

# European relative clauses and the uniqueness of the Relative Pronoun Type

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European resumptive-introductory relative pronouns and the correspondent type of relative clause are one of the core properties of the Standard Average European. (Indo)-European languages are typologically isolated in having developed a clause-initial case-marked pronoun that introduces a relative clause. Taking into account not only the standard, but also the non-standard, language's usages, especially considering differences between speech and writing, the paper argues in favour of a more complex view about European relative clauses. European relative pronouns come from two different evolutionary lines. Continental West Germanic languages (Dutch, German) maintain and still use an inflected (Indo-European) relative pronoun while Romance languages, Greek, and English adopt a mixed system where an inflected relative pronoun alternates with an invariant marker introducing relative clauses and it is the last form that better continues the IE form. In fact, in these same languages the 'new' relative pronoun (from *\*ille qualis*) is a Medieval (at least XII century) innovation originated in a common written (literary) tradition, influenced by Latin language. So, the diffusion in Europe of the relative pronoun strategy reflects the 'sharing' of a common (written) cultural tradition. Its written origins explain the relative uniqueness of the relative pronoun strategy if cross-linguistically considered.\*

## 1. Introduction

There is a certain amount of agreement among linguists about the existence of a European *Sprachbund* (or linguistic league), commonly called *Standard Average European* (or SAE, see among others Dahl 1990; Lazard 1990; Haspelmath 1998, 2001; Comrie 2003b). The *Sprachbund* has a 'core' area consisting of French, Dutch, German and Northern Italian dialects (to say Continental West Germanic languages, Gallo-romance and Gallo-italic languages), and a 'peripheral' area consisting of the other Romance and Germanic languages, the Balkan languages and some Slavic languages (above all West Slavic languages). The *Sprachbund* also includes the Western Finno-Ugrian languages (Finnish, Hungarian) and an Afro-Asiatic language (Maltese).

The linguistic properties characterising the SAE are essentially of two types: some core properties, almost exclusive to these languages and some ‘commonalities’ that are not exclusive to the languages in the SAE. Haspelmath (1998 and 2001: 54) defines the SAE as having the following salient / core properties: definite and indefinite articles, participial passives, ‘have’ for possession, dative external possessors, anti-causative prominence, ‘A and-B’ conjunction, resumptive-introductory relative pronouns, particle comparatives, relative-based equatives. Haspelmath (1998 and 2001: 55) also lists the so-called ‘commonalities’: AVO/SV constituent order, sentence-initial interrogative pronouns, widespread syllable-initial consonant clusters. While the first list of properties is fairly rare, and the second list is fairly common, in world-wide languages, together they differentiate the SAE languages from other European languages that do not belong to the *linguistic league*.

Given the above framework I have undertaken a study of the origin and the diffusion of one core property of the *Sprachbund* (the introductory Relative Pronouns and the correlated Relative Pronoun Clauses), examining the uniqueness of the Relative Pronoun type and its origin.

It is well known that no unique explanation can be given for each property listed above and that there is no genetic explanation for the SAE as a whole. In particular, linguists reject the idea of a genetic (i.e. Indo-European) basis in order to explain the SAE.

The last point becomes clearer if we consider:

- i) The existence of Indo-European languages outside Europe that do not share the SAE properties.
- ii) The existence of some Indo-European languages in Europe, like Celtic languages, that do not share the SAE properties.<sup>1</sup>
- iii) The presence in the *Sprachbund* of non Indo-European languages (Finnish, Hungarian, Maltese) which share the same properties of the Indo-European languages.

The ‘genetic’ explanation is particularly baseless in the case of relative clauses. A proof of i) is, for example, the fact that Persian relative clauses are not introduced by an inflected relative pronoun. On the contrary, they are introduced by a general (invariable) *ke* ‘that’. When the head noun functions as subject or object in the relative clause, the relative clause introduced by the *ke* is constructed by the *gap strategy*. When the head noun functions as an oblique complement in the relative clause, the *ke* is followed by a pronoun, so the relative clause is constructed by the *pronoun-retention strategy*. Comrie

(1998: 63) gives us an example in (1) of a pronoun-retention relative clause in Persian:<sup>2</sup>

PERSIAN

- (1) *mardhâi* [*ke ketâbhâ-râ be ânhâ dâde bud-id*]  
men [that books-ACC to them given were-2SG]  
'the men [that you had given the books to-]'

As a proof of iii), examples (2)-(3) illustrate the relative pronoun strategy in Hungarian and Finnish (taken from Comrie 1998: 60):

HUNGARIAN

- (2) *a fiú, akit lattam*  
the boy who.ACC I.saw  
'the boy whom I saw - '

FINNISH

- (3) *poika, jonka näin*  
boy REL.ACC I.saw  
'the boy whom I saw'

On this foundation I will proceed as follows: I will discuss the European relative clauses taking into account not only the standard, but also the non-standard language's usages, especially considering differences between speech and writing; I will argue against a strong availability of the Relative Pronoun Strategy for spoken (unplanned) registers using three different arguments (§ 2); and I will come back to the problem of a general explanation for the uniqueness of the relative pronoun strategy on the basis of diachronic data (§ 4) after a consideration of differences in the production of relative clauses between spoken and written language (§ 3).

*2. Three arguments for supporting the 'uniqueness' of the European relative clauses*

Evidence based on spoken data compared with data from the written languages leads us to consider three different arguments for approaching the problem of the uniqueness of the relative pronoun type and its maintenance in the European languages. We will refer to them by using the following terms: a typological argument (A and § 2.1), a grammatical argument (B and § 2.2), and a psycholinguistic argument (C and § 2.3). Their content is summed up here:

A. European languages have a clause-initial case-marked (including by an adposition) pronoun that introduces a relative clause. This results in the relative pronoun strategy/type (Comrie 2003b; Comrie/Kuteva 2005) which is one of the characteristics of Standard Average European. But, in a typological framework, the relative pronoun strategy is very marginal and isolated (i.e. not widespread in languages over the world; see Keenan & Comrie 1977, 1979; Downing 1978; Comrie 2003b).<sup>3</sup>

B. The paradigm of relative pronouns in (written) European languages is a 'conservative' paradigm characterised by: a) a very rich number of alternative forms (*parallel paradigms*) some of which are *archaic forms* (see the case of the Italian possessive *il cui padre*, French *dont*, English *whose*, Dutch *het/de welk(e)*, German *welcher*, Swedish *vilken*, discussed below, § 2.2) and b) non productive rules: some case markers, not attested in other parts of the grammar, are kept in this area of the grammar (see the case of English *whom*, § 2.2).

C. Relative clauses of the relative pronoun type imply a hard short memory work (see Prideaux & Baker 1986; Hawkins 2004).

