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Superiority effects without superiority conditions¹

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1. Superiority, wh-movement and focus movement

The Superiority Condition (Chomsky 1973) is a condition governing the relative order of wh-phrases in interrogative clauses. As shown in the example below, the relative order of (bare) wh-phrases in multiple interrogative clauses in English is not free, but seems to require the higher wh-phrase to precede the lower one, where “higher” and “lower” can be defined in terms of c-command in a tree structure.

- (1) a. I wonder who saw what
b. *I wonder what did who see

Chomsky’s formulation of the superiority condition was not specific to wh-clauses or wh-phrases. It read as follows (Chomsky, 1973:246):

- (2) Superiority Condition

A rule cannot relate X and Y in the following description

...X...[...Z...WYV...]

if that rule applies in an ambiguous way to Z and Y and Z is higher than Y (where Z is higher than Y iff Z c-commands Y)

Under the assumption that wh-phrases move to C in English to satisfy a wh-feature (Baker 1970; Bresnan, 1972), the rule requires the wh-phrase in the subject position (*who*) to precede the one in object position (*what*) in (1a,b).

The superiority condition does not apply generally across either wh-constructions² or languages. For the latter, it was immediately noted that many languages do not seem to abide by it. Early work by Wachowicz (1974) already showed that Polish multiple wh-clauses seem to allow both the possible and the impossible configurations in (1a,b):

- (3) a. Kto co robil
WH.NOM WH.ACC did
“Who did what?”

- b. Co kto ropil
WH.ACC WH.NOM did
“What did who do?”

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² The rule does not seem to be operative with complex or heavy wh-phrases. See Pesetsky (2000) for a review and an account of the asymmetry between bare and complex wh-phrases.

The possibility of (3b) seems to be a widespread typological option among the languages of the world, as noted by Boeckx and Grohmann (2003:1-16). In a series of influential papers, Boskovic (1998, 1999, 2001, 2002, 2003) has argued that in languages where the superiority condition is violated, what we actually see is either focus movement or a mixture of movement to C (wh-movement) and focus-movement. Boskovic proposes that unlike wh-movement, which is related to the satisfaction of a left peripheral feature in C (clause typing), focus movement is not probe-driven (in the sense of Chomsky 2000). In other words, you cannot have more than one wh-moved wh-phrase, but you can have multiple foci. What in many languages looks like multiple wh-movement actually depends on the existence in those languages of an independent phenomenon of focus movement that targets wh-pronouns too. An illustrative piece of evidence for the existence of two distinct types of movement is provided by Serbo-croatian. Serbo-croatian has two types of main interrogative clause: one of them involves an overt interrogative complementizer *li*; the other one presents no overt complementizer. In the absence of an overt interrogative complementizer, the relative order of wh-phrases is free in Serbo-croatian so that superiority-violating orders are possible:

- (4) a. Ko je sta kupio?
Who AUX what bought
“Who bought what?”
- b. Sta je ko kupio?
What AUX who bought
“What did who buy?”

If the overt interrogative complementizer is present however, the relative order of the wh-phrases must obey superiority; so that only the order represented in (4a) becomes possible (Boskovic 2002:354):

- (5) a. Ko li koga voli?
WHO.NOM C WHO.ACC loves
“Who loves whom?”
- b. *Koga li ko voli?

Boskovic’s interpretation of the facts is as follows: the presence of C requires overt wh-movement to its outer edge. Movement in this case is in order to satisfy a feature of C. As there is more than one candidate for this (any one of the two wh-phrases), economy considerations apply, and only the closest wh-phrase is attracted. Since this movement is enough to satisfy C, no other movement to C arises. The second wh-element is not in its base position, Boskovic observes, so it too must have been moved. Movement in this case is focus driven movement, that we can also observe in (4a,b). Boskovic claims that the difference between wh-movement and focus movement can equally be observed in Bulgarian, a language that obeys superiority. Bulgarian shows the same asymmetry that English shows in the relative order of wh-phrases:

- (6) a. Koj kakvo e kupil?
who what AUX bought
“Who bought what?”

