-distributive option available to quantifiers like *all*, is not available to indefinite universal constructions:

- (47) a. Herritar guztiok gure herria defendatu dugu villagers all-erg our village defend Aux "All villagers defended their village"
  - b. Nork gure herria defendatu dugu who-erg our village defend Aux "We each defended our village"

Whereas (47a) has a reading in which the villagers collectively defend their village, no such reading is available in (47b).

Syntactically, it is not easy to find differences between the adverbial *each* and phrasal *each*. Adverbial *each* also needs to be adjacent to the share, as shown in (48):

 (48) Nork [gure herria]<sub>i</sub> esan dugu [t<sub>i</sub> ederrena dela] who-erg our village say Aux most-beatiful is-Comp "We each said that OUR VILLAGE is the most beautiful"

But this may be due to the adverb being adjoined to the focus phrase. A fact that comes in support of this idea is that unlike in configuration (30a), the indefinite must be adjacent to the focus:

 (49) \*Nork Mireni [gure herria ederrena dela] esan diogu who-erg Miren-dat our village most-beautiful is-Comp say Aux (1pl<sub>erg</sub>-3s<sub>dat</sub>-3s<sub>abs</sub>)
 "We each said to Miren that our village is the most beautiful"

Things become a bit more clear if we consider Multiple indefinite constructions.

## 6. Multiple indefinite constructions

Indefinite universal constructions can contain more than one indefinite, in which case there arise some intriguing restrictions. Consider the following paradigm:

 (50) a. (Idazleen biltzarrean) Nork nori bere poema irakurriko dio writers convention-at who-erg who-dat his poem read-fut Aux (3sing<sub>erg</sub> -3sing<sub>dat</sub>-3sing<sub>abs</sub>)

"(At the writers convention) everyone will read his poem to everyone"

- b. ?(Guk) nork nori, bere, poema irakurriko diogu we-erg,who-erg who-dat his poem read-fut Aux (1pl<sub>erg</sub>-3sing<sub>dat</sub>-3sing<sub>abs</sub>)
   "We will each read everyone his poem"
- c. \*Guk, haiei, nork nori gure poemak irakurriko dizkiegu we-erg, them-dat, who-erg, who-dat our poems read-fut Aux (1pl<sub>erg</sub>-3pl<sub>dat</sub> -3pl<sub>abs</sub>)

The paradigm should be interpreted as follows: (50a) represents a canonical multiple indefinite construction, in which the pronoun in the share refers to the ergative argument. The structure of (50a) must be that of a Distributive Phrase with two Specs, an absorbed structure:

(51)  $[_{DP} \text{ nork } [_{D'} \text{ nori } D^0 [_{FP} \text{ [bere}_i \text{ poema] } F^0...$ 

The interpretation of (51) has universal quantification over two variables: "for every x,y, x will read his poem to y". (50b) represents a mixed structure, in which the first indefinite is not in the Spec of a Distributive Head, but rather associated to an adverbial quantifier, and the second indefinite is internal to the DP. The sentence is

interpreted as: "Each individual x belonging to a group X is involved in an event of reading everyone his poem". Observe that no other indexing here is possible. The relevant configuration is given in (52):

(52)  $[_{AgrS/TP} \text{ pro AgrS}/T^0 [_{FP} [_{AdvP} \text{ nork } Q^0] [_{FP} [_{DP} \text{ nori bere poema}] F^0...$ 

(52) forces us to say that the floating indefinite quantifies over events. This is so, since the focused share is itself a "saturated" expression, with the pronoun bound in the DP-internal distributive quantification. This conclusion is the same as Junker's (1995). (50c) is a case in which each of the indefinites has a plural antecedent, and the relevant share does not contain a bound pronoun. The sentence is ungrammatical. The only configuration that could accommodate this is a multiple floating quantifier construction, with two adverbial *each* one after the other. The relevant portion of structure would be (53):<sup>6</sup>

(53)  $\begin{bmatrix} A_{grS} & Pro & AgrS^0 \end{bmatrix} \begin{bmatrix} A_{dvP} & Prok & Q^0 \end{bmatrix} \begin{bmatrix} A_{grIO} & Pro & AgrIO^0 \end{bmatrix} \begin{bmatrix} A_{dvP} & Prok & Q^0 \end{bmatrix} \begin{bmatrix} A_{dvP$ 

Given that floating (*each*) quantifiers distribute over event variables, the problem with (53) must be that the first quantified adverb has nothing to distribute over. Only the second one, which precedes the focus phrase, does. Observe that in (53) the pronoun is not a bound pronoun.