In what follows we will consider in detail the three arguments. Our aim is to demonstrate that arguments A, B, and C explain the differences in the production of the relative clauses between written and spoken varieties of most of the European languages. We will also try to show (see § 3) that arguments A, B, and C are connected to each other and that the way some European spoken languages construct relative clauses is more coherent with the needs of unplanned speech, while the Relative Pronoun strategy in these languages is restricted to and coherent with the needs of written language. All these data will then be referred to a diachronic framework (§ 4).

### 2.1. *Typological argument*

Some European languages, especially in the spoken varieties, do not use the relative pronoun strategy (or not for all the syntactic roles) and construct relative clauses recurring in other relativisation strategies (see Keenan & Comrie 1977, 1979; Downing 1978; Comrie 2003b; Comrie & Kuteva 2005), in particular, as I will illustrate in a moment, they recur to the gap strategy and the retention-pronoun strategy.<sup>4</sup>

#### 2.1.1. *Romance languages*

Spoken varieties of the greater part of the Romance languages<sup>5</sup> usually reduce the number of forms of relative pronouns found in

the written language. French spoken relative clauses, for example, are introduced by *qui* and *que* (which oppose human and non-human referents in subject function) while the other forms of the relative pronoun (i.e. *dont*, *lequel*) are very rarely used in conversation. In Italian conversations the most part of relative clauses are introduced by *che* and *cui* while *il quale* is very rarely used).

What is more relevant is that relative clauses in spoken Romance languages can be produced even without a relative pronoun. In examples (4)-(7) the Relative Clause is headed by a complementizer but it does not contain any overt morphological manifestation of its head noun (they illustrate the gap strategy):

- (4) ho sentito delle cose *che* al limite non avevo fatto caso  
 'I heard some things *that* probably I did not take into account'  
 (standard: *a cui* 'to which')
- (5) il fallait leur faire comprendre *que* le cheval c'était plus une pension  
*qu'*il avait besoin  
 'we needed to make them understand that it was a 'boarding house'  
*that* the horse needed'  
 (standard = *dont* 'of which')
- (6) pero en el momento *que* llegaban al ecuador y la estrella Polar desaparecía...  
 'in the moment *that* they arrived at the Equator and the Polar star disappeared'  
 (standard = *en el momento en que* 'in the moment when')
- (7) porque todo está en el ... eclíptica, la misma franja *que* hablábamos antes  
 'because everything is in the ... elliptic, the same band *that* we were speaking before'  
 (standard = *de que* 'about which')

In examples (8)-(11) the Relative Clause is introduced by a complementizer and contains a pronoun (usually personal) realizing the head in the relative clause (illustrating the pronoun-retention strategy):

- (8) è una cosa *che* l'ha detta il ministro  
 'it is a thing *that* the minister has told *it*'  
 (standard = *che ha detto 0 il ministro* 'that the minister has told')
- (9) sono cose *che* uno *ne* deve parlare  
 'they are things *that* one has to talk *about them*'  
 (standard = *di cui uno deve parlare* 'about which one has to talk')
- (10) je voudrais un renseignement: c'est à propos de ma femme *qu'*elle a été opérée y a deux mois

'I would like to have some information: it regards my wife *that she* has been operated two months ago'

(standard = *qui* 'who')

- (11) Entonces, estas personas que... eh... *que* la garganta significa *para ellas* algo... eh... importante,  
'So, these persons that ... eh ... *that* the throat is *for them* something important'  
(standard = *para las cuales* 'for whom')

In examples (12)-(14) the Relative Clauses are introduced by a relative pronoun while also having a resumptive pronoun. They will not be considered here, as they are infrequent, but their interest consists of revealing and illustrating the effect of hypercorrection in this area of grammar. As educational systems explicitly refer to the spoken relative clauses introduced by the invariable complementizer as a syntactic mistake, speakers often produce more syntactic information than necessary and create redundant constructs:

- (12) dobbiamo introdurre il concetto di semiconduttore *di cui ne* avevamo già parlato  
'we must introduce the concept of semiconductor about *which* we had already spoken *about it*'  
(standard = *di cui avevamo già parlato* 'about which we have already spoken')
- (13) c'est tout ce *dont* tu t'en souviens?  
'is this everything *of which* you remember *of it*?'  
(standard = *dont tu te souviens* 'of which you remember')
- (14) depende de la posición del observador con relación a la posición variable de la Luna, *que esas* van cambiando,  
'it depends on the position of the observer in relationship with the variable position of the moon, *that these* are changing'  
(standard = *que van cambiando* 'that are changing')

Examples (4)-(11) illustrate the fact that in spoken Romance languages the Relative Clauses can be produced by different strategies. In this sense they must be considered typologically distinct from the relative clauses of the written varieties.

### 2.1.2. Germanic languages

Romaine (1984) summarises very efficiently the situation for modern Germanic languages and dialects. She divides the languages into three groups: the first uses an invariant particle (Norwegian *som*, Zurich German, using the locative adverb *wo*), the second adopts

a mixed system (English, with the invariant *that* and the variable interrogatives *who*, *which*, etc., and Swedish, with the invariant *som* and the variable interrogatives *vilken*, *vars*, etc.), and finally the third which uses 'true relative pronouns, i.e. case coding pronouns' (Romaine 1984: 439) (German, with the demonstratives *der*, etc. used as relative pronouns, and Dutch, with the demonstrative pronouns *die*, etc. and the interrogative pronouns *wie*, *wier*, etc.). Other dialects recurring to the invariant particle are Frisian (*wat*), Yiddish (*vos*), and Scots English (*that*) (Romaine 1984: 439).

Even for the Germanic family we notice that relative clauses in unplanned spoken language can be differently produced if compared with the written language.

English unplanned spoken relative clauses produced by speakers of standard and non-standard varieties alike include the following (according to Miller, in print):<sup>6</sup> the gap construction with object (15), the gap construction with oblique and prepositional stranding (16), the *that*-construction with object (17), and the *that*-construction with oblique and preposition stranding (18).

- (15) the book \_ I read
- (16) the book \_ I found the picture *in*
- (17) the book *that* I read
- (18) the book *that* I found the picture *in*

Miller defines the examples (15)-(16) 'contact' relative clauses. The 'contact' relative clauses and the *that* clauses have a more literary correspondent in the *wh*- relative clauses. See examples (19)-(21):

- (19) the book *which* I read
- (20) the book *in which* I found the picture
- (21) the book *which* I found the picture *in*

What is more important to notice here, is that spoken language ignores the type of relative clause represented in (20), and it avoids *whom* and *whose* relative clauses. Furthermore, types (19) and (21) are rarely found.

