

# Spanish *el que* Relative Clauses and the Doubly Filled COMP Filter<sup>1</sup>

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## 1. Introduction

In this paper, I study certain aspects of Spanish restrictive relative clauses. Specifically, I concentrate in a type of structure I will term *el que* relative clauses. This structure is exemplified in (1).

- (1) El hombre *con el que* estaba hablando es ciego.  
the man with the QUE I-was talking is blind  
The man I was talking to is blind.

I will show that these relative clauses have two properties. In section 3 I will show that a correct analysis of these clauses must assume that *que* is a complementizer and the string *P el* is a relativized PP, possibly containing an empty or deleted operator. As will be shown in that section, this structure violates the Doubly Filled COMP Filter of Chomsky and Lasnik (1977), a condition which is otherwise respected in Spanish restrictive relative clauses. Secondly, in section 4, I show that *el que* relatives must involve a head-raising analysis, similar to the one proposed in Kayne (1994). In section 5, I show that two analyses of relative clauses that have been proposed within the framework of O(ptimality) T(heory), those in Pesetsky (1996) and Keer and Baković (1997) (henceforth K&B), cannot account for *el que* relative clauses, since they derive the effects of the Doubly Filled COMP Filter for Spanish relative clauses in general. Finally, in section 6, I suggest modifying these OT analyses by incorporating Brucart's (1992) idea that *que* in *el que* relatives is necessary so that the relative clause is explicitly marked as embedded. This analysis of *el que* relatives will be shown to be compatible with the OT analyses, without losing the coverage of the range of data and languages achieved in those analyses.

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<sup>1</sup> I would like to thank Guglielmo Cinque, Jon Nissenbaum, Alec Marantz and David Pesetsky for their

## 2. Doubly Filled COMP Effects in Spanish Restrictive Relative Clauses

In Spanish there are two types of words that can appear in the COMP area in restrictive relative clauses. One of them is the C head *que*. The other type is formed by the relative operators *el cual* and *quien*, the latter being allowed only with animate antecedents. As shown in (2, 3), in subject/object relativization the C head must be overt and the operator covert; as shown in (4), in prepositional relativization the relative operator must be overt and the head covert.<sup>2,3</sup>

- (2) a. El hombre *que* te quiere está allí.  
The man that loves you is there.
- b. \*El hombre *quien* te quiere está allí.
- c. \*El hombre *el cual* te quiere está allí.
- d. \*El hombre *el cual que* te quiere está allí.
- e. \*El hombre *quien que* te quiere está allí.
- f. \*El hombre te quiere está allí.

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helpful comments and discussion.

<sup>2</sup> The French and Italian and restrictive relative paradigms are very similar to the Spanish one in (2-4). See Kayne (1977) for French and Cinque (1981a, b) for Italian.

<sup>3</sup> In Spanish, specific animate direct objects are always preceded by the preposition *a* 'to', as shown in (i).

- (i) Vimos \*(a) ese hombre.  
We saw that man.

As might be expected, when an animate direct object is relativized the option of using the overt operator is better than with inanimate objects, as can be seen in (iia). However, using overt *que* is always preferred, as shown in (iib).

- (ii) a. ??El hombre *a quien/al cual* vimos.  
The man that we saw
- b. El hombre *que* vimos.

- (3) a. El libro *que* leí es de Juan.  
The book that I read is John's.
- b. \*El libro *el cual* leí es de Juan.
- c. \*El libro *el cual que* leí es de Juan.
- d. \*El libro leí es de Juan
- (4) a. El hombre *con quien* estaba hablando es ciego.  
The man with whom I was talking is blind.
- b. El hombre *con el cual* estaba hablando es ciego.
- c. \*El hombre *que* estaba hablando es ciego.
- d. \*El hombre *con el cual que* estaba hablando es ciego.
- e. \*El hombre *con quien que* estaba hablando es ciego.
- f. \*El hombre estaba hablando es ciego.

One significant generalization which emerges from the restrictive relative paradigm (and other embedded constructions) in several languages (including English, Italian and French) is that it is impossible to have both the relativized phrase and the complementizer overt.<sup>4</sup> Chomsky & Lasnik (1977) give this generalization the status of a surface filter, usually referred to as the Doubly Filled COMP Filter. They state the filter as in (5).

- (5) \*<sub>[COMP *wh*-phrase  $\varphi$ ],  $\varphi \neq e$ <sup>5</sup></sub>

By looking at the data in (2-4) it seems clear that this filter at least holds in some Spanish restrictive relatives. However, there is another option for prepositional relativization, exemplified in (6), which might challenge this conclusion. In these relatives, which I will call *el que* relatives, there is an overt *que* preceded by a preposition and an article agreeing in gender and number with the head noun. On the other hand, the

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<sup>4</sup> See Kayne (1977), Chomsky (1977), Chomsky & Lasnik (1977), Chomsky (1980) and Cinque (1981a, b).