### 7. Summary

I tried to show that universal indefinite constructions in Basque get their quantificational force from their surrounding clausal structure. More precisely, I claimed that the different quantificational forces that indefinite forms in Basque have come from their association to different morphological heads that display the relevant quantificational values. I also showed that universal indefinite constructions come in three varieties, and defended an analysis in which each of those varieties corresponds to a different syntactic structure.

<sup>&</sup>lt;sup>6</sup> The structure in (48) is based on the following observation by Beghelli (1995: 172): multiple floating quantifiers are possible in, say, French, but then their relative order is necessarily the same as the unmarked DP argument order (i).

<sup>(</sup>i) a. Ils les ont tous toutes vues

b. \*Ils les ont toutes tous vus

they(masc) them have all(masc) all(fem) seen they(masc) them have all(fem) all(masc) seen Beghelli takes the facts to show that floating quantifiers mark the structural position of their respective Case and Agrement position. I adopt this idea. Multiple floating quantifiers, however, do not always seem possible (for instance with *chacun* "each" instead of *tous* "all").

<sup>(</sup>ii) \*Ils les ont chacun chacune vues

The difference between *all* and *each*, as to the possibility of having multiple floating quantifiers is relevant to the analysis proposed in the text. Observe that, unlike *each*, *all* can be directly predicated of DPs:

<sup>(</sup>iii) a. Nous sommes tous b. Hemos sido todos

If so, we can take the several *all* quantifiers in examples such as (ia) to be predicated directly of the traces of their associated DPs, rather than being predicated of events.

#### References

Beghelli, F., 1995, The Phrase Structure of Quantifier Scope. MIT Dissertation.

- --, D. Ben Shalom & A. Szabolcsi, 1997, "Variation, Distributivity and Branching" in Szabolcsi (ed.), 29-38.
- ---, & T. Stowell, 1997, "Distributivity and Negation: the Syntax of *Each* and *Every*" in A. Szabolcsi (ed.), 71-98.

Cheng. L., 1991, On the Typology of Wh-Questions. MIT Dissertation.

Choe, J. W., 1987, Anti-Quantifiers and a Theory of Distributivity. UMass Dissertation.

Elordieta, A., 2001, Verb Movement and Constituent Permutation in Basque. Utrecht: LOT.

Etxeberria, U., 2001, Manuscript. University of the Basque Country.

- Etxepare, R. (in press), "Nori berea: nor...bere... egiturak euskaraz" in Euskaltzaindiaren XV. Nazioarteko Biltzarraren Agiriak, Euskaltzaindia.
- Haddican, B., 2000, "Basque Functional Heads". Manuscript. University of New York.
- Hagstrom, P., 1998, Decomposing Questions. MIT Dissertation.

Haspelmath, M., 1997, Indefinite pronouns. Oxford University Press.

Junker, M. O., 1995, Syntaxe et sémantique des quantifieurs flottants tous et chacun. Distributivité et sémantique conceptuelle. Droz.

Kayne, R., 1994, The Antisymmetry of Syntax. MIT Press.

-, 1998, "Overt versus Covert Movement", Syntax 1, 128-191.

Koopman, H. and A. Szabolcsi, 2000, Verbal Complexes. MIT Press.

Krifka, M., 1992, "Definite Noun Phrases are not quantifiers", LI 23: 2, 156-163.

Landman, F., 2000, Events and Plurality. Kluwer.

Lasersohn, P., 1995, Plurality, Conjunction and Events. Kluwer.

Link, G., 1998, Algebraic semantics in Language and Philosophy. CSLI Publications.

- Liptak, A., 2001, On the Syntax of Wh-items in Hungarian. Utrecht: LOT.
- Munn, A., 1993, Topics in the Syntax and Semantics of Coordinate Structures. University of Maryland.

Puskas, G., 1999, Word Order in Hungarian. John Benjamins.

Szabolcsi, A., (ed.), 1997, Ways of Scope Taking, Kluwer.

-, 1997, "Strategies for Scope Taking" in Szabolcsi (ed.), 109-145.

-, 2001, "The Syntax of Scope" in M. Baltin and C. Collins (eds.) The Handbook of Syntactic Theory, Blackwell.