



HAL
open science

Basque Semi Free Relative Clauses and the Structure of DPs

Georges Rebuschi

► **To cite this version:**

Georges Rebuschi. Basque Semi Free Relative Clauses and the Structure of DPs. Lapurdum, 2003, VIII, pp.457-477. artxibo-00000071

HAL Id: artxibo-00000071

<https://artxiker.ccsd.cnrs.fr/artxibo-00000071v1>

Submitted on 6 Feb 2006

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Basque Semi-Free Relative Clauses and the Structure of DPs

Georges REBUSCHI

(Sorbonne nouvelle, UMR 7107 & IKER)

rebuschi@ext.jussieu.fr

1. Introduction*

Basque has two types of antecedentless relative clauses, one very similar to the English *whoever* type, as in (1) – a construction dialectally limited to the Eastern part of the Basque Country (the French part of it and Navarra across the border) – and the other, as in (2), which can be literally glossed ‘*the-*([Empty-]Op-)*that*+IP/TP’. In the examples (1) and (2), they are left-dislocated (the unmarked position for the first type).

(1) Type 1

- a [Nork (ere) huts egiten bait du],
who-*k* ever mistake doing C° AUX:he-has-it
(eta) hura gaztigatua izanen da.¹
and DEM punished-SG AUX-PROSP AUX:he-is
aa‘Whoever makes a mistake will/shall be punished.’
lit. ‘Whoever makes a mistake, that one will be punished.’

- b [Nork (ere) huts egiten du.en],
who-*k* ever mistake doing AUX+C°:-en
(*eta) hura gaztigatua izanen da.
id.

(2) Type 2

- [Huts egiten du.en.a], hura gaztigatua izanen da.
mistake doing AUX-C°-SG
id., lit. ‘the that makes a mistake, that one will□’

As the examples show, the two types (roughly) share the same meaning. The main differences are the following:

(i) In type 1, the “true” or “pure” Free Relative (henceforth PFR), a *Wh-* word is obligatorily present, whereas such a word is utterly impossible in case (2), and there is

* This article is a revised version of a talk made at the Workshop on Relative Clauses organised by EALing 2003 at the Ecole Normale Supérieure (Ulm), Département d’Etudes Cognitives, on September 24, 2003. It endeavours to extend the data described in Rebuschi (2000) in further directions, in particular insofar as appositive clauses, and the inner, layered, structure of DPs, are concerned. I thank Beñat Oyharçabal for enlightening discussion on various aspects of this paper, and the audience of the workshop for helpful questions.

¹ Abbreviations: ABS, absolutive; ADN, adnominalising affix; ART, article; AUX, auxiliary; DAT, dative; DEM, demonstrative; EMPH, emphatic (pronoun); ERG, ergative; FR, free relative; GEN, genitive; IMP, imperative; INT, interrogative particle; INDIC, indicative (mood); lit., literally; NEG, negation; PART, partitive; PL, plural; PROSP, prospective (aspect); PFR, pure/*Wh-* free relative; PRT, (assertive) particle; SFR, semi-free relative; SG, singular; SUBJ, subjunctive (mood).

no evidence whatsoever that an abstract or invisible Determiner or Article is present, which would take the CP as its complement.

(ii) On the other hand, an article, *-a* in the singular, is compulsory in type 2, and it is precisely because of the presence of this functional element that I call the bracketed sequence in (2) a “Semi” Free Relative clause or SFR.²

(iii) A further difference, which is clearly correlated with the preceding one, has to do with morphological case; in PFRs, the case on the *Wh-* element is associated with the function that element has within the Free Relative itself: see the *ergative* case ending (*-k*) in (1a,b), which is concatenated with the article — in fact, with the last word within the nominal expression³. On the other hand, left-dislocated SFRs normally have their case determined by the one of their correlate — *hura* in (1) and (2), but other pronouns (among which (small) *pro*), are also possible, see § 3.2; in the examples above, this case suffix is zero, and is called the *absolute* case.⁴

In this paper, I will concentrate on this latter type 2, which is common to all the dialects, and on problems they essentially exhibit with respect to case, on the one hand, and their semantic interpretation on the other: I will suggest that SFRs can, and in some cases even must, be analysed as nominals headed by an Article which directly selects a relative CP as its complement, and that their semantic translation can be uniformly assigned to the type <e,t>, i.e. that they are *predicates*, a proposal which is quite compatible with current research on the inner structure of DPs, at least if they can be conceived of as “Number Phrases”.

2. Common Basque Relative Clauses and (Semi-) Free Relatives

2.1. Basic data

(3) and (4) illustrate basic transitive and intransitive (unaccusative) root sentences and their case marking: note the ergative *-k*, for transitive subjects only — its presence or absence will play a decisive rôle later on (see §4):

- (3) Gizon.a.k liburu.a irakurri du.
 man-SG-*k* book-SG read AUX:he-has-it
 ‘The man has read the/a book.’⁵
- (4) Gizon.a etorri da.
 man-SG come AUX:he-is ‘The man has come.’

² Both types are often labelled “free relatives”, as in de Rijk (1972) and much ensuing work (e.g. Oyharcabal 1987, 2003).

³ For the time being, I will be using the words *article* and *nominal (expression)* in a non-technical sense; thus the latter refers to NPs, DPs, and possibly other functional projections above NPs but below DP: see the conclusion (§5).

⁴ Two more differences, which will not be dealt with in this article, are these:

- (i) In the Northern dialects (those spoken in France), illustrated in (1a), vs. (1b), typical of the (Higher) Navarrese dialects, the complementiser in (1) is different from the one in (2): *bait-* vs. *-(e)n*;
- (ii) in the same Northern dialects, the main clause can be introduced by what is otherwise an ordinary coordinating conjunction, *eta*, lit. ‘and’, cf. (1a), which is absolutely excluded in (1b) and (2).

⁵ On the translation of *-a* as an indefinite article, see the discussion concerning the examples in (28).

There is a suffix *-(e)n* which appears under C° whenever a *Wh*-word or phrase occurs in a subordinate clause:

- (5) Ez dakit [gizon.a.k **zer** irakurri du.**en**].
 NEG I-know man-SG-*k* what read AUX:he-has-it- C° :*en*
 'I don't know what the man has read.'
- (6) Ez dakit [**nor.k** irakurri du.**en** liburu.a].
 NEG I-know who-*k* read AUX:he-has-it- C° :*en* book-SG
 'I don't know who has read the book.'