- b. *Kakvo koj e kupil?
what who AUX bought
“*What did who buy?”

The contrast between (6a,b) suggests that wh-movement targets an interrogative feature in C. But as Boskovic notes, the second wh-phrase is not in its base position either. Bulgarian is thus a multiple wh-movement language, as Serbo-croatian. Only it is bound to always move one of the wh-phrases to C. Since this is probe-driven movement, it is governed by an “attract closest” condition, that motivates superiority. The second wh-movement cannot be triggered by an interrogative feature, but must be an instance of focus movement. Focus movement not being probe-driven, no “attract closest” condition applies, and therefore no superiority effect ensues. As a further step in the argument that wh-movement and focus movement proceed differently, Boskovic proposes to complexify the sentences by introducing a third wh-phrase. In those configurations, he claims, we would expect the following to happen: the first wh-phrase in a multiple wh-construction in Bulgarian, attracted to C, should obey the superiority condition; the other two movements would not be forced to, as they involve focus movement. The prediction is borne out, as shown in (7):

- (7) a. Koj na kogo e pokazal kogo
who PREP who AUX introduced who
“Who introduced who to whom?”

b. Koj kogo na kogo e pokazal
who who PREP who AUX introduced
“Who introduced who to whom?”

c. *kogo koj e pokazal na kogo

2. Basque multiple wh-constructions

Basque is a multiple wh-movement language showing apparent superiority effects, as illustrated by the contrast between (8a,b):

- (8) a. Nork zer ikusi du?
WH.ERG WH.ABS seen has
“Who saw what?”

b. *Zer nork ikusi du?
WH.ABS WHO.ERG seen has
“What did who see?”

The existing analyses of the superiority condition in Basque (Reglero, 2003, 2004; Jeong, 2007) derive (8) from the interplay of different conditions affecting the displacement of the wh-words to the left periphery (to either focus or interrogative C), along the lines of Boskovic’s works. But the superiority condition that we apparently observe in the Basque (8) only concerns sequences involving *zer* “what”. It does not affect other orders, if they don’t involve the wh-pronoun *zer* “what”:

- (9) nor nork ikusi du?
WHO.ABS WHO.ERG seen has
“Who has seen whom?”

The absence of any special ordering requirement is also apparent when more than two wh-phrases are involved:

- (11) a. Nork nori nor aurkeztu dio?
WHO.ERG WHO.DAT WHO.ABS introduced AUX
“Who introduced who to whom”

c. Nor nork nori aurkeztu dio?

d. Nori nor nork aurkeztu dio?

Apparent superiority effects re-emerge if one of the wh-phrases is *zer* “what”. In that case, *zer* cannot be the first wh-phrase in the sequence (12a), although outside that position, it can precede other “higher” wh-phrases (12b):

- (12) a. *Zer nork nori erakutsi dio?
WHAT.ABS WHO.ERG WHO.DAT shown AUX
“who showed what to whom?”

b. Nork zer nori erakutsi dio?
WHO.ERG WHAT.ABS WHO.DAT shown AUX
“Who showed what to whom?”

Dukova-Zheleva (2010:85-86) notes for Bulgarian that orders violating superiority cannot have an inanimate wh-pronoun preceding an animate one. In Bulgarian, the relevant examples involve cases in which the highest wh-phrase is inanimate, as in (13a,b, from Billings and Rudin, 1996). In those cases, the animate wh-phrase can occur preceding the inanimate one, even if this involves violating the superiority condition:

- (13) a. Kakvo kogo e udarilo?
WHAT.NOM WHO.ACC AUX hit
“What hit whom?”

b. Kogo kakvo e udarilo?
WHO.ACC WHAT.NOM AUX hit
“What hit whom?”

There is no opposite configuration in which a lower inanimate wh-phrase would precede an animate one (cf. the examples in (7)).