English spoken language also shows relative clauses with resumptive pronouns (22)-(23) which are typical of spoken, but not of written, English:

- (22) It's something *that* I keep returning to *it*
- (23) An address *which* I hadn't stayed *there* for several years

Finally, unplanned speech typically uses the ordinary possessive pronouns *his, her, their* instead of *whose*:

(24) if you've got some eggs you're not sure about *their age* here's a useful test

(25) the man that *his wife* died

In formal writing (24) is substituted by (26):

(26) If you've got some eggs *about whose age* you're not sure, here's a useful test

which turns out to be more difficult to both process and produce because

'speakers have to construct a relative clause beginning with a complex prepositional phrase, *about whose age*, and listeners have to interpret it. On the contrary (24) introduces the *eggs* – *if you've got some eggs*; the next chunk has the word order of ordinary main clauses – *you're not sure about their age*. The listener merely has to pick up the reference of *their*. The shadow pronoun construction enables speakers to avoid complex relative clauses in which the relative pronoun is an oblique object or a possessive.' (Miller, in print).

Non-standard relative clauses also include subject gaps: '*we had this French girl* (\_\_\_) *came to stay* [conversation]' (Weinert 2004: 12). Relative clauses with subject gaps frequently, but not necessarily, occur in presentational environments. Their designation as standard or non-standard usages is uncertain. Miller (in print) also signals that the written language offers a lot of examples of very complex relative clauses not found in spoken language.<sup>7</sup>

Among Germanic languages German keeps the relative pronoun strategy even in spoken dialects. In fact, "... spoken German does not have contact relative clauses, resumptive pronouns ... or loosely connected pronouns. ... Pronouns have the same form as definite determiners. The WELCH pronoun does not occur." (Weinert 2004: 20). If there is some difference between spoken and written German this has to do with the avoidance of dative or genitive relative pronouns, and with the low occurrences of prepositional object pronouns. Furthermore, while spoken German prefers *wo* in order to relativise locative expressions and prepositional phrases, the written language does not use it so frequently (*die Wohnung wo Sie wohnen* 'the flat where you live' instead of *die Wohnung in der Sie wohnen* 'the flat in which you live'). Even the bare quantitative data

can be considered a difference between spoken and written German; according to Weinert the German relative clauses are rare in spoken language (Weinert 2004: 20). In fact, analysing a corpus of spoken and written German, she finds 229 relative clauses in a spoken corpus of 101,000 words and 109 relative clauses in a written corpus of 12,000 words. For more details on written and spoken relative clauses in German I refer to the article, what is useful for our discussion is the fact that even in spoken German we can observe a different use of relative clauses. In particular, literature shows that the use of relative clauses is more restricted, for example: avoidance of embedding of relative clauses, preference for non-subject head nouns, and preference for relative pronouns in subject or direct object function (2004: 43).

### 2.1.3. Slavic languages

The greater part of Slavic languages uses the relative pronoun strategy. Czech alternates an invariable particle *co* followed by a resumptive pronoun with an inflected relative pronoun (Keenan & Comrie 1979a: 334); Slovenian alternates an inflected relative pronoun with an invariable *ki* followed by personal pronouns (Keenan & Comrie 1979a: 346); Polish and Russian use inflected relative pronouns (Keenan & Comrie 1979a: 343-344). Serbo-Croatian alternates variable pronominal relativizers with an invariable *što* which can be optionally followed by personal pronouns (the personal pronoun is optional with inanimate Direct Objects Accusative and obligatory with Animate Direct Object Accusative, Prepositional Accusative, and with Genitive, Dative, Locative or Instrumental) (Van der Auwera & Kučanda 1985: 924).

Even among Slavic languages data from spoken languages reveal different strategies for relativisation. While ‘written Russian has the classic Indo-European relative clauses’ (Miller & Weinert 1998: 352) spontaneous spoken Russian can use a correlative strategy found in languages like Bengali and Hindi. In this case the relative pronoun correlates with a deictic pronoun in the main clause and the syntactic connection among the two clauses is looser (Miller & Weinert 1998: 352, from which I take example (27)):

#### RUSSIAN

- (27) Ta,     *kotoraja*                    zdes’ stojala                lampa, ja  
 That *which-REL*                    here was-standing lamp, I  
       *ee*     ne     bral  
       *it*     not   took  
 ‘The lamp which was standing here, I didn’t take it’

2.2. Grammatical argument

Among the grammatical tools available in a language it is not uncommon that the spoken languages only select a small subset. In the case of the relative pronoun paradigm the ‘offered’ tools probably overcome the communicative needs of conversation. The richness of the paradigm is manifested by the fact that for almost each syntactic position, above all with human referents, there are alternative ways (all standard) in order to produce a NP in a relative clause:

- a) the [ke]-series (in Romance languages) or *that*-series, including an introducing element which is similar to the complementizer and which is used for subject, object and also oblique positions (with or without preposition stranding, depending on the language);
- b) the [kwal-] or *which*-series, whose origin refers to the interrogative adjective *qualis* (see Italian *quale*, Sp. *cual*, Fr. *lequel*), together with the definite article forms the relative pronoun in the Romance languages and has been the model for Germanic languages as well (see Dutch *het/de welk(e)*, German *welcher*, Swedish *vilken*, English *the which*), and
- c) the [ki] or *who/whom* series coming from the interrogative pronoun.<sup>8</sup>

In Tables 1-4 I compare the paradigms of the relative pronouns in four European languages:

**Table 1.** French.

	ANIMATE	INANIMATE	LOCATIVE	PP AND POSSESSOR
SUBJECT	<i>qui / le quel</i>	<i>qui</i>		
DIRECT OBJECT	<i>que / (lequel)</i>	<i>que</i>		
OBJECT OF PREP	prep + <i>qui / lequel</i>	prep + <i>quoi / lequel</i>	<i>où</i>	<i>dont</i>

**Table 2.** Spanish.

	ANIMATE	INANIMATE	LOCATIVE	POSSESSOR
SUBJECT	<i>que, el que, quien, el cual</i>	<i>que, el que, el cual</i>		
DIRECT OBJECT	<i>que, al que, al cual, a quien</i>	<i>que, el que, el cual</i>		
OBJECT OF PREPOSITION	prep + <i>que, el que, el cual</i>	prep + <i>que, el que, el cual</i>	<i>donde</i>	<i>cuyo</i>

**Table 3.** Italian.

	ANIMATE	INANIMATE	LOCATIVE	POSSESSOR
SUBJECT	<i>che, il quale</i>	<i>che, il quale</i>		
DIRECT OBJECT	<i>che</i>	<i>che</i>		
OBJECT OF PREPOSITION	prep + <i>cui, il quale</i>	prep + <i>cui, il quale</i>	<i>dove</i>	<i>cui</i>

**Table 4.** English

	ANIMATE	INANIMATE	LOCATIVE	POSSESSOR
SUBJECT	<i>that, who</i>	<i>that, which</i>		
DIRECT OBJECT	<i>that whom</i>	<i>that, which</i>		
OBJECT OF PREPOSITION	prep + <i>whom</i>	prep + <i>which,</i>	<i>where</i>	<i>whose</i>