That the C° suffix *-(e)n* of (1b), (2), (5) and (6) has something to do with *Wh*-operators is shown by the fact that another complementizer is used if the embedded clause is declarative, as in (7):

- (7) Jonek erran daut / dit [Peiok liburua irakurri du.**ela**].
 Jon-*k* said AUX:he-has-to-me Peio-*k* book-SG read AUX+ C° :-*ela*
 'Jon has told me that Peio has read a/the book.'

2.2. Restrictive relatives

Consider (8) and (9). The bracketed sequences correspond to sentence (3), with a gap in object or subject position respectively — it is a restrictive relative which modifies the nouns/NPs *liburu* and *gizon*:

- (8) [_{CP} gizon.a.k — irakurri du.**en**] liburu.a
 man-SG-*k* read he-has-it-*en* book-SG
 'the book [that the man has read —]'
- (9) [[— Liburu.a irakurri du.**en**] gizon.a] jakintsu da.
 book-SG read AUX+*-en* man-SG wise he-is
 'The man [that — has read the book] is wise.'

As could be expected, and is illustrated in (10), the case of the (argumental) DP that contains the restrictive relative is linked to the function of that DP in the higher clause (this may sound quite trivial, but we shall see later on that it is not):

- (10) a [[— Liburu.a irakurri du.**en**] gizon.a.k] egia (ba-)daki.
 book-SG read AUX+*-en* man-SG-*k* truth-SG PRT- knows
 'The man [that e has read the book] knows the truth.'
- b Etorri den gizon.a.k liburua irakurri du. [*den = /da+/-en/*]
 come he-is-*en* man.SG-*k* book-SG read AUX:he-has-it
 'The man who's come has read the book.'

2.3. Ellipted NPs in DPs that contain a restrictive relative

The NP, or “head” noun, *gizon* in (10a) for instance, can be dropped or ellipted.⁶ We thus get the second relative clause in (11), where the dash represents the ellipted material.

⁶ A clear example of the fact that *N-Phrases* rather bare Nouns are at stake is provided by small clause predicates, which are realised by bare NPs – specifically, note the absence of any number (SG/PL) mark after *erakasle* below. (Note also the ellipsis of the N° itself in the second predicate

- (11) [[[liburu.a irakurtzen du.en] gizon]a]
 book-SG reading he-has-it-en man-SG
 eta [[[izparringia irakurtzen du.en]—]a]
 and newspaper-SG reading AUX+**-en-Ø**-SG
 '[the man [that reads the book]] and the one that reads the newspaper'
 lit.: '□ and [[[the — [that [- reads the book]]]]'

One natural question to ask is whether the left-dislocated SFR in (2) has the same grammatical properties as the second DP in (11), or not. My answer is definitely: no. Let me now give two empirical arguments.

2.4. Two specific properties of SFRs

2.4.1. Mood

The first argument comes from the Western (Biscayan) dialect, in which, in paraphrases of Eastern “pure” free relatives, the subjunctive mood can (but need not)⁷ be used in SFRs, cf. (12b), whereas that mood is (as in all the remaining dialects) impossible in adnominal restrictive relatives⁸ and in elliptical ones too:

- (12) a huts egiten du.en.a / dauana~ ~ dauena~ dabena⁹
 mistake doing AUX:he-has-it+**-en**- SG
 (i) '(□ and) the [one] that makes a mistake': *elliptical*
 (ii) 'whoever makes a mistake': *“generic”¹⁰/non-specific*
- b huts egin d.**agi.en.a**
 mistake do AUX[SUBJ]+**-en**-SG
 'whoever makes a mistake'/*[□ and] the one that makes a mistake' **not**
 ambiguous: only “generic”
- (13) a *huts egin d.**agi.en** gizon.a
 mistake do AUX[SUBJ]+**-en** man-SG
 [intended meaning: 'the man that makes a mistake']

(Hiriart-Urruti (1984, p. 257)):

- (i) ...gizon bat_i ezarriz <_{SC} t_i [mutiko.e.n erakasle]> eta <_{SC} serorak [neskato.e.n Ø]>.
 man one assigning boy-PL-GEN teacher and nun-PL girl-PL-GEN
 lit. 'assigning <_{SC} a man (as) boys' teacher> and <_{SC} nuns (as) girls'—>.'

⁷ See e.g. the following contiguous verses from Kerexeta's Biscayan Bible (1976):

- (i) Bere emaztea itzi dagianak... 'he[ERG] who leaves[SUBJ] his wife' (Mt 5,31)
 (ii) Bere emaztea izten dauanak... 'he[ERG] who leaves[INDIC] his wife' (Mt 5,32)

Such a free choice between indicative and subjunctive non-referring SFRs is already attested in the famous *Refranes de 1596* (in the same dialect); compare for instance the following pair:

- (iii) Lastozko buztana dauanak atzera begira. [# 202]
 'Let the one who has [INDIC] a tail made of straw look behind.'
 (iv) Sar dina geben lekuan, bere kaltean. [# 209]
 'The one who enters [SUBJ] a closed field, [let him do it] at his own risk.'

⁸ A possible counter-example is provided by restrictive relatives adjoined to the indefinites *edozein* and *edonor* 'any one' in particular in some non-standard varieties of Basque (only formerly?) spoken in Navarra and Guipuzcoa, but such nominals are not ordinary ones anyway.

⁹ These forms respect the specific Biscayan verbal morphology and spelling.

¹⁰ I will be using this word in a non-technical sense throughout, since the formal semanticists' genericity is generally assumed to be assigned by a generic operator – often linked to the generic tense of the clause and/or to an unselectively binding (temporal) adverbial.

- b berba egiten dau.en gizona
 word doing AUX[INDIC]+-en man-SG
 eta uts egiten dau.an.a [INDIC]
 *eta huts egin d.agi.en.a [SUBJ]
 'the man who speaks and the one who makes a mistake'

The ungrammaticality of the thrrd line in (13b) of course follows from that of (13a).

2.4.2. Coordination

Another argument, which is more telling, if only because it is common to all the dialects, is that conjoining two “generic” SFRs does not necessarily yield two (plural or maximal) individuals.