Assuming a link between the relative order of the wh-pronouns and the animacy status of the wh-pronouns in Basque is problematic though, as it only arises if both wh-phrases are moved. Basque allows instances in which only one of the wh-phrases fronts into the left periphery. In those cases, the animacy status of the wh-pronouns is irrelevant:

(14) a. Nork erosi du zer?
WHO.ERG bought has WHAT.ABS
“Who bought what?”

b. Zer erosi du nork?
WHAT.ABS bought has WHO.ERG
“Who bought what?”

Basque does provide examples parallel to the Bulgarian (13a,b). In those cases, an animate object wh-phrase can take precedence over an inanimate subject wh-phrase:

(15) a. Zerk nor eraman du bizitzaz aldatzera?
WHAT.ERG WHO.ABS led has life.INSTR change.NOM.ALL
“What led whom to change his/her life?”

b. Nor zerk eraman du bizitzaz aldatzera?
WHO.ABS WHAT.ERG led has life.INSTR change.NOM.ALL
“What led whom to change his/her life?”

It is interesting that the word order alternation in (15a,b) has an effect in interpretation. Pair-list answers sound natural with (15b), but much less so with (15a). Imagine for instance that we are inquiring about the reasons (winning the lottery, divorce, middle age crisis, revelation) that led a bunch of people (say Ricardo, Eladio, Pilar, Fermin) to undertake big changes in their lives. If we inquire about the mapping between the reasons and the people, we will clearly opt for (15b):

(16) Talking about the persons in question, and the choices that led to their changing:

Baina zehazki,
But concretely

Nor zerk eraman du horretara?
WHO.ABS WHAT.ERG led AUX that.to
“But concretely, what led whom to that?”

B: Ba horra, Ricardo 50etako krisiak, Eladio loteria irabazi izanak, Pilar...
Here it.is, Ricardo 50 year.of crise.ERG, Eladio lottery win having.ERG, Pilar...

No similar bijective relation can be established on the basis of (15a), which seems to inquire about a single pair, perhaps as a clarificatory question. Similar examples can be constructed with other wh-pairs. For instance, in the context of a treasure hunt, I can ask about the relation between places and hidden things by uttering (17a), but that same attempt does not seem natural with the alternative order (17b). (17b) is nevertheless a grammatical question in Basque, and it could be used as a sort of clarificatory question (tell me again where you hid whatever you hid):

(17) a. Non zer gorde duzu?
where what.abs hid you.have

“Where did you hid what?”

b. Zer non gorde duzu?
what.abs where hid you.have
“What did you hid where?”

At this point we are led to ask why the relative order of *zer* “what” versus other *wh*-pronouns should have an impact on the interpretation of the question as either a distributive one or something else. This takes us to the next section.

3. Basque *wh*-distributive constructions

Among the grammatical means to represent distributive relations, Basque has constructions such as (18), built on *wh*-pronouns (from Etxepare, 2002):

(18) a. Nork bere ama maite du
who-erg his mother love aux
“Everyone_i loves his_i mother”

b. Athleticeko hamaika jokalariak zelaira atera ziren.
“The eleven players of Athletic de Bilbao came out to the playground”

Zein bere tokian jarri zen.
which-abs his place-loc positioned aux
“Everyone_i took his_i place”

The constructions in (18) should be compared on the one hand to lexical distributive quantifiers, represented by the quantifier *bakoitz* “each” in Basque:

(19) a. Bakoitzak bere ama maite du
Each-erg his mother love aux
“Each one loves his mother”

b. Jokalari bakoitza bere tokian jarri zen
player each-abs his place-loc positioned aux
“Each player took his place”

And on the other hand, to interrogative clauses, as illustrated in (20b).

(20) a. Nork bere ama maite du
who-erg his mother-abs love aux
“Everyone loves his mother”

b. Nork maite du bere ama?
Who-erg love aux his mother-abs
“Who loves his mother?”

(20a) is the distributive quantificational construction. (20b), uttered with interrogative intonation and showing the *wh*-pronoun in the position immediately preceding the verbal phrase (the focal position), is a partial question.

