

Free relatives

I. Introduction: towards a definition

As discussed in much detail by Caponigro (2003) and van Riemsdijk (2006), cross-linguistically free relatives are quite widespread. We shall here illustrate them mostly with English and Romance.

Free relative clauses or simply free relatives (FRs) are descriptively defined as **wh-clauses** which, despite their clausal nature, function as nominal, prepositional, adverbial, or adjectival phrases in their host clauses (Caponigro 2003; a.o.).

Prototypical examples of free relatives in English are given in (1) and (2) in square brackets.

- (1) I noticed [what you did for me]
- (2) [Who didn't arrive in time] will be reported

Free relatives can also have an adverbial distribution, as in (3). In this case they are also referred to as 'adverbial clauses'.

- (3) a. I arrived [when you left]
- b. I cooked the dish [how you suggested]
- c. I went [where you did]

Typically, the same sequence of word that forms a free relative can form an embedded question:

- (4) a. I wonder [what you did for me]
- b. I wonder [who didn't arrive in time]
- (5) a. I wonder [when you left]
- b. I wonder [how you cooked the dish]
- c. I wonder [where you went]

Free relatives are present in all major Romance varieties, as exemplified below.

- (6) a. [Chi arriverà in ritardo] non parteciperà alla riunione Italian
- b. [Qui diu això] ment Catalan
- 'Who says this lie' (Hirschbühler & Rivero 1983: 507)
- c. [Quien bien te quiere] te harà llorar
- Who well you loves you will make cry
- 'Who loves you well will make you cry' Spanish (Rivero 1984: 83)
- d. Elena detestă [pe cine o critică]. Romanian (Caponigro & Fălăuș, in press)
- Elena hates ACC who her criticizes
- 'Elena hates the one/those who criticize(s) her.'

e. Quem estuda tem boas notas
Who studies has good marks

Portuguese
(Miotto & Lobo: 282)

f. Je féliciterai [qui relèvera le défi]
I congrat-FUT who take-up-FUT the challenge
'I will congratulate (the one) who will take the challenge up.'

French

Free relatives are distinguished from headed relatives

→ not only by the absence of an overt head

→ but also by the fact that, unlike headed relatives, **they cannot contain the counterpart of the complementizer 'that'**. In fact, all the sentences in (6) become unacceptable if the complementizer is introduced.

→ As for **wh-words** that can introduce free relatives in Romance varieties, there is some cross-linguistic variation. Interestingly, this is another feature where free relatives resemble questions, rather than relatives:

(7) Caponigro's generalization (Chierchia & Caponigro (2013))

If a language uses the wh-strategy to form both Qs and FRs, the wh-words found in FRs are always a subset of those found in Qs. Never the other way around

For example in standard Italian free relatives can be introduced by *chi* ('who'), *dove* ('where'), *quando* ('when'), *come* ('how') but not by *cosa* ('what').

(8) Ho chiesto cosa hai letto

(9) *Ho comprato cosa hai letto

Italian is not isolated in ruling out the counterpart of 'what' in free relatives. Also in French, Portuguese, Spanish and Catalan free relatives cannot be introduced by the equivalent of 'what'.

(10) *J'aime [que tu as cuisiné].

I like what you has cooked

(11) *He tastat [què has cuinat].

have.1SG tasted what have.2SG cooked

Catalan (Caponigro 2003:163)

(12) *Comí [qué cocinaste].

ate.1S what cooked.2S

Spanish (Caponigro 2003:168)

(13) *Ele admira [que é belo].

He admires beautifulMASC.SG

'He admires what is beautiful.'

In other Romance varieties, like Romanian, free relatives with the counterpart of 'what' are fully acceptable, as well as in English. :

(14) Ți-am dat [ce vrei]

I gave you what you wanted

Romanian

As far as we know, the only restriction on wh-words introducing free relatives that holds across languages concerns the counterpart of '**why**', which can never introduce a free relative. This lack in the paradigm of free relatives and Cecchetto and Donati (2012) relates it to the fact that, as argued

by Rizzi (2001), ‘why’ and its Romance cognates are base generated in the left periphery of the interrogative clause, so there is no gap that allows the free relative interpretation. The impossibility of free relatives introduced by the counterpart of ‘what’ in the varieties in which this is not possible can be related to the presence of an alternative construction which resembles (but is distinct from) free relatives.

II. Light headed relatives

This is the structure that Citko (2004) called light-headed relatives, where the head has the shape of a demonstrative pronoun or of a definite determiner and the complementizer is present:

- (15) He visto a la [que me presentaste] Spanish (Citko 2004: 97)
 have-1sg seen ACC the that to.me introduced-2sg
 I have seen the one that you have introduced to me.
- (16) Ho comprato ciò che mi hai suggerito Italian
 have-1sg bought that that to.me introduced-2sg
- (17) He tastat el [que has cuinat]. Catalan (Caponigro 2003:164)
 have.1S tasted the.M.S that have.2SG cooked
 ‘I tasted what you cooked.’
- (18) Ele admira [o que é belo]. Portuguese (Matos and Brito 2008: 310)
 he admires theMASC.SG that is beautifulMASC.SG
 ‘He admires what is beautiful.’

Light-headed relatives and free relatives, although functionally very similar, cannot be assimilated because light-headed relatives lack two distinctive features of free relatives: they are not introduced by a *wh*-word and do have a head, although this is reduced.

So, these structures have to be considered a special case of headed relatives in which the head is a null NP and the external determiner is something like a demonstrative/pronominal.