For (11) above, in the interpretation, we necessarily get *two* (atomic or maximal) individuals, something that is morphologically indicated by the plural morpheme on if the (complex) nominal expression is cross-referenced in the Inflected Verb Form:

- (14) □ joan **dira** / ***da**
 gone are is

However, such structures as (15a) are ambiguous in all dialects, and (15b) is not even ambiguous: given the conjunction *baina* 'but', only one (generic/plural) individual is referred to):

- (15) a [[Liburu.ak irakurtzen ditu.**en.a**] eta
 book-PL reading AUX+-en-SG and
 [artikuluak idazten ditu.**en.a**] jakintsu **da** / **dira**.
 article-PL writing AUX+-en-SG wise is are
 lit.: 'The that reads books and the that writes articles is/are wise.'
- b Ez izan beldurrik [[gorputza hiltzen dute.n.e.i],
 NEG have fear-PART body-SG killing AUX-en-PL-DAT
baina [ezin hil dezakete.n.e.i] (EHEG 1980: Mt 10,28)
 but cannot kill AUX-n-PL-DAT
 'And fear not them which kill the body, but are not able to kill
 the soul.'¹¹

What is relevant here is the possibility for the (inflected verb form of the) predicate to be in the singular: this indicates that real (i.e. non-elliptical) SFRs are to be interpreted as *properties*, since the conjoined SFRs can be interpreted as referring to only *one* (possibly maximal or “generic”) individual that has both the property of reading books and that of writing articles.

The foregoing conclusion is corroborated by the fact that for some speakers, PFRs and SFRs can even be conjoined, always yielding such “singular” maximal or generic individuals, as in (16), thereby supporting the hypothesis that, semantically, SFRs are properties — or predicates.

¹¹ All excerpts from the Bible will now be paraphrased in English by the so-called “King James Version”.

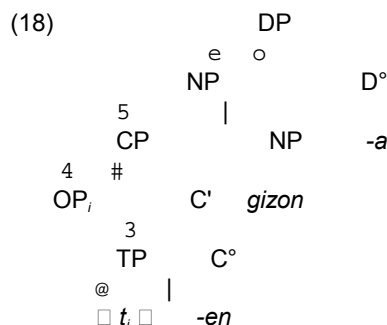
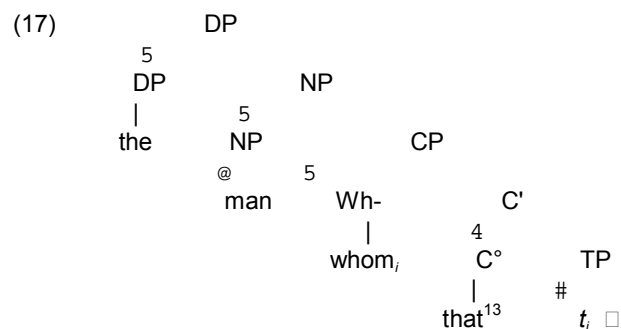
- (16) Echenique (Northern Higher-Navarrese, ms., ±1855): Mt 5, 19¹²
 Orrengatik, *nork* ere austen *baitu* manamendu otarik
 for that, who-*k* ever breaking *bait*-AUX commandment those-PART
 ttipiena, *eta* ola gizonei erakusten du.*en.a*,
 smallest-SG and thus to-men teaching he-has-it+-*en*-SG
 soil *ttarra* deitua izain **da** Ø zeruetako erreinuan [□].
 mere small-SG called-SG be-PROSP AUX heavenly kingdom-in
 'Whosoever therefore shall break one of these least commandments, and shall teach men so, he
 shall be called the least in the kingdom of heaven.'
 lit. 'Whoever breaks □ and he that teaches□, he shall□'

In the section that follows, we will see that the "predicateness" of SFRs is, in fact, to be found all over the place in Basque.

3. SFRs as (semantic) predicates

3.1. Restrictive relative clauses: a reminder

Of course, there is nothing really new about restrictive relatives being predicates. Thus, since Montague's work in the early seventies, it has been usual to analyse what I rephrase here as a DP modified by a Restrictive Relative after the model in (17) — needless to say, linearly, the Basque structure will be quite different, but the various instances of c-command relation between the syntactic objects remain constant, as in (18):



¹² The version printed in London in 1857 has *ba-* instead of *bait-*, but this is irrelevant here.

¹³ Needless to say, Modern English does *not* tolerate the simultaneous phonetic realisation of both the relative pronoun and the complementiser.

Given such a syntactic structure, the semantics requires a specific rule that says that if a CP is adjoined to an NP, then the interpretation yields the coordination of two properties, i.e., extensionally, the intersection of two sets, the set of individuals denoted by the NP, and the set of all the elements that have the property indicated by the relative clause itself.

Partee (1975) next suggested that relative pronouns were λ -operators, i.e. abstraction operators: the IP which contains the trace of the *Wh*-Phrase (or silent operator) is an open sentence, but the λ -operator *ipso facto* turns the whole CP into a semantic object of type $\langle e, t \rangle$, whence the natural intersective analysis of the modification.

An important modification can be suggested today: the *Wh*-Phrase as a whole can be reanalysed as a bundle of features (some of which will have to be checked against the antecedent): that bundle will include a $[+?]$ feature that is passed on to C° , the head of CP. I will return to that point in section 5.

In any case, it seems possible to generalise the idea that relative clauses are predicates to other types of (even semi-free) relatives.

3.2. Left-dislocated PFRs and SFRs

The first type of non-restrictive relative clauses is the one illustrated in (1) and (2), i.e. free and semi-free relatives.¹⁴

If all *Wh*- words and phrases can be interpreted as carrying a λ -feature, there is no problem (interrogative *Wh*- words proper provide the following, informally stated, semantic contribution: ‘*What is the set of x 's such that $P(x)$?*’ or: ‘*What is the CHARACTERISTIC PROPERTY of the x 's in that set?*’. The fact remains, though, that SFRs do look like DPs (but recall the coordination data), whence the fact that they are generally interpreted as maximal individuals.

However, against this wide-held view, there are independent facts that enhance the approach I am suggesting. Thus, the would-be correlative or resumptive pronoun *hura* which appears in the main clause in (1) and (2) can be analysed as an iota operator containing a free predicate variable \underline{P} , something like ‘*the x such that $\underline{P}(x)$* ’, or ‘*the x that has property \underline{P}* ’. Besides, another pronoun, *haina*, which was used until the 19th century in the coastal dialect spoken in France (Labourdin Basque), must, in my opinion, be interpreted as a universal quantifier again associated with an unspecified first domain, i.e. *every x such that $\underline{P}(x)$, all the x 's that have property \underline{P}* (see Rebuschi 1998)¹⁵.

¹⁴ Contrary to, say, Latin or Hindi left-dislocated relatives with a visible *Wh*-element, those that occur in Basque are never restrictive.

¹⁵ See also, the use of *oro* ‘all’ in the easternmost dialects, as in the following example:

Zer ere hon baituzuie, oro dira eniak. (Etxepare 1545, I, 343)
what ever possession C° -you-have, all are mine

(*Oro* is still in use in Lower-Navarrese proper).