<sup>5</sup> This filter is stated in a framework assuming an S' analysis of clauses. Under a CP framework, it would ban any sentence containing a CP where both the complementizer and the phrase in its specifier are overt.

sequence article + *que* is not allowed in subject and object relativization, as shown in (7).<sup>6</sup>

- (6) a. El hombre *con el que* estaba hablando es ciego.  
the man with the QUE I-was talking is blind  
The man I was talking to is blind.<sup>7</sup>
- b. El restaurante *en el que* comí ayer es italiano.  
the restaurant in the QUE I-ate yesterday is Italian  
The restaurant where I ate yesterday is Italian.
- (7) a. \*El hombre *el que* te quiere está allí.  
the man the QUE you(CL) loves is there  
The man that loves you is there
- b. \*El libro *el que* leí es de Juan.  
the book the QUE I-read is of John  
The book that I read is John's

There are two possible analyses of this construction. The first one, defended by Rivero (1980, 1982), is that *el que* is a relative pronoun similar to *el cual*. In this case, nothing special needs to be said about the syntax of *el que* relatives, since it will be just like with

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<sup>6</sup> As noted in footnote 3, Spanish specific animate direct objects must be preceded by the preposition *a* 'to'. Accordingly, *el que* relatives are marginally possible in these cases, as can be seen in (i).

- (ii) a. ??El hombre *al que* vimos.  
The man that we saw

Since this option is only marginally possible (and the option with a covert operator is always preferred), I will ignore it in this paper.

<sup>7</sup> There is another type of prepositional relatives, which is exemplified in (ia). In these relatives the leftmost element is the preposition, which is immediately followed by *que*, with no intervening article. The option of using the article (cf. (ib)) is always possible.

- (i) a. el dinero de que dispongo  
the money of QUE I-have  
the money I have
- b. el dinero del que dispongo  
the money of-the QUE I-have

However, it is not always possible to omit the article. In the literature there is no satisfactory explanation of the factors that determine when the omission of the article. As a matter of fact, there is not even a generalization that captures all the relevant facts (although there have been several proposals). See Bruccart (1992) for some interesting comments. At this point I have nothing constructive to say about this type of relatives, so I will ignore them in this paper.

*el cual*: it is covert in subject and object relativization, and overt in prepositional relatives.

In the other analysis, which is proposed in Brucart (1992), *que* is the complementizer, as in subject and object relatives, and the sequence P + article is the *wh*-phrase (possibly containing a deleted or covert operator). As I will show in the next section, this analysis is the right one. This means that Spanish restrictive relative clauses are inconsistent with the Doubly Filled COMP Filter: with the operators *el cual* and *quien* it is respected (cf. examples (2-4)), but with the *wh*-phrase P + article, i.e. in *el que* relatives, it is violated.

### 3. On the Nature of *que* in *el que* Relatives

As mentioned in the previous section, Rivero (1980, 1982) proposes that in restrictive relatives with the sequence P *el que*, *el que* is a relative operator. She gives several arguments in favor of this view:<sup>8</sup>

(I) In the relevant restrictive relatives, the order is P + article + QUE. In an analysis of this construction where *que* is a complementizer, the *wh*-phrase P *el* would be preceding the complementizer *que*. However, in Spanish embedded questions, when the complementizer can appear together with an operator, the order is C + Op, as shown in (8).

- (8) Juan me preguntó *que con quién* había venido María.  
Juan me(CL) asked QUE with whom had come Maria  
*Juan asked me who Maria had come with.*

Based on these facts, Rivero proposes that in Spanish COMP the order of constituents is complementizer + *wh*-phrase. If this is the correct interpretation of sentences like (8), it is a counterargument for analyzing *que* as a complementizer in *el que* relatives, since there, *que* would be following the *wh*-phrase.

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<sup>8</sup> Rivero also gives theory internal motivations for her proposal, which I will ignore here.

(II) In cases where there is no article in the PP in COMP (see footnote 7), if we assumed that *que* is a complementizer, the PP in COMP would have a P followed by an empty NP. Rivero assumes that this is ruled out by whatever principle bars stranding prepositions in Spanish.

Rivero's first argument seems to be irrelevant in a framework that assumes a CP analysis of clauses. Under this type of analysis the complementizer and the *wh*-phrase in sentences like (8) are clearly not 'in the same COMP'; if they were, the order should be the opposite, since specifiers are always closer to the (right or left) edge of the maximal projection than the head. Probably, the structure exemplified in (8) involves CP-recursion (or the presence of different C-like projections specialized in different functions, as in Rizzi (1995)). Analyzing *el que* relatives with *que* as C is perfectly compatible with the CP analysis of clauses, and no CP-recursion is needed.<sup>9</sup>

As for Rivero's second argument, it only accounts for the cases where there is no article in the PP in COMP. It has nothing to say about *el que* relatives. Furthermore, it predicts that in English, where preposition stranding is allowed, relatives with 'stranded' prepositions in COMP should be possible. This prediction is not borne out, as can be seen in (9).

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<sup>9</sup> Still, one could argue that what (8) in fact shows is that *all* (Spanish) clauses involve multiple CP-related projections. Then, (8) could also be showing that *wh*-phrases move to a CP layer which is lower than the one where *que* is. However, this proposal would be assuming that *que* is in the same CP layer in both embedded questions and relative clauses, and also that both relative and interrogative *wh*-phrases move to the specifier of the same CP layer. These are assumptions that need not be necessarily true. Consider for instance topicalization in questions, as in (i), and in relative clauses, as in (ii).

- (i) a. A la hora del asesinato, ¿en qué lugar estaba Juan?  
At the time of the murder, in which room was John?
- b. \*¿En qué lugar a la hora del asesinato estaba Juan?
- (ii) a. la habitación en la que, a la hora del asesinato, estaba Juan  
the room in which, at the time of the murder, John was
- b. \*la habitación a la hora del asesinato, en la que estaba Juan

As seen by the contrasts in (i-ii), topics precede *wh*-phrases in questions, but follow them in relative clauses. Therefore, either topics or *wh*-phrases do not have a fixed position within the CP layers. Either option strongly weakens the assumption that both *que* and *wh*-phrases have a fixed position in the CP area.