Another characteristic feature of the European relative pronouns is the high number of ‘archaic’ forms maintained in this grammatical area. By ‘archaic’ we intend forms that imply and keep a structural diversity if compared with the synchronic syntactic type of that language. This diversity has a historical basis.<sup>9</sup>

For example in Italian the relativisation of a genitive (modifier) can be produced by an invariable ‘*cui*’ preceding the modified referent:

- (28) *il cui padre*  
*the of-whom father*  
 ‘whose father’

The structure in (28) has a determiner - determined word order that is not the common order in Italian. And in fact, the form in (28) is more commonly produced as (29) with the modifier realised as a PP (*del quale*) and following the modified referent (*il padre*):<sup>10</sup>

- (29) *il padre del quale*  
*the father of-the whom*  
 ‘whose father’

A similar situation can be observed in French (*dont le père* ‘whose father’ > *le père duquel* ‘the father of whom’). There is a tendency in spoken languages not to use the archaic form, except for some bureaucratic or fixed examples such as:

- (30) et regarder en face la petite Abir Aramin, (...), *dont l'assassin* ne sera jamais confronté à la justice de ce pays  
'and to meet little Abir Aramin, (...), *whose killer* never will submit himself to the Court of this country'

In non-standard varieties this construction is performed as a resumptive construction with a possessive adjective modifying the NP; see in (31) the Spanish standard construction (equivalent to (28)), and the non-standard alternatives (32)-(33):

- (31) el hombre *cuyo hijo* es Juan, trabaja en el aeropuerto (standard)  
'the man *whose* son is Juan, he works at the airport'  
(32) el duque de Milán *que su hijo* fue Galeazzo (non-standard)  
'the man *that his* son was Galeazzo'  
(33) la chica *que el hijo* no esta bien (non-standard)  
'the girl *that her* son is ill'

The construction in (32) is also possible in non-standard English because- according to Miller:

... instead of *whose* unplanned speech typically has the ordinary possessive pronouns *his, her, their*, etc. (Miller, in print)

(see examples here reported as (24)-(25)).

Last but not least, the archaic and conservative character of this area of grammar, primarily manifested in the written variant, also reflects in the maintenance of rules that are not productive at all. These rules are simplified in the production of relative clauses in the spoken language. For example, English avoidance of the use of *whom* in relativising a direct object and the generalised use of *who* for object and oblique relatives depend on the almost complete deletion of case marking of objects in English.

### 2.3. Psycholinguistic argument

It is not my aim here to summarize the extensive literature on the processing of relative clauses, as this topic has received extensive attention from cognitive and psycholinguistic approaches (for some references see at least Prideaux & Baker 1986; Hawkins 2004: 171-221). I will however refer to some work in order to show how the processing of relative clauses relates to, and can be argued to impact, the structural variants that one finds in relative clauses across languages, and in particular in European relative clauses.<sup>11</sup>

In psycholinguistic terms there are at least three major problems related to the processing of relative clauses. Each problem has to do with one of the three major strategies: CLOSURE, NORMAL FORM and DEPENDENCIES DOMAIN.

The first problem concerns CLOSURE, which is a very general principle based on the limitations of short term memory. It predicts that 'listeners (and speakers, for that matter) tend to expect that sentences, phrases, etc. will be closed as soon as possible, once the requisite properties, be they semantic or syntactic, have been satisfied' (Prideaux & Baker 1986: 32). In the production of a RC this strategy predicts that non-interrupting clauses (like (34)) are preferred over embedded or interrupting clauses (like (35)):

- (34) I gave a book to a man [who is a doctor]  
(35) The man [to whom I gave the book] is a doctor

In fact, in the first case the main clause can be closed before the RC begins, as a contrast, in the second case main clause processing cannot be closed until RC processing has been concluded.

The second problem arises with the NORMAL FORM strategy. NORMAL FORM is assessed as follows: 'The language user assumes that the unit being processed is in its 'normal' or 'canonical' form unless the unit is overtly marked to the contrary (Prideaux & Baker 1986: 32). In producing a RC this strategy predicts that RCs relativising a Subject (like (36)) are preferred over RCs on Objects (like (37)).<sup>12</sup>

- (36) I met again the girl [who was dancing so well yesterday]  
(37) I met again the girl [that you saw yesterday]

In fact, while in the first case the RC has a (Normal) SVO order, the second RC clause has a (non-Normal) OSV order.

The third problem has to do with the DEPENDENCY DOMAINS. In this case difficulties in the processing of a RC essentially depend on two aspects: one related to the anaphoric relationships and the other to the syntactic relationships of dependency.<sup>13</sup>

Regarding the first aspect, we observe that in a standard RC there is a double anaphoric relationship: between the head noun and the Relative Pronoun on the one hand and between the Relative Pronoun and the gap (the empty position of the deleted constituent) on the other. See example (38) where the first anaphoric link is realised between the head noun *The man* and the relative Pronoun *to whom* and a second one between the relative pronoun *to whom* and the gap (here 0):

(38) The man<sub>i</sub> [to whom<sub>i</sub> I gave the book 0<sub>i</sub>]

Non-standard production of a Relative Clause turns out to be advantageous. In fact, it deletes one of the two anaphoric relationships, as it directly relates the head noun and the gap (39), or the head noun and a resumptive pronoun (40):

(39) the man<sub>i</sub> that I gave the book to 0<sub>i</sub>  
(40) the man<sub>i</sub> that I gave the book to him<sub>i</sub>

The advantages of a non-standard relative clause are even clearer if we consider more complex cases like the relativisation of the possessor. Compare (41) with (42). In (41) there is only one anaphoric relationship between *The man* and the possessive adjective *his*, while in the standard production of (42) there are more complex anaphoric relationships:

(41) the man<sub>i</sub> [that I saw his<sub>i</sub> daughter] is my boss  
(42) the man<sub>i</sub> [[whose<sub>i</sub> daughter]<sub>j</sub> I saw 0<sub>j</sub>] is my boss

The second problem for on-line processing of standard RCs arises because the dependent constituent (the relative pronoun) precedes the verb, which is its subcategorizing element. In comprehension this implies that the Relative Pronoun can be assigned all syntactic and semantic properties only when the parser has reached the verb of the relative clause (so the assignment is postponed). In production this implies that the speaker has to plan in advance the whole syntactic structure of the Relative Clause at the same time that (s)he articulates the relative pronoun. This creates many problems, which are apparent from corpus data where we observe that a relative pronoun sometimes occurs with the wrong preposition, the resulting preposition being incoherent with the choice of the verb. Corpus data show cases in which the speaker can produce a clause where the incorrect preposition on the Relative Pronoun seems to be due to a change in the choice of the verb. For example a relative clause like:

(43) La ragazza *di cui* ti accennavo  
'The girl *about-whom* I was talking to you'

has the wrong preposition '*di*' 'of' on the relative pronoun (the right version being *la ragazza a cui accennavo* 'the girl to-whom ...' with the *a*' preposition) and can be considered to be the output of an

interference with *la ragazza di cui ti parlavo* 'the girl of-whom I was talking to you', where both verbs are related to the semantic area of verbs of speaking. On the contrary, in the non-standard relative clause the dependent element regularly follows its subcategorizing constituent, thus retaining the word order of an independent clause (45):

- (44) the man<sub>i</sub> *whom* I saw is my boss  
(45) the man (that) I saw *him* is my boss

In conclusion, (spoken) non-standard RCs seem to better respect the more general cognitive restrictions imposed on the processing of language. On the contrary, Relative Pronoun clauses seem more difficult for the human parser, at least in on-line processing, so they best fit the written texts where there is less time pressure and readers (and writers) can be more analytic (on the cognitive differences related to reading or listening to RCs see Prideaux & Baker 1986: 145-166).

### *3. Relative clauses in spoken European languages*

The typological, grammatical, and psycholinguistic factors that we have just discussed support an explanation for the different distribution of the relative pronoun construction between written and spoken languages. This is clearly true for some languages of the SAE (Romance languages and English) and less so for others (Continental West Germanic languages). Taking into account the spoken (including non-standard) varieties of the first group (Romance languages and English), we noticed that two more relativisation strategies (the gap strategy and the retention pronoun strategy) must be included in our description of European relative clauses, even if with different degrees of standardisation and acceptability among languages and between spoken and written varieties. On this basis, and contrary to the commonest view of a homogeneously spread relative pronoun strategy, we defend the idea of European languages in the SAE as constructing relative clauses with mixed strategies. This idea receives further support from the fact that the other two observed strategies are not a recent speech-pressure induced evolution of European languages, but instead stable linguistic devices in some of these languages (especially Romance languages and English, but even Greek and some others, see below) since the medieval period (tracing back to the vulgar Latin). I will discuss in detail this point later (§ 4).

In what follows I want to show how the three arguments for supporting the uniqueness of the relative pronoun strategy can be connected and unified under some syntactic processes that apply not only to the production of relative clauses but more generally to the syntax of the spoken languages. In other words, I argue in favour of the idea that the gap strategy and the pronoun retention strategy are coherent with the syntax of spoken languages, especially in the Romance languages and in English.

As a response to the 'Grammatical argument' the spoken European languages adopt a *reduction of the paradigm of relative pronouns*. Some relative pronouns (It. *il quale, cui*, Fr. *dont, le quel*, En. *whom, whose*, etc.) only occur in the written texts, while the Relative Clauses in spoken varieties are preferably introduced by:

- a) a generic invariable complementizer: English *that*, French *que*, Spanish *que*, Italian *che*, or Serbo-Croatian *što*;
- or b) an invariable relative adverb (generally the locative adverb): French *où*, Italian *dove*, English *where*, Greek *pou*, or German *wo*.

Relative clauses can also have no subordination marking: *the man I saw yesterday is your husband*.

As a response to the Typological argument, the relative pronoun reduction implies two types of *non-standard relative clauses* the gap construction and the pronoun retention construction. In particular it is the generalised use of a complementizer in oblique relative clauses that produces non-standard relative clauses.<sup>14</sup>

The non-standard types of relative clauses treat the relativisation process as a *pronominalization process*, subject not to movement rules but to reference constraints and to the more general cognitive *accessibility principle* (see a discussion with data from Hebrew in Ariel, 1999). In both cases the relative clause is headed by a complementizer. In the relative clause a pronoun or a zero anaphora appear which are co-indexed (by the rule of predication) with the relativised NP. The gap strategy corresponds to the zero anaphora, while the pronoun retention strategy (or resumptive pronoun strategy) to a pronominal anaphora. The choice between them is bound by the accessibility principle: more accessible referents correspond to a zero anaphora, while less accessible ones correspond to a pronoun anaphora.

As no *wh*-movement is involved in the formation of non-standard relative clauses there is no necessity for applying subjacency conditions to them<sup>15</sup>. In fact, the non-standard relative clauses can avoid subjacency violations like the complex NP constraint. For an example, compare (46) with the ungrammatical standard RC in (47):

- (46) io ho fatto un unico esame<sub>i</sub> [*che* mi sono meravigliata [leggendo [il programma [(di) 0<sub>i</sub>] PP] NP]]  
 'I made only one examination<sub>i</sub> [that I wondered [in reading [the programme [0<sub>i</sub> (= of it)]]]'
- (47) \*io ho fatto un unico esame<sub>i</sub> [*del quale* / *di cui*<sub>i</sub> mi sono meravigliata [leggendo [il programma [(di) 0<sub>i</sub>] PP] NP]]

As a response to the Cognitive argument, we observe that *two types* of relative clauses (those with zero anaphora or with a resumptive pronoun) have a word order similar to an independent clause. So we observe a *linearization process* which has clear cognitive advantages in not implying any syntactically dependent element to appear before the element that can assign syntactic or semantic properties.<sup>16</sup>

As a response to both the Cognitive argument and the Typological argument, we observe the *avoidance of clauses which relativise non-Subject and non-Object positions*. Spoken languages drastically reduce the production of RCs on the lowest positions of the Accessibility Hierarchy to relativisation (see Keenan & Comrie 1977) shown below in (48).

- (48) Subject > Direct Object > Indirect Object > Oblique object >  
 Possessor > Object of Comparison

In fact, RCs in spoken languages mostly occur on S and O, also due to pragmatic and informative pressures (see Fox/Thompson 1990 for English; Gadet 2003 for French; Fiorentino 1999, for French, Italian and Spanish; and Weinert 2004 for German). Data for spoken French, Italian and Spanish (from Fiorentino, 1999) are here shown in Table (49)):

(49)

	Italian	French	Spanish
Subject	3357 68.3%	737 68.3%	685 67.5%
Object	1004 20.4%	209 19.4%	250 24.7%
PP	553 11.3%	133 12.3%	79 7.8%
TOTAL	4914	1079	1014

As for pragmatic and informative pressures, an explaining factor for the preponderance of some particular sequences of S and O rela-

tive clauses has been discussed in Fox/Thompson (1990) working on 414 relative clauses in American English.

In particular the authors observe four main patterns:

- 1) the preponderance of S-O for non-human referents;<sup>17</sup>
- 2) the tendency for O-O not to occur for non-human referents;
- 3) the preponderance of Ex-S;
- 4) the tendency for Ex-O not to occur (Fox/Thompson 1990: 299).

The first pattern, non-human subject heads with object relatives, is explained on the basis of grounding. A non-human head subject when expressed is not grounded and the relative clause performs this function by anchoring the Head NP in the relative clause to a Given discourse referent (most commonly human referents pronominally realized as subjects of the relative clause).