In SFRs, explicit universal quantification, when not triggered by *haina* in the right-hand clause, can be marked by the quantifier *guztia(k)* ‘all’ (SG or PL) directly following the complementiser *-(e)n*, as in *dudan guztia, ditudan guztiak* ‘everything I own, all my goods’ – yet another argument in favour of a semantic analysis of SFRs as predicates, since a quantifier is a semantic object of type $\langle \langle e, t \rangle, \langle \langle e, t \rangle, t \rangle \rangle$ that combines with a property, $\langle e, t \rangle$ to yield a general quantifier (i.e. an object that will combine with another property to give a proposition: $\langle \langle e, t \rangle, t \rangle$).

Both pronouns will then only be interpretable if the context provides a value for this variable – i.e., provides a property that will *bind* that variable. Thus, if the initial clauses in both (1) and (2) actually are semantic predicates, since they c-command the correlative pronoun, the compositional interpretation of the whole complex structure will be straightforward. Assuming that PFRs directly yield properties as their translations (see Rebuschi (2001), as against Grosu & Landman (1998), between others), we have no problem at the syntax-semantics interface.

Let us now extend the proposal to other types of relatives.

3.3. Existential codas

Another type of relative clauses must be interpreted as predicates: those that follow in indefinite nominal expression under the scope of an existential operator (generally assumed to be located within the copula or its “transitive” variant *have*), as in *There are people who...* Interestingly, both restrictive relatives like those illustrated in (11) and SFRs may appear in such a context, as shown in (19):

- (19) a Badira [beren lana maite ez duten] jende asko.
 PRT-are their work-SG like NEG they-it-*n* people many
 ‘There are some/many people that don't like their jobs.’
- a' Badira jende asko [beren lana maite ez dute.n. **ak**]
 PRT-are people many their work-SG like NEG they-it-*n*-PL
id.
- b Baditut euskara(z) ondo dakite.n ikasle batzu.
 PRT-I-have-PL (in-)Basque well they-know-*n* student a-few
 ‘I have a few students who know Basque well.’
- b' Baditut ikasle batzu euskara(z) ondo dakite.n. **ak**.
 PRT-I-have-PL student a-few (in-)Basque well they-know-*n*-PL
id.

Here again — recall (15)-(16) — it should be clear that the SFR of the (a') and (b') variants cannot be interpreted as an argument or a referential nominal expression, but as a predicate,¹⁶ a conclusion corroborated by the fact that SFRs as such can be used as syntactic predicates licensed by a copula, as in:¹⁷

- (20) Badira beren baitan bakearen jabe dire.n. **ak**,
 PRT-they-are EMPH-GEN in peace-SG-GEN master they-are-*en*-PL
 bai eta bertzeekin bakean daude.n. **ak**. (Léon 1929, p. 94, ll.3.3)
 yes and others-with in-peace they-stay-*en*-PL
 ‘There are people who are in peace with themselves, and with others too.’¹⁸

¹⁶ I leave for future research the relevance of structures like those against the so-called “head-raising analysis” of existential constructions that contain relative codas.

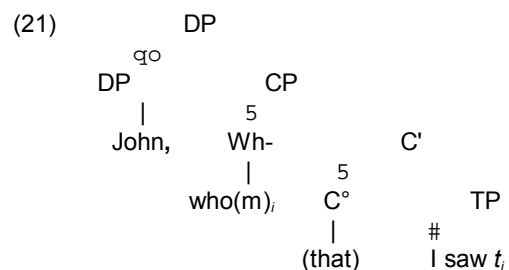
¹⁷ See Oyarçabal (2003) for discussion and details.

¹⁸ Interestingly, the 18th century translation of the same text by Chourio has a DP followed by an SFR, just as in (19b,d): *Badire presunac [bere buruekin, eta bertzeekin bakea dutenak]*, lit. ‘There are persons [the that have peace with themselves and with others]’. Diachronically more interesting is Pouvreau's 17th C. translation, which displays a partitive ending, thereby highlighting the non-definiteness of the SFR: *Bada bakean dagoe.n. ik*, *eta bertzerekin ere bakea daduka.n. ik* (this use of the partitive would be totally out today, though).

3.4. Appositive clauses

3.4.1. Appositive relatives (in general)

A typical case in which relative clauses are usually *not* analysed as predicates is *appositive* clauses, which are generally assumed to be adjoined to a DP, as in (21):¹⁹



Many linguists analyse these relatives as propositions that are conjoined or coordinated with the main clause in the semantic representation (Demirdache 1991, Kayne 1994). Besides the fact that this analysis entails fairly unusual LF movements, there is a semantic problem too: if the appositive relative are false, but the main clause is true, we should expect the resulting conjunction (p?q) to be false — which is not clear at all.²⁰ Interestingly enough, the Messieurs de Port-Royal in the 17th century²¹ considered the whole sentence as true — which is not devoid of problems either, of course.

Suppose now that they are *presupposed*: if the relative is false, the whole sentence will simply be uninterpretable. Besides, the semantic relation to be established between the lower DP and the CP interpreted as a property in a structure like (21) is fairly simple. An entity as such, an object of type *e*, certainly cannot entertain any semantic relation with a predicate, except that of Predication. But it cannot be the case here, because the resulting object is not a proposition.²² Suppose now that the type of the name *John* in (21) is raised from *e* to that of a Generalized Quantifier $\langle\langle e, t \rangle, t \rangle$, i.e. to the *set of properties* that define the individual John: a natural relation will automatically emerge between the appositive clause and the DP, that of *set membership*, i.e. of being an element of that set of properties that is thus associated with the name.

The *use* of appositive relatives then reduces to the fact that, for the speaker, this property is pertinent or relevant, thereby allowing for instance a causal interpretation, etc. — in other words, in my opinion, such interpretations are just not a (truth-conditional) semantic issue at all.

¹⁹ See footnote 13 above.

²⁰ At least if we carefully distinguish between appositive SFRs and “extraposed” relatives, which are not adjacent to the nominal expression they apply to, and which precisely cannot take on the form of an SFR (Oyharçabal 2003): in the case of *real* extraposed relatives, the coordination option seems generally valid at the semantic level.

²¹ Cf. Arnauld & Nicole (1992 [1662], p.117) – for our purposes, it is irrelevant that their *Grammaire*, published two years earlier, did not address this question.

²² I must confess I have never understood what Chomsky means when he says that relative clauses (restrictives RLs inclusive) are “predicated” of their antecedent.