(9) \*This is the person with (that) I went to New York.

Therefore, Rivero seems to have no convincing arguments that *el que* in *el que* relatives is a relative pronoun.

As mentioned in the previous section, Brucart (1992) proposes that, in *el que* relatives, *que* is a complementizer. Specifically, he assumes the structure in (10) for this construction.

(10) [CP [PP P *el* Op]<sub>i</sub> [C' *que* ... t<sub>i</sub> ...]]

He presents one piece of evidence in favor of this analysis. Consider the sentences in (11) from the Canariense dialect of Spanish.

- (11) a. el amigo con el que tengo más confianza  
the friend with the QUE I-have most confidence  
the friend I trust most
- b. el amigo *con el* más confianza *que* tengo

As seen in (11b), in this dialect certain phrases can intervene between P *el* and *que* in *el que* relatives. This example shows that P *el* and *que* do not form a constituent in *el que* relatives. This is perfectly compatible with an analysis where *que* is the complementizer, but not with one where *el que* is a relative pronoun. Although examples like (11b) are not possible in other dialects of Spanish, the former analysis leaves open the possibility that there might be phrases intervening between *el* and *que*, but the latter does not. Thus, unless we assume that Canariense relative clauses are radically different from other dialects of Spanish, this kind of example shows that *que* is a complementizer in Spanish *el que* relatives.<sup>10</sup>

Furthermore, there is more evidence that shows that *que* is a complementizer in *el que* relatives. The sequence P *el que* cannot be coordinated, as shown in (12).

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<sup>10</sup> Also note that examples like (11b) favor CP recursion analyses. If there is only one CP layer in (11b), the phrase *más confianza* is adjoined to C'. If we assume that adjunction to X' is not possible (cf. Kayne

- (12) a. la persona con la cual y de la cual estabamos hablando  
 the person with the CUAL and of the CUAL we-were speaking  
*the person with whom and about whom we were speaking*
- b. la persona con quien y de quien estabamos hablando
- c. \*la persona de la que y con la que estabamos hablando

As shown in (12a, b), the sequence P + relative pronoun can be coordinated in Spanish. If *el que* were a relative operator, we would then expect to be able to coordinate P *el que*. As shown in (12c), this is the wrong prediction. On the other hand, in an analysis where *que* is a complementizer, the sequence P *el que* is not a constituent, so it correctly predicts that the sequence P *el que* cannot be coordinated.

One possible counterargument to this kind of evidence is the fact that the sequence P *el* cannot be coordinated either, as shown in (13).

- (13) \*la persona de la y con la que estabamos hablando  
 the person of the and with the QUE we-were speaking  
*the person about whom and with whom we were speaking*

In analyses where *el que* is an operator, (13) is expected to be ungrammatical, since the sequence P *el* is not a constituent. On the other hand, in an analysis where *que* is a complementizer (13) could be expected to be grammatical, since the sequence P *el* forms a constituent (possibly with some empty material included in it, as proposed by Bruccart (1992)). However, there are other reasons why (13) could be ungrammatical. It could be due to the fact that the definite article in Spanish shows clitic-like behavior. For instance, like other clitics in this language, it never bears stress. Thus, (13) could be ungrammatical due to the fact that in the coordinate structure the first article is forced to bear stress. As shown in (14), clitics cannot be coordinated.

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(1994)), (11b) must involve at least two CP layers, with *más confianza* adjoined to the lower one (or in its specifier position).

- (14) a. Juan vio a Pedro y a María  
 Juan saw Pedro and María
- b. \*Juan lo y la vio.  
 Juan him(CL) and her(CL) saw

Thus, the impossibility of coordination in (13) can be related to the similar fact in (14). Assuming that this is the case, then (13) cannot be seen as counterevidence for the analysis with *que* as a complementizer in *el que* relatives.

Thus, the evidence shows that *que* is a complementizer *el que* relatives. This means that the PP in [Spec, CP] has a preposition and an article as overt material.

#### 4. A Head-Raising Analysis of *el que* Relatives

As shown in the previous section, *que* in *el que* restrictive relatives is a complementizer. This narrows down the possible structures that these phrases might have. These options are represented in (15).

- (15) a. NP [P *el*]<sub>i</sub> [*que* ... t<sub>i</sub> ...]
- b. NP [P *el* Op]<sub>i</sub> [*que* ... t<sub>i</sub> ...]
- c. NP [P *el* ~~empty~~]<sub>i</sub> [*que* ... t<sub>i</sub> ...]
- d. NP<sub>j</sub> [P *el* t<sub>j</sub>]<sub>i</sub> [*que* ... t<sub>i</sub> ...]

In option (15a), the article would be treated as a pronoun. In this paper I will not consider this option. Although the Spanish article is very similar in form to personal pronouns, they are different, and there seems to be no plausible analysis that would account for the alternation. Structures (15b, c), are in effect indistinguishable; the choice of one over the other would depend on the theoretical framework assumed in the analysis. In both there is an empty operator, as in standard analyses of relative clauses. In (15b) it is base generated empty; in (15c) it is deleted (or unpronounced). I will use the cover term *empty operator analysis* to refer to both options. Structure (15d) is a head raising analysis, similar to the ones proposed in Vergnaud (1974) and Kayne (1994). In this approach to *el que* relatives, the NP head of the relative would be generated inside the relative clause,

and then raised along with P *el* to some left peripheral position. The NP head would then move further to the left.

There are several tests which can be used to determine which of these two analysis is right. Kayne (1994) uses an argument derived from Principle A of Binding Theory which favors a head raising analysis of English relative clauses. The example he uses is the one in (16).