We could synthesize the basic data in (18)-(20) by saying that in Basque, phrases phonologically identical to *wh*-items function as key terms in a distributive quantification when they are not uttered with interrogative intonation, and do not occur in the preverbal focal position (cf. 20b). The phenomenon occurs in both generic and episodic contexts (cf 18a,b).

4. Functional dependencies

One intriguing property of the *wh*-distributive constructions in Basque, is that the *wh*-pronouns are obligatorily followed by a definite DP containing a pronoun, which functions as the share of the distributive structure. Without such a DP, the *wh*-distributive construction is out (see Etxepare, 2002; to appear):

- (21) *Nork liburu bat erosi du
who.ERG book one-abs bought has
“(Intended meaning) Everyone bought a book”

As one would expect, this restriction does not extend to lexical distributive quantifiers of the *each* sort:

- (22) Bakoitzak liburu bat erosi du
Each.DET.ERG book one.ABS bought has
“Each one bought a book”

The distributive relations apparent in the *wh*-constructions are strikingly similar to the kind of functional dependency manifest in multiple *wh*-questions (see Dayal, 1996), and *Wh*-/Quantifier interactions like (23) (Engdahl, 1986; Groenendijk and Stokhof, 1984; Chierchia, 1993), and illustrated in (23):

- (23) A: Who does everyone love?
B: His mother

A question like (23) admits a functional interpretation whose meaning can be defined as in (84):

- (24) What is the NP-valued function *f*, such that it maps every atomic element in the denotation of the QP to that function?

For Chierchia, answers such as B to questions like A suggest a semantic analysis whereby the *wh*-phrase leaves a two layered trace, containing both an argument variable (corresponding to the pronoun in B) and a functional variable, corresponding to the function *mother of*. The argument variable is bound by the quantifier, whereas the functional variable is bound by the *wh*-operator in C. Chierchia’s proposal has been developed further by Hornstein (1995), who proposes that the lower *wh*-copy in a question such as (23A) is a complex syntactic entity, formed by a pronominal argument

variable and a functional variable. The syntactic form of the lower copy is thus identical to (23B). But (23B) is identical to the structure of the share in distributive wh-constructions. Our distributive construction seems thus to wear the logical form of this type of structure on its sleeves:

(25) $[\text{Distr}^P \text{Wh-pronoun Distr}^0 [\text{Share}^P f(NP) \text{Share}^0 \dots]]$

In (25), to each element x in the set denoted by the highest wh-pronoun corresponds a function of type $\langle e, e \rangle$ that maps x into the set of individuals denoted by the NP.

I propose that we treat the wh-distributive construction in Basque as a structural device for quantifying over unique functions. In this view, the logical form for a sentence like (26a) is (26b), which involves quantification over unique functions (from Jacobsen, 1994):

(26) a. Nork bere ama maite du
wh.erg his mother.det love aux
"Everyone loves his mother"

b $\lambda f [\text{Nat}'(f) \ \& \ \forall x [x \in \text{Dom}(\tilde{f}) \rightarrow \text{woman}'(\tilde{f}(x))] \ \& \ \forall x [\text{man}'(x) \rightarrow \text{love}'(x, \tilde{f}(x))]] = \lambda x \lambda z [\text{mother-of}'(z, x)]$

c. The only natural function in the set $\{f: f \text{ maps every person to the woman he loves}\}$ is the function that maps every person to his mother

The focal adverb in the paraphrase in (26c), that captures the uniqueness restriction in the interpretation of the construction, suggests that the functional variable must be focalized. This corresponds to the obligatory focalization of the share in the Basque wh-distributive construction.

5. Multiple questions and distributivity

For Chierchia (1993), the functional reading has also an extensional version, where the function is manifested as a series of pairs, the so-called pair-list reading. It is therefore reasonable to ask whether multiple questions yielding pair-list readings in Basque can be amenable to the same syntactic analysis as wh-distributives. This possibility is encouraged by the following parallelism: pair-list readings require the adjacency of the wh-words in Basque, exactly as the distributive wh-constructions require the adjacency between the wh-pronoun and the share:

(27) a. Nork zer erosi du? (Pair-List)
Who what buy aux
"Who bought what?"

b. Nork zer_i uste du [t gertatu dela]? (Pair-list)
who what think aux happen aux
"Who thinks that what happened?"