3.4.2. *Appositives in Basque*

I will use examples with personal pronoms, which, contrary to proper nouns and demonstratives, cannot be precede by the *-(e)n* relatives (falsely) described uniquely as restrictive relatives up to now.²³

Thus the first three cases in (22) are grammatical, but the fourth one is not:

- (22) a egi.a daki.en gizona
truth-SG knows-*en* man-SG
'the man(,) who knows the truth'
- b egi.a daki.en Jon
truth-SG knows-*en* John
'John, who knows the truth'
- c egi.a daki.en (honeko) hau
truth-SG knows-*en* here-ADN this
'this (here) one, who □ '
- d *egi.a dakizu.n zu
truth-SG you-know-*n* you

However, if the relative follows the object it is adjoined to, provided it also carries the number suffix or article, it will be grammatical in the four contexts, as shown in (23) – note especially the contrast between (22d) above and (23d) below:

- (23) a gizon zaharr.a, egi.a daki.en.a²⁴
man old-SG truth-SG he-knows-*en*-SG
'theyoung man(,) who knows the truth'
- b Jon, egia dakiena
'John, who knows the truth'
- c honeko hau, egia dakiena
'this here one,who knows the truth'
- d zu, egia daki.zu.n.a
you, truth-SG you-know-*n*-SG
'you, who know the truth'

In other words, SFRs can be used in apposition to *definite* N.E.s, a fact which is compatible both with their semantic construal as predicates, and with the general analysis of appositive clauses put forward in the preceding subsection.

An interesting fact to note in this context is that they may, but need *not*, agree in case with the nominal expression they are adjoined to. Thus, in (24) and (25), both options are available: in the (a) cases, the SFR is in the absolutive/zero case (SG *-a*, PL *-ak*), in spite of the ergative case *-k* (SG *-ak*, PL *ek*) affixed to the personal pronoun “antecedent”, whereas it “agrees” with it in the (b) cases:²⁵

²³ See Oyharçabal (1987, 2003) for examples and enlightening discussion. The comma in the translation of (22a) should suffice here.

²⁴ I add an attributive Adj(P) here because the lighter the “articled” nominal expression is, the more likely it is for the right-adjoined SFR to be interpreted as non-restrictive.

²⁵ I cite these excerpts from two well-known Northern writers here because of the dogmatic rule of obligatory case agreement enacted by the Basque Academy. The lack of “case agreement” between the SFR and the nominal it is right-adjoined to is also attested when the former must be interpreted as

- (24) a Bainan zu.k, guzien egiteko ahala daukazu.n.a,
 but you-ERG all-GEN to-do power you-hold-it-*n*-SG+ABS
 emenda zazu ni baitan zure grazia.
 extend AUX:IMP2SG-ERG me in your grace
 'But you, who have the capacity to do everything, extend you grace to me.'
 (Léon 1929, p. 202: III.23.4)
- b Ez dakit zer dugun nahi gu.k,
 NEG I-know what we-have-*n* will we-ERG
 kartsu omena dugu-*n-e.k* (id., p. 224: III.31.3)
 ardent reputation we-have-it -*n*-PL-ERG
 'I do not know what we want, we, who have the reputation of being fervent.'
- (25) a Zu.k, gizon hau ezagutu ez du.zu.n.a,
 You-ERG man this-ABS known NEG AUX-*n*-SG+ABS
 begira zazu (Larre 1989, p. 12)
 watch AUX:IMP2SG-ERG
 'You[polite SG], who have not know this man, look'
- b zu.k holako gaietan Mattini berari
 you-ERG such matters-in Mattin-DAT EMPH-DAT
 begietan nigarr.a begizatu ze.n.i.o.n.a.k,
 eyes-in tear-SG seen AUX-*n*-SG+ERG
 ez ahal zenuen zu.k ere begia bustia? (id., p. 13)
 NEG INT you-have-it you-ERG too eye-SG wet-SG
 'You, who saw Mattin's tears in his own eyes, didn't you have yourself your eyes wet?'

It should be clear that if SFRs were always semantically “referring” or “argumental” objects in Longobardi's (1994) sense,²⁶ and could thus be somehow construed as *identified* with the DP they are in apposition to, they would normally be expected to agree in case with their “antecedent”. But here again, it is not the case: the SFR denotes only *one* of the properties of the personal pronoun, as in (24)-(25) or definite expression, as in (23b,c) and under the non-restrictive reading of (23a).²⁷

4. Non-standard Left-dislocated SFRs

4.1. The facts

In the foregoing subsection, we have seen that appositive SFRs need not carry the case-ending of the nominal expression they are adjoined to, and seem happy to remain caseless. Admittedly, one could argue that they are not caseless, but absolutively-marked. That it is probably not the case is suggested by the “internal” case-marking that appears in what I dubbed “non-standard SFRs” in Rebuschi (2000). We can

restrictive, as shown by the following example, from the Guipuzcoan translator Udabe ([1856] 1993) — the verse 7,26 has exactly the same structure:

- (i) Konparatuko det baroi prudente **bati**, egin duena bere etxea arrokaren gañean.
 compare-PROSP AUX man prudent one-DAT, made AUX-*en*-SG his house rock-GEN on
 'I will liken him unto a wise man, which built his house upon a rock.' (Mt 7,24)

²⁶ Or even if they were to receive a “quantifier” interpretation in Winter's (2000) terms: see §5.

²⁷ I consider the optionality in case-agreement as evidence that, in spite of the presence of the article, the Semi-Free appositive relative *need not* be interpreted as a DP — and therefore cannot be analysed after the “ellipsis” model in (11).

summarize the results of that study as follows. In many 19th century texts (but also in some older, and in some more recent, ones), some of which were written by famous authors such as Añibarro (see (26a) below), when SFRs are left-dislocated, they sometimes do not exhibit the case of their correlative pronoun, as in (2), but the case that corresponds to the relativised position within the CP they contain. The examples in (26), which are all excerpts from NT translations by Roman Catholic priests, certainly testify to the fact that the register cannot simply be labelled “informal” — although the constructions are universally rejected as “bad” Basque by all prescriptive grammarians today (and have hardly been noticed in the linguistic literature proper).

In the following examples, then, as the diamond ‘?’ signals, the ergative suffix is unexpected, since the left-dislocated SFR corresponds to an absolutive-marked position, be it realised by an explicit pronoun, as in (26a), or silent, as in the other examples (b-d). But it clearly corresponds to the function of subject of a transitive verb within the SFR.