The third and fourth patterns concern existential-head relative clauses in which there is a preponderance of Ex-S over Ex-O (the last not attested at all) because existential heads are New and indefinite (and in a high proportion human) so they need grounding and identification. Grounding is provided either by locative expressions in the main clause (the relative clause provides characterizing information) or by propositional linking in the relative clause. In both cases the grounding consists of a linking of the referent introduced to its activities.

A final point, probably a little more controversial, regards the so-called *pragmatic relative clauses* and more in general the different syntactic clause integration that we can get if using different types of relative clauses.

Some authors (see among others Deulofeu 1981, Miller in print, and Fiorentino, 2007) even include in the relative clauses some special types of subordinate clauses related to a main clause by the *que-that*-complementizer but with no 'clear' argument deletion (or gap) in the second clause. The interpretation of the second clause as a relative clause is, according to these authors, more pragmatically than syntactically driven because the discourse function of the second clause is of the same type as the RCs discourse function, that is to say:<sup>18</sup>

- helping to identify a Given Head NP referent, previously known to the hearer:  
(50) and then *the one that's bigoted*, she's married to this guy
- providing a characterization or description of a New Head NP referent, not previously known to the hearer:  
(51) there is *a woman* in my class *who's a nurse* <sup>19</sup>

(52)-(53) provide some examples of the so-called *pragmatic relative clauses* with a possible paraphrase indicated as (52') and (53'):

(52) FRENCH (the example is discussed in Deulofeu 1981):

*il y a des feux qu' il faut appeler*  
 there are some fires *that* it is necessary to call  
*les pompiers tout de suite*  
 the fire brigade rapidly

(53) ITALIAN (the example is discussed in Fiorentino 1999):

*voi dovreste trovare un lavoro che la domenica*  
 you should find a job *that* on Sunday  
*restate libera*  
 you-are free

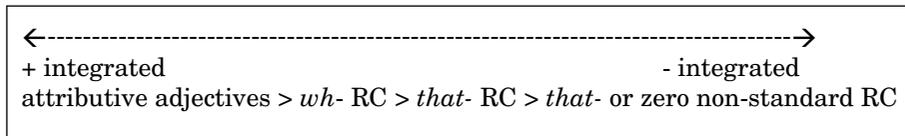
(52') *il y a des feux à cause desquels / d'un type que il faut appeler les pompiers tout de suite*

(53') *voi dovreste trovare un lavoro grazie al quale / d'un tipo che la domenica restate libera*

Semantically these clauses are similar to clauses denoting 'consequences'. Their paraphrases with a relative pronoun clarify in what sense the use of non-standard relative clauses holds a more natural word order and the difficulty in finding a unique meaning for the *que-que* complementizer illustrates in which sense the semantic and syntactic integration of the two clauses is weaker in the case of a 'pragmatic' relative clause.

Even leaving aside the pragmatic relative clauses and their problematic inclusion in the Relative Clauses, we can agree that the non-standard types of RC perform different degrees of syntactic integration in the main clause. A similar consideration is found in Chafe (1982). In fact, non-standard relative clauses occupy a different position in the Chafe's *integration - fragmentation continuum* if compared to standard relative clauses (the integration - fragmentation continuum is a parameter which, according to Chafe 1982, differentiates speech and writing ). The continuum is reported here as (54):

(54) Chafe (1982): integration - fragmentation continuum



In this perspective, *wh*- relative clauses are considered a more elaborate and explicit way for the identification of nominal referents (Biber 1988: 144-145), while *that*- relative clauses “are used for informational elaboration in such a way that each additional piece of information is tacked on rather than integrated tightly into the text” (Biber 1988: 158). This last point explains why non-standard relative clauses better fit with the exigencies of unplanned discourse.

#### 4. Diachronic argument

In order to demonstrate that gap, pronoun retention and relative pronoun construction are all ‘basic’ types for the European relative clauses we have now to turn to some diachronic, in some cases, dialectological data (at least for the Italian situation).

Diachronic data support the hypothesis that different strategies for relative clauses have been adopted since the origins of the European languages. In fact, relative clauses introduced by an invariant marker (with or without a resumptive pronoun) are found in Old Italian, Old Spanish and Old French (see a summary in Fiorentino 1999) and confirm the possibility of a gap construction or a pronoun retention construction in these languages. Jespersen (1927: III, 108-111) mentions the existence of relative clauses in Old English formed by the pronoun retention strategy and he also quotes many other languages where the construction occurs, including: Spanish, Italian, Old and Modern French, Greek, Lithuanian, Modern Persian, Semitic, Ancient Egyptian and Malay. For the Italian dialects Cennamo’s survey supports the same picture. The dialects use gapping (above all for restrictive clauses) and pronoun retention (above all for non-restrictive clauses) (Cennamo 1997: 192). In all dialects there is an invariable marker introducing a relative clause and there is no trace of the *il quale* relative pronoun (in Nuorese, a Sardinian dialect: ‘The relative pronoun strategy for oblique cases is restricted to high registers and reflects Italian influence’ Cennamo 1997: 196). The New Testament’s Greek presents the case of a relative pronoun as: ‘a mere connective ... followed by a redundant demonstrative placed after one or more intervening words, but always within the relative clause. ... This is apparently an Hebraism initiated by the Septuagint, imitated by the NT writers, and spread through their subsequent imitators to common speech’ (Jannaris 1968: 353).

The production of a relative pronoun strategy correlates to the existence of a relative pronoun. As widely known, the morphology of

Latin evolved in such a way that the paradigm of relative pronouns was reduced to only three forms: *qui / quem / cui* (Väänänen 1967<sup>2</sup>; Lloyd 1987: 159).<sup>20</sup> From this already reduced paradigm, most of Romance languages and dialects generalised an invariant relative marker (Väänänen 1967<sup>2</sup>) and only later developed a fully inflected relative pronoun paradigm. In Romance languages a complete inflected relative pronoun paradigm originated by combining the anaphoric *ille* and the interrogative adjective *qualis* (*\*ille qualis*).<sup>21</sup> The demonstrative origin of this relative pronoun reflects in the fact that it more frequently occurs in appositive clauses.<sup>22</sup>

The existence of such a relative pronoun influenced other European languages to adopt a similar paradigm. Even languages not derived from Latin developed an inflected relative pronoun as a *calque* from classical languages. For English it has been observed that the inflected relative pronoun *which* originated as a *calque* from Latin (see Bourcier 1977, Roma 2007).