We noted before (examples 14a,b), that in Basque, multiple questions may be constructed by fronting one of the wh-pronouns to the left periphery, leaving the other one in-situ. We repeat one of the examples here:

- (28) Nork erosi du zer?
Who.ERG bought has what
“Who bought what”

Interestingly, sequences such as (28) do not support a pair list reading. Imagine a context in which we sent several people to buy for a list of things. They have come back, and I ask about who bought what. To get a list pairing persons and objects I would need to utter (29a), with fronting of both wh-pronouns, and not (29b):

- (29) a. Ia, nork zer erosi du?
let's.see WHO.ERG WHAT.ABS bought has
“So let's see: who bought what?”

b. Ia, nork erosi du zer?
let's.see WHO.ERG bought has WHAT.ABS
“So let's see: who bought what?”

The obligatory fronting of the second wh-pronoun is clearly reminiscent of the fronting of the share in the wh-distributive construction.

The comparison we established between Basque pair-list questions and the wh-distributive construction can help us understand another intriguing property of Basque multiple questions: why they cannot be headed by *zer* “what”. The Basque wh-distributive construction is not possible with the wh-pronoun *zer* “what” as the Distributive key:

- (30) a. *Mundu honetan, zerk bere saria dauka
world this.in what.ERG its reward has
“In this world, everything has its (corresponding) reward”

b. *Zer bere lekuan jarri zuen
WHAT.ABS its place.in placed had
“He/she placed everything in its (proper) place”

The asymmetry we see in Basque is not peculiar to this language, and it is easy to find matching restrictions in other languages. Thus, Spanish allows the quantifier *cada* “each” to merge with wh-pronouns, giving rise to complex distributive quantifiers (Etxepare, to appear):

- (31) a. A cada quién lo suyo
to each who cl his.MASC
“To each one that which is his/hers”

b. ...metiendo cada cual la cuchara en la caldera
introducing each which the spoon in the cauldron

“Each one introducing the spoon in the cauldron”

The construction, as seen in (31a-c) is possible with *quién* “who” and *cuál* “which”, but it is not available with *qué* “what”:

- (32) *Metiendo cada qué en su sitio
introducing each what in its place

Japanese *nani* “what” does not combine with *-mo-* either with a universal distributive reading. A form like (33a) is impossible under that reading (Yatsushiro, 2009:143).

- (33) *Nani-mo “everything”
what-also

We may assume that a distributive relation requires a set consisting of individualized atoms, therefore demands a grammatically count expression (see Gil, 1995). This suggests that the denotation of *zer* “what” is such that it does not include atomic subparts (it is not consistent, in the sense of Landman, 1991). This is the conclusion independently reached by Heim (1989) for English *what* too, which she suggests to interpret as “something of kind x” (Heim, 1989:29). If this approach to *who/what* asymmetries is correct, the Basque equivalent of *what* is semantically excluded from the construction. Let me assign a concrete syntactic configuration to distributivity, one that includes an independent Functional Head *Distributive* in the clause structure, along the lines of Beghelli (1995), Szabolcsi (1997), Szabolcsi and Brody (2003) and Szabolcsi (2018). Under such an hypothesis, something like (34) is impossible in Basque:

- (34) *_{[DistrP Zer Distr⁰...}

6. Syntactic structure

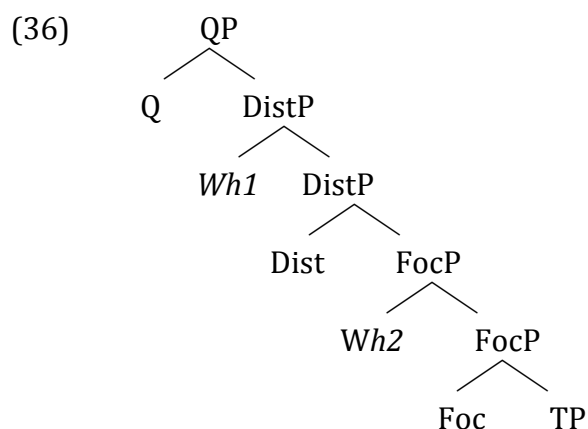
In forthcoming work, I propose that the wh-distributive construction in Basque corresponds to a basic syntactic template that has a wh-pronoun in the outer edge of a Distributive head, which in turn selects a focus head hosting the share. The structure is reminiscent of what has been proposed for the Hungarian left periphery, where distributive quantifiers occupy a designated Quantifier position and shares are fronted to a focus position (Szabolcsi, 1997):