- (26) a Biscayan – Añibarro (ms., ±1800): Mt 5,19
 egiten dituan.a?^k, au andiá deituko da □
 doing AUX-*en*-SG-ERG this-ABS great-SG he-will-be-called
lit.: '(t)he-ERG that does it, this(-one)[ABS] will be called □ '
 'Whosoever shall do them [=these commandments], the same shall be called □ '
- b Guipuzcoan – Udabe (ms, ±1860): Mt 20,26
 nai due.n.a?^k zuen artean egin aundi,
 want AUX-*en*-SG-ERG you-GEN among become great
 izango da Ø zuen serbitzaria.
 he-will-be *pro*-ABS your servant
 'Whosoever will be great among you, let him be your minister.'
- c Baztanese – Echenique (ms, ±1855): Mt 5,22
 bere anaiai erten diona?^k, Raka,
 his brother-DAT say AUX-*en*-SG-ERG R.
 obligatua izain da Ø kontzilia.
 obliged will-be *pro*-ABS to-the-council
 'Whosoever shall say to his Brother, Raca, shall be in danger of the council.'
- d Southern High-Navarrese – (ms., anon., ±1820): Mt 10,38
 Eta ez.tuen.a?^k artzen soñean bere gurutzea
 and NEG-AUX-*en*-SG-ERG taking on-shoulder his cross
 eta neri egitzen, ezta Ø nere dignó
 and to-me follow, NEG-is *pro*-ABS of-me worthy
 'And he that taketh not his cross and followeth after me, is not worthy of me.'

4.2. The original analysis

In Rebuschi (*op. cit.*), I used two layers for nominal expressions, a functional one, DP, and a lexical one, NP, and the reasoning was as follows: since SFRs have articles (by definition), i.e. Determiners, their functional projections must be DPs. But DPs must be case-marked. It ensues that if the chain that links a left-dislocated SFR to the correlative pronoun somehow fails to transmit the latter's case to the former (or if there is no possible, even silent correlate, as in the example (20) of the 2000 text), then the structure will be ruled out.

However, given that the silent operator within the relative CP must transmit its ?-feature to the dislocated DP (if the latter is to be interpreted as a property binding the

property variable alluded to in section 3.2), I postulated that this operator raised from Spec,CP to Spec,DP, thereby transmitting the said feature to D° under Specifier-head agreement, thereby somehow circumventing the definiteness of the nominal expression as a whole.

It thus seemed possible to distinguish between the standard case-marking and the non-standard case marking of dislocated SFRs in terms originally due to Chomsky (1986): the operator's movement could take place respectively after S-S/Spell-Out, or before (i.e. in the “visible” syntax); if it took place after S-S, the only effect was a semantically interpretable one (the type-shifting of a definite expression into a property); but if it took place before, the operator also carried its case feature, whence the possible transmission of this mark to D° (which is, recall final in Basque nominal expressions).

There are, however, quite a few difficulties with that analysis. In the next section, I will note the main one and suggest another approach, based on the hypothesis (generally accepted today) that there is more than one functional layer in the extended projections of NPs.

5. Towards a solution: the Number Phrase hypothesis

5.1. Summary of results and problems

There is no denying that SFRs can be — and, in fact, *are* widely — used as arguments (cf. Oyarçabal 2003), i.e. as theta-marked expressions; but the questions raised in this article precisely address other uses.

(i) Thus, when they are left dislocated, they are not the argument of any predicate, but somehow help interpret a correlative pronoun which either is in argumental position, or is related to such a position if it has raised to a Spec,FocusP (as is often the case). It is naturally possible to interpret such Left-dislocated SFRs *either* as having “argumental / referential” status (if the correlate is interpreted as a variable), *or* as a property (if the correlative pronoun itself has quantificational force or import, as in the case of *haina* or *oro*). But such a dual or disjunctive analysis seems unnecessary, since the predicative interpretation, which sometimes *is* necessary, cannot be derived from a (modern – see below) DP analysis without having recourse to *ad hoc* semantic type-shifting operations or hidden semantic operators.²⁸

(ii) When SFRs are right-adjoined to a nominal expression ?, and are thus *syntactically* appositive, the same difficulties arise, since that nominal expression ? is sometimes itself a predicate under the scope of an existential operator – and we have seen that it makes sense to interpret all clauses in apposition to a definite expression as expressing one property of the latter's referent.

²⁸ Recall in this respect the possibility to use the subjunctive mood rather than the indicative mood in such contexts, at least in some Biscayan subdialect. Now it is well known that, cross-linguistically, subjunctive relative clauses, when they are possible, are associated with non-denoting nominals (i.e. with intensional readings), as in the well known French pair *Je cherche une secrétaire qui sait / sache parler le russe*: with the indicative *sait*, the secretary exists, whereas no such conclusion can be drawn if the inflected verb of the relative clause is *sache*, in the subjunctive mood.

(iii) They may also be used as copula complements (Oyharçabal 2003), in which case the *ad hoc* semantic mechanism of type-shifting — or the equally little convincing intervention of hidden semantic operators — seems required again if they are considered fully referential DPs.

(iv) Finally as we saw in 2.4.2, SFRs can function as syntactic elements coordinated with objects of the same type (or with pure FRs), yielding a *unique* individual.

It is therefore difficult to maintain the accepted view that they are (almost) normal DPs.

Moreover, some *morphological* data are unexpected is SFRs are such quasi-normal DPs: appositive SFRs need not carry the case of the definite expression (or personal pronoun) they are adjoined to, whereas left-dislocated SFRs may carry an “internal” case-suffix determined by the relativised position within the subordinate CP they contain, rather than the (visible or abstract) case-mark of the correlative pronoun.

Note in this respect that the account of the latter phenomenon in Rebuschi (2000) fails at least in one important respect: it does not explain why the pre-SS/pre-Spellout movement of the relative operator (almost) never takes place in appositive SFRs: the only example I have ever seen is the following one (as against the near **one** hundred examples of “internal” case marking for left-dislocated SFRs cited in Rebuschi (2000)²⁹:

- (27) Baztanese – Echenique [1857]: Mt 23,37
 Jerusalem, Jerusalem, Profetak iltzen dituzun.a.k,
 J. J. prophet-PL killing AUX:you-them-*n*-SG-ERG
 eta arrikatzen zure gana bidaliak direnak,
 and lapidating to-you sent-PL those-that-are
 zenbat aldiz nahi izan ditut bildu zure umeak [□] ?
 how many times wanted AUX I-have-them gather your children
 ‘O Jerusalem, *thou that* killest the prophets, and stonest them which are sent unto thee,how often
 would I have gathered thy children together?’