In particular, Bourcier (1977) shows that in older OE prose texts (9th-10th centuries) there were three main markers available for Relative Clauses: the demonstrative pronoun *se, seo, þæt* (case-inflected and agreeing in Number and Gender with the antecedent, definitely an old Germanic structure), the invariable particle *þe*, and a combination of the two (*se þe*), all with different distributions.<sup>23</sup> Generally, in older texts, while the particle could be used in any context, the pronoun was used mainly in non-restrictive and/or non-adjacent relative clauses, containing non-presupposed information. *Wh*-pronouns in relative clauses are a ME development, which, according to Bourcier (1977: 241), make their earliest appearances in prose in interlinear glosses on Latin, where they represent a *calque*.<sup>24</sup> On the model of *which*, three later developments appear: *whom, whose, and who*, the last one appearing in the XVI century.<sup>25</sup>

Very interestingly a similar process also concerns the Greek language, which did not inherit the Proto Indo-European *\*k<sup>w</sup>is / \*k<sup>w</sup>id* series.<sup>26</sup> Classical or Ancient Greek had a relative clause introduced by the relative pronoun *hos, hē, ho*, with both independent and dependent moods, which shows its early origin as an anaphoric construction (and not a subordinate clause in the proper sense). Only later when the second member of this anaphoric construction was re-analysed as non-autonomous (as a dependent clause) the marker was also re-analysed as a subordinating relative pronoun. This reanalysis was completed in the V century BC. Greek also developed an invariant *pou* marker (from the locative adverb) which is commonly used in Modern Greek (see Joseph 1980 and 1983) to introduce relative

clauses (with or without resumptive pronoun). Furthermore, in the XII century Greek forms a new series of relative pronouns *ho opoios*, *hē opoia*, *to opoion* (Modern Greek *o opios*) made of the definite article and the *opo-* root (Joseph 1983: 3). This pronoun (a cultivated, literary, and learned formation) is rare in demotic Greek but it correlates well to the Romance relative pronouns *il quale*, *lequel*, and *el cual*.

Not being in the Romance family, Greek and English facts strongly confirm the idea that some European languages (forming relative clauses both by an invariant complementizer and by an inherited relative pronoun or demonstrative pronoun), added a third possibility, a *calque* from Latin, e.g. English *the which* Greek *ho opoios*, as a later and learned artificial creation of written texts not based on a *direct* IE inheritance but as an *indirect* product of the Medieval imitation of the Latin model. In this sense, the relative pronoun for these languages is a European innovation spread among culturally related languages, primarily through the (literary) written tradition.

## 5. Conclusion

Data presented in the paper show that the Relative Pronoun Strategy not only is ‘unique’ or rare among languages in the world but even in the European languages it proves to be less frequent if we include the analysis of the spoken varieties. In fact, spoken languages infrequently recur to this strategy in order to produce relative clauses. We also argued that the uniqueness of the Relative Pronoun Strategy is strongly related to cognitive difficulties: some European spoken varieties systematically avoid the Relative Pronoun Strategy by adopting the gap construction or the pronoun retention construction, with all the advantages in processing that we have just illustrated. Finally, it is well known that the relative pronoun strategy can be restricted to lower positions in the Accessibility Hierarchy (a detailed analysis of relativization strategies which crosses types of clause and position in the AH in the languages of Europe is Cristofaro & Giacalone Ramat 2007).

In conclusion, the current view about European relative clauses can be summarized as follows: the relative pronouns in European languages come from two different evolutionary lines. Continental West Germanic languages (Dutch, German) maintained and still use an inflected (Indo-European) relative pronoun while Romance languages, Greek, and English adopted a mixed system where the invariant marker continues the IE form. In these same languages the relative

pronoun (*\*ille qualis*) is a Medieval (at least XII century)<sup>27</sup> innovation which originated in a common written (literary) tradition, influenced by Latin language.<sup>28</sup> We put some emphasis on the ‘written’ context because it is in this case that an inflected fronted relative pronoun can prove to be more useful to correctly identify, for example, a non-adjacent head. It is also in this context that some languages, like English, provide themselves with such a pronoun. So, the diffusion in Europe of the relative pronoun strategy reflects the ‘sharing’ of a common (written) cultural tradition, and its written origins explain its relative uniqueness, if cross-linguistically considered.

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*Notes*

\* I want to warmly thank Bernard Comrie and John Hawkins for commenting on an earlier version of this paper and for interesting and stimulating discussions at different stages. The following abbreviations are used: SAE, Standard Average European, RC, relative clause, ACC, accusative, SG, singular, REL, relative, PP, prepositional phrase.

<sup>1</sup> For Celtic languages the peripheral geographic position can probably explain the strongly idiosyncratic grammar if compared with the SAE. For relative clauses in Insular Celtic languages see the recent Roma (2007).

<sup>2</sup> Another case of an Indo-European language which does not construct relative clauses by the relative pronoun strategy is Hindi. Hindi relative clauses belong to the ‘correlative’ type, that is to say relative clauses are constructed using the non-reduction strategy. In this case the head noun appears as a full-fledged noun phrase within the relative clause (for more details see Comrie 1998: 62 and Lehmann 1984).

<sup>3</sup> (Indo)-European languages are typologically isolated in having developed a clause-initial case-marked pronoun that introduces a relative clause. “Although the relative-pronoun type is widespread in the languages of Europe, especially in their standardised, literary variants, it is cross-linguistically quite rare. Indeed, examples found outside Europe nearly always turn out to have arisen under influence from some European language (Comrie 1998). Nonetheless, under such conditions of contact, the relative-pronoun type does seem to be borrowed easily, thus giving the impression of a type that arises rarely spontaneously but which, one it has arisen, is a favoured construction for borrowing” (Comrie 2003a: 20).

<sup>4</sup> For differences between relative clauses in speech and writing see, among others, Biber 1988, 1995; Biber *et al.* 1999; Blanche-Benveniste 1980, 1990; Deulofeu 1981, 1988; Fiorentino 1999; Gadet 1989, 1995, 2003; Gadet / Mazière 1987; Miller, in print; Miller/Weinert 1998; Weinert 2004.

<sup>5</sup> Data primarily from Italian, French and Spanish (see Fiorentino, 1999)

<sup>6</sup> The examples in this section have been discussed by Miller (in print). Example (23) has been discussed in Miller & Weinert (1998: 347).

<sup>7</sup> This fact, along with the avoidance of relative clauses on oblique positions, shows that planned and unplanned discourses have different sets of usages. RCs which are not common (or non used at all) in unplanned discourse are: *The hospital admitted several patients that month, for all of whom chemotherapy was the appropriate treatment; We read several government reports the gold lettering on the covers of which was admired by all the officials; She is not a person to rely on*, or complex, e.g. *she is not a person on whom to rely*. The type on whom to rely is very rare in unplanned speech. English has reduced relative clauses, as in *the book lying on the table or the book written by my colleague* (Miller & Weinert, 1998).

<sup>8</sup> In other dialects (some German dialects, some British dialects, Yiddish) the invariable marker is 'what'.