(16) John bought the picture of himself that Bill saw.

In an empty operator analysis, the fact that the reflexive can be bound by *Bill* cannot be explained. However, in a head raising analysis, *picture of himself* is generated internal to the relative clause, and then moved to the left ([Spec, CP] in Kayne (1994)). After reconstruction, *himself* is in the c-command domain of *John*, so that binding is possible.

A similar argument can be made for Spanish *el que* relatives. Consider the example in (17).

(17) Esta es la foto de sí mismo de la que me habló Juan.  
this is the picture of himself of the QUE me(CL) talked-he Juan  
*This is the picture of himself John talked to me about.*

As in Kayne's example, the fact that the anaphor *sí mismo* in the head NP of the relative clause can be bound by *Juan* shows that this NP can be reconstructed to a position internal to the relative clause, so it must have been raised from that position.

Further evidence for the head raising analysis comes from pronouns bound by quantifiers. The examples in (18) are relevant in this respect.

- (18) a. El amigo de su<sub>i</sub> padre con el que hable cada alumno<sub>i</sub> tiene que ser pescador.  
 the friend of his father with the QUE talk each student has that to-be fisherman  
*The friend of his father each student talks to must be a fisherman.*
- b. La habitación de su<sub>i</sub> casa en la que suele dormir cada niño<sub>i</sub> es siempre la más pequeña.  
 the room of his house in the QUE uses to-sleep each boy is always the most small.  
*The room in his house where each boy sleeps is always the smallest one.*

In both (18a, b) the pronoun *su* can be interpreted as bound by the QP inside the relative clause. Again, this argues for an analysis which allows for reconstruction of the head NP to a position internal to the relative clause. As argued above, this is expected in the head raising analysis, but not in the empty operator one.

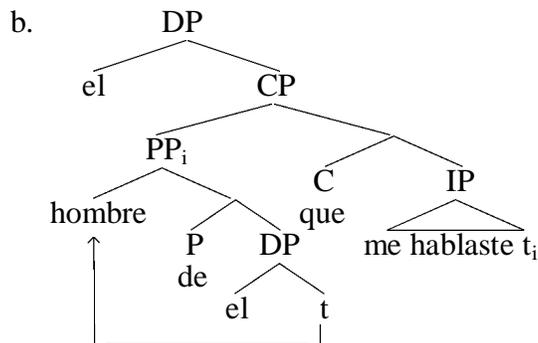
One further argument for a head raising analysis of *el que* relatives comes from Condition C effects. Consider the examples in (19).

- (19) a. \*?Nombrarán presidente al amigo de Franco<sub>i</sub> en el que *pro*<sub>i</sub> pueda confiar.  
 they-will-appoint president to-the friend of Franco in the QUE pro can trust  
*They will appoint as president the friend of Franco's who he trusts most.*
- b. \*?Esa editorial publicará el libro de Juan<sub>i</sub> del que *pro*<sub>i</sub> nos hable esta noche.  
 that publisher will-publish the book of Juan of-the QUE pro us(CL) talk this night  
*That publisher will publish the book of John's about which he will talk tonight.*

In both sentences in (19) coreference between name and the pronoun results in ungrammaticality. This must mean that at some level of representation, the name is c-commanded by the pronoun. In a head raising analysis, this is achieved at LF after reconstruction of the head NP. This would not be possible in an empty operator analysis of this construction.

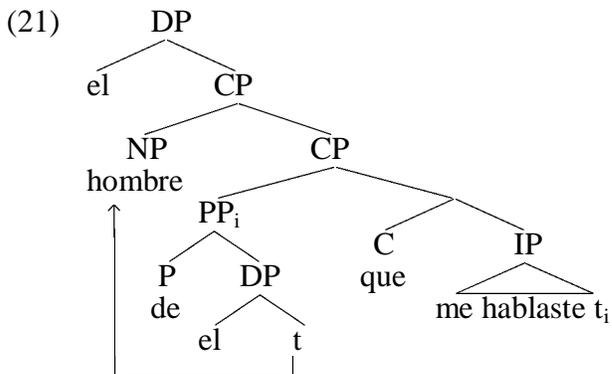
Therefore, I conclude that the analysis of Spanish *el que* relatives must involve a head raising structure. If we followed Kayne's (1994) analysis of relative clauses, the structure of these relative clauses would be as in (20).

- (20) a. el hombre del que me hablaste  
 the man of-the QUE me(CL) talked-you  
 the man you talked to me about



Under this analysis, as can be seen in (20b), the head NP moves to [Spec, CP], pied-piping the containing PP. Further movement of the NP to [Spec, PP] gives the correct word order.

Another possible way in which a head raising analysis of *el que* relatives may be instantiated is illustrated in (21).



In this analysis, the movement of the NP from the PP complement is outside PP and CP, as opposed to the structure in (20b), in which it has not moved outside PP.

I will assume that (21), as opposed to (20b), is the correct structure for Spanish *el que* relatives. There is some evidence that this is the right choice. Note that these two analyses make quite different predictions about the constituent structure of these phrases. Specifically, in (21), the string PP C IP (*del que me hablaste*) is a constituent, while in

(20b) it is not. As shown in (22), this string can be coordinated, which shows that it is a constituent.

- (22) el hombre [del que me hablaste] y [con el que estuvimos discutiendo]  
the man [of-the QUE me(CL) you-talked] and [with the QUE we-were arguing]  
*the man about whom you talked to me and with whom we argued*

Hence, this constituency test shows that the correct analysis of *el que* relatives is the one in (21).