This extreme rarity is unexpected — unless SFRs do not have the same status everywhere. Let's therefore look for possible technical solutions.

5.2. Split DPs

The idea that there might (in fact, that there must) be one (or several) functional layers between DP and NP (semantically a Common Noun or property) is not new: see Ritter (1991), Longobardi (1994), Stroik (1994), Déchaine & Wiltschko (2002), and Coene & D'hulst (2003) for a fairly extensive review, and, as far as Basque is concerned, Artiagoitia (2002).

I shall neither repeat Artiagoitia's arguments nor criticise them here, but will simply recall his main result: the “article” mentioned in the foregoing sections might well be a morpheme that merely indicates number, in which case it is basically hosted under

²⁹ Interestingly, in (27), the “antecedent” is vocative, not argumental, and there is no correlative pronoun proper, at least in argumental position; moreover, in the twenty-odd other Basque translations of Matthew's gospel I have examined — among which the original manuscript by Bruno Echenique himself [Echenique ±1855] published in 1995 — not a single one displays this non-standard case marking.

the Num^o head; according to the author,³⁰ this number morpheme will then undergo Head-raising from Num^o to D^o — but when the nominal expressions are clearly definite, the *same* morpheme is directly inserted under D^o: this approach provides a straightforward (if perhaps a little *ad hoc*) explanation for why *-a(k)* “absolutives” are sometimes either definite or not – as in (28) below – and why they sometimes must be interpreted as definite, as in (4) above – typically, when they are the external, or externalised, argument of a (syntactic) predicate³¹ — something that should probably be linked to Diesing's (1992) proposal that nominals in the VP domain are indefinites, whereas once they are in the IP/TP domain (and *a fortiori* above, in the CP domain), they are clearly referential.

- (28) a Ogi.a jan dut.
bread-SG eaten I-have-SG
'I've eaten (the) bread'
- b Liburuak irakurri ditu.
books-PL read he-has-PL
'He has read (the) books'

Suppose now that SFRs are “bare” NumPs with a Num^o head and a relative CP. What is important with regard to the data discussed in this paper is the fact, illustrated recently by several scholars (Winter 2000,³² Déchaine & Wiltschko 2002), that NumPs are *semantically variable*: whereas (as was recalled above) NPs are semantic predicates, and DPs are entities (or generalised quantifiers), NumPs can be either, depending on various (contextual) factors.

This, of course, represents an alternative to Artiagoitia's view: if NumPs are semantically variable, not all NumPs have to be dominated by a DP. Now, if that is true, there is no specific semantic problem raised by Basque non-argumental SFRs: being NumPs, they may denote properties (or sets, extensionally), whence the array of contexts in which they must be so interpreted — to recall again some the facts described here: when they are left dislocated and bind a property variable in the would-be correlative pronoun, as in (2), when they are existential codas, as in (19a',b'), or yet, if my analysis is on the right track, when they are in apposition, as in (24)-(25) — and above all when they are interpreted as restrictive relatives, as in one reading of (23a).

5.3. The case-related difficulties

The idea that *bare NumPs* ought to be syntactically admitted when they are not arguments (or theta-marked) might be pushed a bit further. Recall the idea (suggested in 3.1) that the (silent) relative operator should be regarded as a bundle of features. One way of ensuring that a NumP will be interpreted as a property now is to allow the ?-feature of that operator to raise to Spec,NumP, a position from which it will transmit

³⁰ And, let me add, possibly because (morphological) case must be associated with a D^o.

³¹ The two nominals in (3) illustrate the two possibilities.

³² In fact, this scholar rather defends the view that the semantic variability concerns D' as opposed to NumP, but he does not discuss the issue, and I will not address it either.

that feature to the head Num^o owing to Spec-Head Agreement, whence it will percolate to its maximal projection.³³

If appositive relatives are just NumPs, the absence of case-marking illustrated in (24a) and (25a) would just be the normal result. The case-agreement illustrated by the (b) cases would then be the result of some sort of parallelism requirement, which, to be better understood, would require more work on the specific morpho-syntactic constraints on adjunction — a syntactically abnormal phenomenon (if it is not axionatically ruled out as in Kayne (1994)) if X-bar theory is to be as constrained as possible. In any case, the single example or *hapax* (27) would remain quite exceptional, a welcome result: if another feature of the silent operator, case here,³⁴ were to be given a free-ride to Spec,NumP, there would be no use for it, since, by hypothesis, NumPs are not case-marked.?

Now, contrary to appositive relatives, dislocated SFRs must be case marked. That is probably due to their external position (recall Diesing's partition between the verbal domain and the clausal domain), which requires that they possess some argumental/referring features — among which possession of a Det and its projection is the most natural candidate.

In this specific context or configuration, then, since case and determination are narrowly linked,³⁵ we would indeed find a situation closely corresponding to Artiagoitia's analysis — provided, of course, that the SFR's interpretation as a predicate is maintained: the D^o would be there all right, but would be originally empty. If the Num^o morpheme undergoes head-to-head movement, it will fill in that position. But that morpheme has already inherited the ?-feature from the silent relative operator; consequently, the nominal will have the morphosyntax of a DP, and the semantics of the NumP it contains.

Whence two possibilities.

- (i) If Num^o has also (vacuously) inherited the case feature of the relative operator (a possibility suggested *supra*), that feature will now be able to be copied on the D^o, whence the “non-standard” case-marking described in section 4.
- (ii) If it has not, a chain between the left-dislocated nominal and the correlative pronoun will be established, and the “standard” case-marking (case agreement between the left-dislocated nominal and the correlate) will result.

References

1. *The Basque corpus*
 Añibarro, P. A. [±1800] 1991. *Jesu Christoren lau Evangelioac batera alcarturic*. Edited by M. P. Ciarrusta, Bilbao : Jarein.
- Anon. [±1820] 1996. *El Santo Evangelio [...] segun San Mateo*. Ms.edited in M.A. Pagola *et al.* (eds.), *Bonaparte Ondareko Eskuizkribuak, Hegoaldeko Goi-nafarrera IV* (Univ. of Deusto, Deiker), 1277-1341 (under the title ‘San Mateoren Ebanjelioa’).

³³ The number (SG/PL) feature could also move along, allowing for a direct checking of the number of the relativised position and that of the nominal the SFR is adjoined to.

³⁴ I leave the status of person features (see (24)-(2F)) for future research.

³⁵ See Giusti (1993, cited by Coene & D'hulst 2003), for a KP immediately dominating a DP, Willim (1999: p. 197) for the reverse hypothesis in Polish, and Boucher (2003) for the hypothesis that Latin and (very) Old French had a KP directly dominating an NP, this KP being replaced by a DP in Modern French.