<sup>9</sup> Other obsolete forms in languages that partially maintain the relative pronoun strategy are: Dutch *het/de welk(e)*, German *welcher*, Swedish *vilken*, English *(the) which*.

<sup>10</sup> See Cinque (1991: 266-271) for a detailed analysis of this special use of *cui* in Italian, which he relates to a lexical value of the form and not to the usual anaphoric value manifested in the ordinary restrictive relative clauses (according to Cinque there are two different forms '*cui*' in Italian, and the lexical one is a '*forma figée*', 1991: 271, note 80).

<sup>11</sup> As known, a considerable part of psycholinguistic literature is based on chomskyan syntactic theories (psycholinguistic studies as a whole started as a way to prove, to test the chomskyan theory). Even if my approach basically remains a typological approach, in what follows I will refer to the generativist approach to relative clauses. In particular, what will reveal useful for our discussion is the definition of the relative clauses among the filler-gap constructions. Filler-Gap constructions are clauses that 'exhibit an extraction dependency between a clause-initial filler phrase and a gap located within the sentential head daughter'. (Sag 2008). Differences in the processing of relative clauses are commonly related to this kind of internal relationship. For an introduction to Italian relative clauses in a generativist approach see Cinque (1978, 1981a, 1981b, 1988).

<sup>12</sup> Usage-based studies for Italian and other Romance languages support this data (for details see Fiorentino 1999 and Table (49) below).

<sup>13</sup> The processing of the Relative Clauses in the widest approach of dependency domains is brilliantly and exhaustively developed in Hawkins (2004). I assume here that non-standard relative clauses with a gap or a resumptive pronoun are simple and easily processed and that, on the contrary, two anaphoric domains like those created by the relative pronoun strategy introduce unnecessary complexity in the discourse.

<sup>14</sup> The process of developing an invariable relative marker is also found in Creole languages having a European language as their base (see Romaine 1984 for more details). For relative clauses in pidgins see Sankoff & Brown 1976.

<sup>15</sup> The complex NP constraint proposed by Ross (1967) is one of the island constraints for *wh*-movement. Island constraints have been later subsumed under a more general principle called *Subjacency condition* which predicts that 'Movement cannot cross more than one bounding node, where bounding nodes are IP and NP'.

<sup>16</sup> *Dependency*: two categories A and B are in a relation of dependency if (and only if) the parsing of B requires access to A for the assignment of syntactic or semantic proper-ties to B with respect to which B is zero-specified or ambiguously or polysemously specified (Hawkins, p.c.).

<sup>17</sup> "Taking the phrase 'A-B' to represent a relative clause in which the Head NP has the role A and the NPREL has the role B, we provide examples of each combination" (Fox & Thompson 1990: 298). S-O: THE MAN WHOM you met is John; O-O: I bought THE BOOK THAT you suggested. Ex-S and Ex-O are the cases of Existential clauses followed

by a relative clause on the S and the Object respectively. Ex. *There is a man who is looking for you; There is a book which I have been looking for some weeks.*

<sup>18</sup> For the discourse function of relative clauses see Fox and Thompson (1990: 301-302).

<sup>19</sup> On discourse function of RC see also Weinert: 'Non-restrictive relative clauses are rare in unplanned speech and recent work suggests that speakers actually use relative clauses for three purposes, to describe, confirm or identify referents (Weinert 2004).

<sup>20</sup> Traces of the retention pronoun strategy can be found in Late Latin too. See the examples: *hominem QUEM ego beneficium EI feci (Formulae Andecavenses 48; VII cent-ury)*, instead of *dative cui; Illud enim non fuit condigum quod egesti in Segeberto regnum de Grimaldo maiorem domus, QUEM EI sustulisti sua unica ove, sua uxore (Formulae Senonenses Add II, 8, 665 d.C.)* instead of *dative cui* (Fiorentino 1999: 55).

<sup>21</sup> See also Rum. *care* < *quails*, the standard form for the relative pronoun, attested in the past with a postponed article: *carele, carea, cari, carele* (Jinga 2004: 99).

<sup>22</sup> On the demonstrative origin of Italian *il quale* and the analysis of its following development as a relativizer see Giacalone Ramat 2005. The author hypothesizes a written origin for the *il quale* pronoun (2005: 118) and observes that the Italian relative pronouns represent a mixed paradigm (pronoun and complementizer) which is influenced by different pressures: economy, which favours the complementizer and clearness, which favours the inflected pronoun.

<sup>23</sup> *Se pe* is frequently used in "open relative clauses", i.e. where *se* is in fact the antecedent. (Roma, 2007).

<sup>24</sup> *Liber Scintillarum*, 1st half of the 11th cent., West-Saxon *unusquisque in quo* > *anra gehwylc* ['each one'] ON HWAM, where it represents a calque. Two contrasting examples in the 9th cent. poem *Elene* (Vercelli's Book) testify, according to Bourcier (1977: 395), the connection of the interrogative pronoun with "non-actualising" contexts (negative main clause, non-realis modality).

<sup>25</sup> «Spread of interrogative pronouns in relative position is on the other hand a non-Celtic phenomenon, which in English may also have been influenced by Latin (Romaine 1984: 450; Mustanoja 1960: 191, 196)» (Roma, 2007). See also Giacalone Ramat 2005, 'in the history of English a change in the relative pronoun paradigm took place which shows some similarity to the one found in Romance languages' (Giacalone Ramat 2005: 132, fn.15). For early Modern English relativizers see Dekeyser 1984: 61.

<sup>26</sup> Scholars reconstruct two Proto Indo-European Relative Pronouns: the *\*yos* *\*yā* *\*yod* series and the *\*k<sup>w</sup>is* (animated) *\*k<sup>w</sup>id* (inanimated) series. The first adopted as relative pronoun by Sanskrit, Greek, and Slavic, the second adopted by Italic (Latin), Tocharian, Hittite, Celtic and Germanic languages (Szemerényi 1970 [1985: 247]). The use of the two roots as relative pronouns is only a later and secondary specialization (very strongly realized in Latin by the *\*k<sup>w</sup>is* / *\*k<sup>w</sup>id* series, and subsequently in the Romance family) (see Benveniste 1994[1966]: 261).

<sup>27</sup> Italian *il quale* is attested from the XIII century in legal and administrative texts; French *lequel* occurs 'in the Anglo-Norman version of the *Vie de saint Alexis* and in translations of psalms from Latin; (Giacalone Ramat 2005: 132); Spanish *el cual* is attested very early.

<sup>28</sup> A very close conclusion in Cristofaro & Giacalone Ramat, (2007) which individuates two language types in Europe: a first type relativising with overt morphosyntactic information for all of the syntactic positions (German and Eastern Europe languages), and a second group in which languages alternate overt morphosyntactic information with strategies which do not indicate such an information (Western European languages, including Romance languages).

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