### 5. OT Analyses of the Doubly-Filled COMP Filter

Both Pesetsky (1996) and K&B develop analyses of relative clauses which derive the effects of the Doubly Filled COMP Filter within the framework of OT.

In the theory proposed in Pesetsky (1996), the pronunciation of certain elements in sentences is regulated by certain constraints which interact in an OT fashion: for any given sentence with a given syntactic structure, GEN provides a set of candidates; these candidates differ in what elements of the sentence are pronounced and which are not. In the cases we are interested in this paper, it is the (non-)pronunciation of complementizers and phrases in [Spec, CP] that is determined by GEN. The constraints in EVAL determine which candidate becomes the real output, which will be the one that satisfies the constraints optimally.

K&B develop an analysis of restrictive relative clauses based on Grimshaw's (1997) approach to syntax within the framework of OT. In this approach, syntactic structure building is regulated by constraints in an OT fashion. The input of a sentence is 'a lexical head plus its argument structure and an assignment of lexical heads to its arguments, plus a specification of the associated tense and aspect' (Grimshaw (1997: 375-376)). Given an input, GEN generates the possible candidates by creating all the extended projections of the lexical head, introducing functional heads (which are not present in the input) and their projections, and it places its arguments in this structure. Crucially, GEN has the option of creating phrases without heads. Furthermore, it also creates movement structures by introducing traces coindexed with other constituents.

Finally, EVAL determines which candidates win by determining which ones optimally satisfy the ranking of constraints.

Both approaches derive the Doubly Filled COMP Filter in a very similar manner.<sup>11</sup> They can derive the effects of this filter in Spanish restrictive relatives with the operators *quien* and *el cual* as follows. As we saw in section 2, in subject/object relativization the *wh*-phrase is not overt and the complementizer is covert. This is achieved with a constraint that is violated unless the complementizer appears on the left edge of CP. In Pesetsky (1996) this constraint is LE(CP), which is violated unless the complementizer is pronounced at the left edge of CP. As a consequence, the *wh*-phrase in [Spec, CP] is not pronounced. In K&B the constraint is HD-LFT, which is violated unless the leftmost overt element in CP is the complementizer. The only output which can satisfy this constraint is one in which the operator in [Spec, CP] is empty and CP is generated by GEN with an overt head.

In prepositional relatives, as seen in section 2, the *wh*-phrase is overt and the complementizer is covert. In order to achieve this, both approaches first ensure that relativized PPs are always overt. The basic idea behind this is that covert material must be recoverable. If a PP is covert, the content of its P head is not recoverable. In Pesetsky (1996), this is achieved with the undominated constraint REC (Recoverability). In K&B, this recoverability is not an EVAL constraint, but a condition on possible candidates.

The two approaches derive the fact that the complementizer must not be overt in prepositional relatives in different ways. In Pesetsky (1996), the constraint TEL (Telegraph), which in Spanish would be ranked below LE(CP), requires that function words, including complementizers, be unpronounced. In PP relativization LE(CP) is obligatorily violated (since the phrase [Spec, CP] must be pronounced), so TEL chooses the candidate in which the complementizer is not pronounced. In K&B, HD-LFT is not violated if the head is not generated. In PP relativization the phrase in [Spec, CP] must be overt, so the only way to satisfy HD-LFT is by not generating the complementizer head at all.

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<sup>11</sup> I will present a very simplified version of both analyses here, including only the aspects which are relevant for Spanish restrictive relative clauses.

The basic idea behind both analyses is that a complementizer is overt only if it can be pronounced at the left edge of its CP. In PP relatives this is not possible due to recoverability, so it is not pronounced (or not generated, as in K&B). In subject/object relatives the phrase in [Spec, CP] can be covert, so the complementizer can be overt, and at the left edge of CP. Both analyses make the right prediction for Spanish subject/object relatives, where only the complementizer is overt. In PP relatives with the operators *el cual* and *quien*, they also make the right prediction: the PP in [Spec, CP] is overt, and the complementizer is covert.

However, Spanish *el que* relatives are problematical for both approaches. In this construction, as seen in (23) the complementizer must be overt, but it is not pronounced at the left edge of CP. Basically, this type of structure violates the Doubly Filled COMP Filter. Since both analyses necessarily derive the effects of this filter for Spanish, they make the wrong prediction for *el que* relatives.

- (23) a. El hombre *con el que* estuve hablando se llama Juan.  
           the man with the QUE was-I talking CL calls Juan  
           *The man I talked to is called Juan.*
- b. \*El hombre *con el* estuve hablando se llama Juan.

The prediction in both analyses would be that, since there is a PP in [Spec, CP], *que* cannot be pronounced at the left edge of CP, it should not be pronounced (not even generated, in K&B's case). Thus, they incorrectly predict that (23a) should be ungrammatical, and that (23b), with no complementizer, should be grammatical.

The fact that, as shown in section 4, *el que* relatives involve a head-raising analysis does not make any difference with respect to these OT analyses. Although neither assumes a head-raising analysis of relative clauses, the structure is the same in the basic aspects: what matters is what material is overt in both C and [Spec, CP].<sup>12</sup> As shown in section 4, the structure of *el que* relatives should be as in (24).

- (24) D NP<sub>i</sub> [CP [P *el* t<sub>i</sub>]<sub>j</sub> [C' *que* ... t<sub>j</sub> ...]]

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<sup>12</sup> Pesetsky (1996: footnote 5) makes a similar point about his analysis.