- Chourio, Michel. [1720] 1788. *Jesu-Christoren Imitacionea*. Bayonne: Tresbos, 1788. Facsimile printing: San-Sebastián/Donostia (Hordago/Lur), 1978.
- Echenique, B. [±1855] 1995. *S. Mateoin Evangelioa*. In M.A. Pagola et al. (eds.), *Bonaparte Ondareko Eskuizkribuak, Iparraldeko Goi-Goñafarrera*, I (Univ. of Deusto, Deiker), 97-176.
- Echenique, B. 1857. *El Evangelio segun San Mateo, traducido al vascuence, dialecto navarro [...]*. London. [Printed version of the foregoing entry, revised by L.-L. Bonaparte]. facsim. reprint in L.-L. Bonaparte, *Opera Omnia Vasconice*, II (Bilbao: Euskaltzaindia, 1991), 91-151.
- “EHEG”. 1980. *Itun Berria*. San-Sebastián: Idatz (Herriko Elizbarrutietako Gotzaiak).
- Etxepare, B. 1545. *Linguae vasconum primitiae*. Edited by P. Altuna, Bilbao: Mensajero, 1980.
- Hiriart-Urruti, J. 1984. *Artzain solas*. Zarauz: Itzaropena.
- Kerexeta, Jaime. 1976. *Euskal-Biblia (bizkaieraz)*. Bilbao: Bilboko Elizbarrutiko Gotzaintza.
- Larre, E. 1989. ‘Aintzin solasa’. In Xalbador [Ferrando Aire], *Odolaren mintzoa* (Tolosa: Auspoa).
- Léon, L. 1929. *Jesu-Kristoren Imitacionea*. Turnhout (Belgium): Brepols.
- Pouvreau, S. [1669] 1979. *Iesusen Imitacionea*. Edited with a modernised spelling by J.M. Satrustegi, San-Sebastián/Donostia (Hordago/Lur), 1979.
- Refranes de 1596*. Ms. Critical edition by J. A. Lakarra, Bilbao (Euskaltzaindia), 1996.
- Udabe [Aita/Father —] [1856] 1993. *Evangelio santu gure Jesu Cristo Jaunarena, Done Matheoren arauran...* In M.A. Pagola et al. (eds.), *Bonaparte Ondareko Eskuizkribuak, Gipuzkera*, IV (Univ. of Deusto, Deiker), 1969-2024.

2. Linguistic and related studies

- Arnould, A., & Nicole, P. [1662]. *La logique ou l'art de penser*. Reprint, Paris: Gallimard (Tel), 1992.
- Artiagoitia, X. 1998. ‘Determinatzaile sintagmaren hipotesia euskal gramatikan’. *Uztaro* 27, 33-61.
- Artiagoitia, X. 2002. ‘The functional structure of the Basque noun phrase’. In X. Artiagoitia et al. (eds.), *Erramu Boneta: Festschrift for Rudolf P. G. de Rijk* (San-Sebastián/Donostia & Vitoria/Gasteiz: Diputación Foral de Gipuzkoa & Universidad del País Vasco, Supplements of ASJU 44), 73-90.
- Boucher, P. 2003. ‘Determiner Phrases in Old and Modern French’. In Coen & D'hulst (eds.), 47-69.
- Chomsky, N. 1986. *Knowledge of Language*. New York: Praeger.
- Coene, M., & D'hulst, Y. 2003. ‘Introduction: The syntax and semantics of noun phrases; Theoretical background’. In Coen & D'hulst (eds.), 1-46.
- Coen, M., & D'hulst, Y. (eds.). 2003. *From NP to DP*, I. Amsterdam: Benjamins (Linguistik Aktuell 55).
- Déchaine, R.-M., & Wiltschko, M. 2002. ‘Decomposing Pronouns’. *Linguistic Inquiry* 33.3, 409-442.
- Demirdache, H. 1991. *Resumptive Chains in Restrictive Relatives, Appositives and Dislocation Structures*. Doctoral dissertation, MIT [distributed by MIT Working Papers in Linguistics].
- Diesing, M. 1992. *Indefinites*. Cambridge, Mass.: MIT Press.
- Giusti, G. 1993. *La sintassi dei determinanti*. Padova: Unipress.
- Grosu, A., & Landman, F. 1998. ‘Strange Relatives of the Third Kind’. *Natural Language Semantics* 6.2, 125-170.
- Kayne, R. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.
- Longobardi, G. 1994. ‘Reference and proper names: A theory of N-movement in syntax and Logical Form’. *Linguistic Inquiry* 25.4, 609-665.
- Oyharçabal, B. 1987. *Etude descriptive de constructions complexes en basque: propositions relatives, temporelles, conditionnelles et concessives*. Doctoral dissertation, Univ. Paris 7.
- Oyharçabal, B. 2003. ‘Relatives’. In J.I. Hualde & J. Ortiz de Urbina (eds.), *A Grammar of Basque* (Berlin: Mouton de Gruyter, MGL 26), 763-822.
- Partee, B. 1975. ‘Montague Grammar and Transformational Grammar’. *Linguistic Inquiry* 6.2, 203-300.
- Rebuschi, G. 1998. ‘Nouvelles remarques sur *haina*’. *Lapurdum* 3, 53-75.
- Rebuschi, G. 2000. ‘A propos d'une construction non-standard du basque’. *Lapurdum* 5, 237-282.
- Rebuschi, G. 2001. ‘Note sur les phrases complexes à protase corrélatrice du basque’. *Lapurdum* 6, pp. 261-289.
- de Rijk, R. P. G. 1972. ‘Relative Clauses in Basque: a Guided Tour’. *Chicago Linguistic Society* 8, 115-135.

- Ritter, E. 1991. 'Two Functional Categories in the Noun Phrase: Evidence from Hebrew'. In S. Rothstein (ed.), *Perspectives on Phrase Structure; Heads and Licensing* (San Diego: Academic Press, Syntax & Semantics 25), 37-62.
- Stroik, T. 1994. 'Saturation, Predication, and the DP Hypothesis'. *Linguistic Analysis* 24.1-2, 39-61.
- Willim, E. 1999. 'On the Syntax of the Genitive in Nominals: The Case of Polish'. In I. Kenesei (ed.), *Crossing Boundaries* (Amsterdam: Benjamins), 179-210.
- Winter, Y. 2000. 'DP Structure and Flexible Semantics'. In M. Hirotani *et al.* (eds.), *NELS* 30, 709-731.

* * * * *