- (35)
-
- ```

graph TD
 DistP1[DistP] --- Who/which[Who/which]
 DistP1 --- DistP2[DistP]
 DistP2 --- Dist[Dist]
 DistP2 --- FocP1[FocP]
 FocP1 --- DP["[DP pro NP]"]
 FocP1 --- FocP2[FocP]
 FocP2 --- Foc[Foc]
 FocP2 --- TP[TP]

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The idea is that multiple questions in Basque that give rise to a distributive reading must be accounted for along the same lines. They are distributive constructions that get connected to a higher interrogative syntactic layer (marked as QP):<sup>3</sup>



If the comparison between multiple wh-questions and wh-distributive constructions in Basque points in the right direction, we must reinterpret the underlying structure of multiple questions with distributive interpretations (Pair-List readings) in terms of the specific syntax that the language in question makes available to express distributivity, and not in terms of derivational constraints related to the expression of sentence mood.

## References

Baker, C.L. (1970) “Notes on the description of English questions: the role of an abstract question morpheme” *Foundations of Language* 6-2: 197-219.

Beghelli, Filippo (1995) *The Phrase Structure of Quantifier Scope*. MIT diss.

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<sup>3</sup> An issue arises about the existence of multiple wh-question with more than two wh-phrases. How can we integrate those sequences (see e.g. 11a-c) in the syntactic structure represented by (36)? Multiple wh-distributives are possible in Basque, as shown in (i) (from the Basque Reference Corpus)

- (i) Bi jeinuek, nork nori moko, eztabaida luzean jardun zuten  
 two genies.ERG WHO.ERG WHO.DAT fighting discussion long.in spent they.had  
 “The two geniuses, fighting with each other, debated for a long time”

(*Mila gau eta bat gehiago*, Patxi Zubizarreta, 2002)

Sentences such as (i) have a reciprocal reading. Taking into account the association of wh-pronouns with universal distributive force in the cases discussed, and the presence of overt distributive quantifiers in at least some lexical reciprocal anaphors (cf. English *each other*, Heim and Lasnik, 1991), it may not come as a surprise that wh-pronouns in Basque can double as reciprocal constructions. I leave the precise analysis of these cases and their eventual connection with multiple wh-questions aside. One possibility is that more than one wh-pronoun can occur in the outer edge of the Distributive Phrase. This option is not available *zer* “what”, as shown in (12a).

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Billings, L. and C. Rudin (1994) « Optimality and Superiority: A New Approach to Overt Multiple *Wh*-Ordering » In J. Toman (Ed.) *Formal Approaches to Slavic Linguistics: the College Park Meeting*. Ann Arbor, MI. Michigan Slavic Publications: 35-60.

Boeckx, C. eta K. Grohmann (arg) (2003) *Multiple Wh-Fronting*. Amsterdam: John Benjamins.

Boškovic, Ž. (1998) "Multiple *Wh*-Fronting and Economy of Derivation". In Borer, H. (arg) *Proceedings of the West Coast Conference on Formal Linguistics* 16: 49-63. Stanford, California: Stanford University.

Boškovic, Ž. (1999) "On multiple feature-checking: Multiple *wh*-fronting and multiple head-movement". In S. Epstein & N. Hornstein (arg) *Working Minimalism*. Cambridge, Mass.: MIT Press. 159-187.

Boškovic, Ž. (2000) "Sometimes in Spec CP, sometimes in-situ". In R. Martin, D. Michaels & J. Uriagereka (arg) *Step by step: Essays on minimalism in honor of Howard Lasnik*. Cambridge, Mass.: MIT Press. 53-87

Boškovic, Ž. (2001) *On the nature of the syntax-phonology interface: Cliticization and other phenomena*. Amsterdam: Elsevier.

Boškovic, Ž. (2002) "On multiple *wh*-fronting". *Linguistic Inquiry* 33: 351-383.

Brody, M. eta A. Szabolcsi (2003) "Overt Scope in Hungarian" *Syntax* 6-1: 19-52.

Chierchia, Gennaro (1993) "Questions with quantifiers" *Natural Language Semantics* 1 (2):181-234.

Chomsky, N. (1973) "Conditions on Transformations" in S. Anderson eta P. Kiparsky (arg) *A Festschrift for Morris Halle*. New York: Holt, Rinehart and Winston. 232-286.

Chomsky, Noam (2000) "Minimalist inquiries: the framework" In Roger Martin, David Michaels and Juan Uriagereka (eds.) *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*. Cambridge, Mass: MIT Press. 89–155.

Chomsky, N. (2001) "Derivation by Phase" In M. Kenstowicz (ed) *Ken Hale: a Life in Language*. Cambridge: MIT Press. 1-52.

Dayal, V. (1996) *Locality in Wh-Quantification*. Kluwer.

Etxepare, R. (to appear) "Wh-distributives in Basque" In A. Gallego eta D. Ott (arg) *Cartography and Explanatory Adequacy*. Oxford: Oxford University Press.

Etxepare, R. eta J. Ortiz de Urbina (2003) "Focalization" In J. I. Hualde and J. Ortiz de Urbina (arg) *A Grammar of Basque*. Berlin: Mouton de Gruyter. 459-514.

To appear in Oana Lungu et al (2021) *Festschrift for Hamida Demirdache*. Nantes : University of Nantes

Heim, I. (1987) "Where does the definiteness restriction apply? Evidence from the definiteness of variables" In E. Reuland and A. Ter Meulen (eds.) *The Representation of (In)definiteness*. Current studies in Linguistics 14, MIT Press, pp. 21-42.

Hornstein, N. (1995) *Logical Form. From GB to Minimalism*. Blackwell.

Jeong, Y. (2007) « Multiple wh-fronting in Basque » In A. Conroy, C. Jing, C. Nakao eta E. Takahashi (arg), *University of Maryland Working Papers in Linguistics 15*. 98-142.

Landman, F. (1991) *Structures for Semantics*. Dordrecht: Kluwer.

Ortiz de Urbina, J. (1989) *Parameters in the Grammar of Basque*. Dordrecht: Foris.

Pesetsky, D. (2000) *Phrasal Movement and its Kin*. Cambridge, MA: MIT Press.

Reglero, L. (2003) "Non Wh-fronting in Basque" In K. Grohmann and C. Boeckx (eds) *Multiple Wh-Fronting*. Amsterdam: John Benjamins. 187-227.

Reglero, L. (2004) "Preguntas multiples en euskara" *ASJU* 38-1: 249-285

Szabolcsi, A. (1997) "Strategies for Scope Taking" In A. Szabolcsi (ed.) (1997) *Ways of Scope Taking*. Kluwer Academic Publishers.

Szabolcsi, A. (2010) *Quantification*. Cambridge University Press.

Szabolcsi, A. (2018) "Two types of quantifier particles: Quantifier-phrase internal vs. heads of the clausal spine" *Glossa* 3-1: 1-32.

Wachowicz, K. (1974) "Against the Universality of a Single Wh-Question Movement" *Foundations of Language* 11-2:155-166.