In this structure there is a PP in [Spec, CP] with some overt material in it, and CP has *que* as its head. These are the relevant aspects of the structure with respect to the Doubly Filled COMP Filter and these OT analyses of it, not how this structure is generated. Thus, under the head-raising analysis, they still make the wrong prediction.

## 6. Towards an Account of *el que* Relatives

In this section I suggest incorporating certain ideas proposed in Brucart (1992) for Spanish relative clauses into the OT analyses presented in the previous section. As will be shown, this modified OT analysis can account not only for the behavior of *el que* relatives, but also for restrictive relatives in general in Spanish and other languages.

### 6.1. Brucart's (1992) Analysis of Spanish Relative Clauses

Brucart (1992) offers an analysis of Spanish relative clauses which accounts in part for their behavior with respect to the Doubly Filled COMP Filter. The structures he proposes for the different types of restrictive relatives are the following. In subject/object relatives, there is an empty operator in [Spec, CP], and the complementizer *que* is overt, as in (25a). In PP relatives with the overt operators *el cual* and *quien*, the PP in [Spec, CP] containing the operator is overt, and C is covert, as in (25b). In *el que* relatives, there is a PP in [Spec, CP], which contains an overt P, whose complement is a determiner followed by an empty operator, and *que* is overt, as in (25c).

- (25) a. [CP Op<sub>i</sub> [C' *que* ... t<sub>i</sub> ...]]  
 b. [CP [P *quien/el cual*]<sub>i</sub> [C' ... t<sub>i</sub> ...]]  
 c. [CP [P *el Op*]<sub>i</sub> [C' *que* ... t<sub>i</sub> ...]]

He proposes that all Cs must be specified for the feature [QU], which specifies whether the CP is embedded or not.<sup>13</sup> If it is embedded, the head of a CP must be [+QU].

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<sup>13</sup> In fact, Brucart (1992) proposes that this feature specifies whether the clause is 'propositionally independent'. Thus, questions also need to have a [+QU] C head. For reasons of simplicity, I will continue using the term 'embedded' in this paper.

Furthermore, he assumes that this feature must be saturated by S-structure. This occurs under two conditions. First, if there is an element with the feature [+QU] in [Spec, CP], this requirement is satisfied by spec-head agreement. Second, if there is no [+QU] element in [Spec, CP], *que*, which is specified for [+QU], is inserted in C. Specifically, Brucart assumes that insertion of *que* is a last resort operation, in the sense of Chomsky (1991): it is inserted only if the requirements of C are not satisfied otherwise (i.e. by moving a [+QU] phrase to [Spec, CP]). Furthermore, overt operators (*quien* and *el cual*) are [+QU], but covert operators are [-QU]. The basic idea behind this analysis is that embedded clauses need some explicit mark showing that they are embedded.

In PP relatives with an overt operator, the only possible structure is that shown in (25b). [Spec, CP] has a [+QU] feature (the operator is overt) which satisfies the requirement of C. Therefore, *que* is not inserted. In *el que* relatives there is no [+QU] feature in [Spec, CP], so *que* is inserted in order to satisfy the requirements of C. Thus, this analysis makes all the right predictions in the case of PP relativization.

However, it is not clear how this analysis accounts for subject/object relativization. There are three possibilities that must be taken into account. The first one is (25a), repeated here as (26a), which is in fact the only possible one: only C can, in fact, must, be overt. The other two are represented in (26b-e), in which the phrase in [Spec, CP] contains overt material. In the case of (26b, c), this phrase contains an overt relative operator. In the case of (26d, e), it contains the determiner *el* and a covert operator.

- (26) a. [CP Op<sub>i</sub> [C' *que* ... t<sub>i</sub> ...]]  
 b. \*[CP *quien/el cual*<sub>i</sub> [C' *que* ... t<sub>i</sub> ...]]  
 c. \*[CP *quien/el cual*<sub>i</sub> [C' ... t<sub>i</sub> ...]]  
 d. \*[CP *el* Op<sub>i</sub> [C' *que* ... t<sub>i</sub> ...]]  
 e. \*[CP *el* Op<sub>i</sub> [C' ... t<sub>i</sub> ...]]

The analysis correctly predicts that (26a) is grammatical: there is no [+QU] feature in [Spec, CP], so *que* is inserted in C. Case (26b) is also easily excluded: since there is already a [+QU] feature in [Spec, CP], insertion of *que* is not necessary, hence not

possible. Case (26e) is also correctly predicted to be ungrammatical: there is no [+QU] element either in [Spec, CP] or in C, so the requirements of C are not met.

However, cases (26c, d) are problematical for the analysis. In (26c) there is a [+QU] feature in [Spec, CP] and *que* is not inserted, so the requirements of C are met, and last resort is not violated. Thus, it is predicted to be grammatical. In (26d) there is no [+QU] in [Spec, CP], but *que* is inserted in C: this satisfies the requirements of C and does not violate last resort. In order to account for the ungrammaticality of these structures, Brucart assumes that in subject/object relatives the phrase undergoing *wh*-movement cannot be *el cual*, *quien* or *el Op*. However, it is not clear how he derives this. He notes that these three operators reproduce the grammatical features of the antecedent: *quien* agrees in number, and both *el cual* and *el Op* agree in number and gender. These features, he assumes, permit the identification of their antecedent. He also assumes that the identification obtained through the agreement between these operators and their antecedent is redundant with the one obtained through the coindexation between them. He assumes that this redundancy is excluded by economy principles of the sort proposed in Chomsky (1991) (specifically, he assumes that movement of these agreeing operators to [Spec, CP] is banned by economy principles). Furthermore, he also assumes that this redundancy appears only when the relativized phrase is a DP, not when it is a PP, since in the latter case ‘the lexical and structural information carried out by the preposition is not contained in the antecedent’ (p. 137).

There are several problems with this proposal. First, it is not clear how PP relatives with *quien*, *el cual* or *el Op*, are permitted at all. Although the P in [Spec, CP] must be overt for the reason mentioned above, it is not clear why the operators are allowed to have agreement features at all, since they are also coindexed with the antecedent. Furthermore, it is not clear why coindexation and agreement between two phrases should be redundant at all, and it is even less clear why this redundancy should result in ungrammaticality. In fact, there are many cases in Spanish when both coindexation and agreement between two phrases is obligatory. For instance, consider the case of reflexive pronouns. They must be coindexed with their antecedent, and in the case of first and second person reflexives in Spanish, they must also agree with their antecedent, as shown in (27).

- (27) Yo<sub>i</sub> me<sub>i</sub> miré a [mí mismo]<sub>i</sub> en el espejo.  
I CL-1st.sg looked to me(1st.sg) self-masc.sg in the mirror  
*I looked at myself in the mirror.*

One final problem with Brucart's analysis is that it can only account for Spanish relative clauses. For instance, it cannot explain why in English object relatives there is no overt material in the COMP area (unless we make the *ad hoc* assumption that an empty complementizer is [+QU] in English), or why overt operators are allowed in subject/object relatives in this language, since they have some agreement features which identify their antecedent (*which* is [+animate] and *who* is [-animate]). The system proposed in Brucart (1992) is designed to capture the facts in Spanish, but it is not a general account of relative clauses.

## **6.2. Towards an Explanation**

In this section I would like to suggest a possible alternative to the OT analyses presented in section 5. One possible way of explaining the behavior of *el que* relatives within these OT frameworks is to incorporate Brucart's (1992) basic idea that embedded clauses need to have some explicit signal of the fact that they are embedded. This is the basic insight behind Brucart's feature [+QU]: one of the functions of overt relative operators is to explicitly mark the relative clause as embedded. As Brucart points out, in cases where there is no element with this feature, some other property of the clause marks it as embedded. For instance, as noted by Brucart, in infinitival complements, which lack overt complementizers in Spanish, the 'defective verbal temporality' (p. 127) of the clause is the explicit mark which determines that the clause is embedded. In finite relative clauses this explicit mark is provided by overt operators or by an overt complementizer.

This idea can be incorporated into an OT analysis in the form of a constraint. We can call this constraint OMBED, which requires that an embedded clause requires some explicit mark of its embedded nature. Operators like *el cual* and *quien*, and the complementizer *que* can be such explicit marks (they always appear in embedded contexts). However, I assume that the determiner (*el* in Spanish) is not, since it need not

appear in embedded contexts. In Pesetsky's (1996) framework<sup>14</sup>, this constraint would be ranked higher than TEL (which requires the complementizer to be unpronounced). Thus, the relevant ranking for Spanish would be the one in (28).

(28) REC >> LE(CP), OVEMBED >> TEL

This ranking can now explain the behavior of *el que* relatives in Spanish. Assuming the head raising analysis proposed in section 4, the possible candidates in PP *el que* relatives would be the ones in (29).

- (29) *Input:* el hombre<sub>i</sub> [<sub>CP</sub> [con el t<sub>i</sub>]<sub>j</sub> [<sub>C'</sub> que estuvimos hablando t<sub>j</sub>]]  
 the man with the QUE were-we talking  
*the man we talked to*
- a. \*el hombre [<sub>CP</sub> ~~con el~~ que estuvimos hablando]
  - b. \*el hombre [<sub>CP</sub> ~~con el~~ que estuvimos hablando]
  - c. \*el hombre [<sub>CP</sub> con el ~~que~~ estuvimos hablando]
  - d. el hombre [<sub>CP</sub> con el que estuvimos hablando]

Candidates (a, b) are ruled out by the highly ranked REC, since deletion of P is not recoverable. Both (c, d) violate LE(CP). Furthermore, (c) violates OVEMBED, and (d) violates TEL. Since OVEMBED is ranked higher than TEL, candidate (d) is correctly predicted to win.

The fact that *el que* relatives are impossible in subject/object relativization is also accounted for in this analysis. The possible candidates would be the ones in (30).

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<sup>14</sup> The same kind of analysis can be made in K&B's framework, by ranking OVEMBED higher than HD-LFT.

- (30) *Input:* el hombre<sub>i</sub> [CP [el t<sub>i</sub>]<sub>j</sub> [C' que t<sub>j</sub> vino]]  
 the man the QUE came  
*the man who came*
- a. \*el hombre [CP ~~el que~~ vino]
  - b. \*el hombre [CP el ~~que~~ vino]
  - c. \*el hombre [CP ~~el que~~ vino]
  - d. el hombre [CP ~~el~~ que vino]

Candidates (a-c) violate both LE(CP) and OVEMBED, but satisfy TEL. Candidate (d) satisfies the former two constraints, but violates TEL. Since the latter constraint is ranked below the other two, candidate (d) is correctly predicted to win.

In the case of *el cual* and *quien* relatives, nothing has changed from Pesetsky's original analysis (see section 5). There the prediction was that in subject/object relatives the winning candidate has a deleted operator and an overt complementizer. This candidate also satisfies OVEMBED, by virtue of the overt complementizer. In the case of PP relatives, the prediction was that the winning candidate has an overt PP in [Spec, CP] and a deleted complementizer. This candidate also satisfies OVEMBED, due to the overt operator in [Spec, CP].

Therefore, this revision of Pesetsky's OT analysis can account for the complete restrictive relative clause paradigm in Spanish. Furthermore, it can also account for the paradigms in other languages. In English, the fact that embedded finite clauses can have covert complementizers shows that OVEMBED is ranked below TEL. Thus, in this language this constraint becomes irrelevant, and English relative clauses can be accounted for as in Pesetsky's analysis. In the case of French and Italian, the ranking would be as in Spanish. Thus, restrictive relative clauses in these languages pattern like Spanish, except for the fact that they do not have *el que* relatives. This can be accounted for if we adopt the following assumptions. All *wh*-movement in relative clauses in these languages must involve some kind of operator. Spanish *el cual* and *quien*, and their French and Italian counterparts, are operators. Furthermore, in Spanish the definite determiner can act as an operator, but not in French or Italian. As a consequence, *el que* relatives are only allowed in Spanish, since this structure involves *wh*-movement of a phrase containing the determiner, which can act as an operator only in Spanish.

The assumption that the Spanish definite determiner can act as an operator in Spanish might seem *ad hoc*. However, there is evidence for it in a different type of embedded clause. With certain matrix verbs, embedded interrogatives are possible without the standard interrogative pronouns *qué/quién*. Instead, they contain a definite determiner in [Spec, CP]. This is exemplified in (31).

- (31) a. No sé en *qué* casa vive.  
not I-know in which house lives  
*I do not know in which house he lives.*
- b. No sé en *la* casa que vive  
not I-know in the house that lives  
*I do not know in which house he lives.*

As suggested by the glosses, the correct interpretation of the embedded clause in (31b) is that of an embedded question. The fact that in this case we can have a definite determiner instead of the *wh*-operator *qué* supports the idea that the definite determiner in Spanish can be an operator.

To conclude, the analysis suggested in this section makes the correct predictions for restrictive relative clauses in several languages. Specifically, by including a simple modification in Pesetsky's (1996) (or, as noted in footnote 14, also in K&B's) analysis, we predict that the Doubly Filled COMP Filter will be violated only in languages with *el que* relatives of the kind found in Spanish. In other structures, including Spanish *el cual* and *quien* relatives, it is correctly predicted that the Doubly Filled COMP Filter holds.

## 7. Conclusion

In this paper I have shown that a correct analysis of Spanish *el que* relatives must have two properties. First, *que* must be analyzed as a complementizer, not as a relative pronoun, which means that the Doubly Filled COMP Filter is violated in these relatives. Secondly, these structures must involve a head-raising analysis. The fact that *que* is a complementizer in these relative clauses has been shown to be problematical for the OT analyses of relative clauses proposed in Pesetsky (1996) and K&B. Finally, I have shown

that a simple modification in this analysis makes the right predictions in *el que* relatives, and for restrictive relatives in general.

## References

- Brucart, J. M. (1992). Some Asymmetries in the Functioning of Relative Pronouns in Spanish. *Catalan Working Papers in Linguistics* 1992, 113-143.
- Chomsky, N. (1977). On Wh-movement. In P. Culicover, T. Wasow, and A. Akmajian (eds.), *Formal Syntax*. Academic Press, New York.
- Chomsky, N. (1980). On Binding. *Linguistic Inquiry* 11, 1-46.
- Chomsky, N. (1991). Some Notes on Economy of Derivations and Representation. In R. Freidin (ed.), *Principles and Parameters in Comparative Grammar*. MIT Press, Cambridge (MA).
- Chomsky, N. and H. Lasnik (1977). Filters and Control. *Linguistic Inquiry* 8, 425-504.
- Cinque, G. (1981a). On the Theory of Relative Clauses and Markedness. *The Linguistic Review* 1, 247-294.
- Cinque, G. (1981b). On Keenan and Comrie's Primary Relativization Constraint. *Linguistic Inquiry* 12, 293-308.
- Grimshaw, J. (1997). Projections, Heads, and Optimality. *Linguistic Inquiry* 28, 373-422.
- Kayne, R. (1977). French Relative Clauses. In M. Luján and F. Hensey (eds.), *Current Studies in Romance Linguistics*. Georgetown University Press, Washington D.C.
- Kayne, R. (1994). *The Antisymmetry of Syntax*. MIT Press, Cambridge (MA).
- Keer, E. and E. Baković (1997). Have Faith in Syntax. Ms. To appear in *Proceedings of WCCFL XVI*. [Available from Rutgers Optimality Archive, <http://ruccs.rutgers.edu/roa.html>]
- Pesetsky, D. (1996). Some Optimality Principles of Sentence Pronunciation. Ms. To appear in Barbosa, Fox, Hagstrom, McGinnis and Pesetsky (eds.), *Is the Best Good Enough?*, MITWPL/MIT Press, Cambridge (MA). [Available from Rutgers Optimality Archive, <http://ruccs.rutgers.edu/roa.html>]
- Rivero, M. L. (1980). *That*-Relatives and Deletion in COMP in Spanish. *Cahiers Linguistiques d'Ottawa* 9, 383-399.
- Rivero, M. L. (1982). Las relativas restrictivas con *que*. *Nueva Revista de Filología Hispánica* 31, 195-234.
- Rizzi, L. (1995). The Fine Structure of the Left Periphery. Ms. Université de Genève.
- Vergnaud, J-R. (1974). French Relative Clauses. Ph.D. Dissertation, MIT.