Typically light-headed relatives, unlike free relatives, **are not string-ambiguous** with embedded interrogatives. However, this is not true in general. In **French** the sequence formed by the demonstrative *ce* and by a complementizer *que* can introduce an embedded question (19) in addition to its use in a light-headed relative (20) (Konrad 2019).

- (19) Je voudrais savoir [ce que tu as acheté]
 I would-like to-know this that you has bought
- (20) Je voudrais acheter [ce que tu as acheté]
 I would-like to-buy this that you has bought

Many people claim that all free relatives should be analyzed in this way, crucially involving a silent D external head responsible for their nominal interpretation.

This might look attractive at first at the light of an archaic English construction: (21).

- (21) That which we call a rose / By any other name would smell as sweet.
 (*Romeo and Juliet* II, ii, 1–2)

However this analysis presents problems.

1. First of all, the *wh*-elements that appear to be licensed in light headed relatives **are not** the same that can open a free relative. This is clear in English from the example above, containing *which*, not allowed in free relatives.

(22) *Which we call a rose

The same split in the *wh*-paradigm is observable in Romance. In Italian *cui* is admitted in the light headed relative, but is not grammatical in free relatives; *quanto*, which is a free relative introducer, is not allowed in this kind of construction (23).

- (23) a. Quello di cui ti ho parlato
That of which I told you
b. *Quello di quanto ti ho parlato
That of how I told you

- (23') a. Ce dont je t'ai parlé
b. *Don't je t'ai parlé

Remember (7): Caponigros's generalization: the *wh*-elements occurring in free relatives are a subset of those occurring in *questions* (Caponigro 2003), not of those occurring in *headed relatives*. On the contrary, the *wh*-elements occurring in light headed relatives correspond to those occurring in headed relatives.

2. Furthermore, only a subset of free relatives could be analyzed by postulating an abstract light headed relative, since free relatives introduced by *wh*-words like 'when', 'how' and 'where' obviously resists this type of analysis, being adverbial, not nominal.

3. A third problem concerns the so-called **matching requirement**.

Another property that sets free relatives and headed relatives apart is matching. In case of Romance the matching requirement can be stated as a condition that dictates that the preposition introducing the *wh*-phrase has to be compatible both with the matrix predicated and with the predicate in the free relative: (24) is ok but (25) and (26) are ungrammatical.

(24) Ele só conversa com quem ele concorda.

he only talks with who he agrees

'He always talks to whoever he agrees with.'

Brasilian Portuguese (Kato and Nunes 1986: 86)

(25) *Ele sempre concorda com **quem** ele ri.

he always agrees with who he laughs

'He always agrees with whoever he laughs at.'

(26) *Ele sempre concorda de quem ele ri.

he always agrees of who he laughs

There are syntactic contexts in Romance in which matching requirement has been argued *not* to hold. Still, cases of mismatch seem very restricted and the sentences with mismatch often have a marginal status (cf. Grosu 1994 for discussion).

Now, **light headed relatives** do not appear to obey any matching requirement.

- (27) Il est toujours d'accord avec **celui de qui** il rit
Il est toujours d'accord avec ce **dont** il rit

III. Ever free relatives

Another construction which closely resembles (and that according to some authors should be assimilated to) ordinary free relatives is so-called ever relatives, or free choice free relatives (due to their semantics).

→ “normal” free relatives cannot be introduced by a wh-phrase (as opposed to a wh-word). We illustrate this with Italian:

(28) *[Quale ragazzo arriverà in ritardo] non parteciperà alla riunione. Italian

→ However, there is an exception: if the wh-root attaches to the affix which corresponds to English *-ever*, the structure becomes grammatical.

(29) [Qualunque ragazzo arriverà in ritardo] non parteciperà alla riunione Italian

(30) Elena detestă [ori-ce coleg o critică]. Romanian, Caponigro and Fălăuş (2017)
Elena hates *ori*-what colleague her criticizes
'Elena hates any colleague that criticizes her.'

IV. Analyses of free relatives

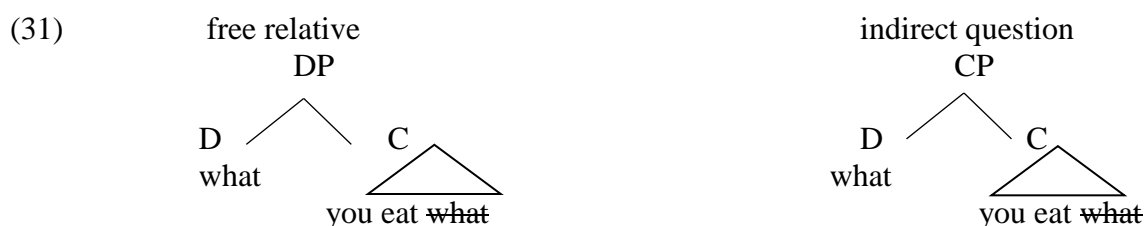
The analysis of free relatives has been the object of an extensive debate which cannot be summarized in a limited space (cf. van Riemsdijk 2006).

Two families of analyses can be identified.

1) According to a first approach, the free relative is only superficially headless since there is an empty head (PRO or 'pro') that acts as a covert head. This analysis minimizes the difference with light headed relatives (cf. Grosu 2003 for an extensive defense of this view): cf. for example Chierchia & Caponigro (2013).

2) According to a second group of analyses, the wh-category is directly selected by the matrix verb, so free relatives are literally headless.

A version of (2) is Cecchetto and Donati (2011; 2015) (C&D): according to their general theory of labeling, **words (but not phrases)** have the power to change the label of the category they attach to. This would explain why free relatives are introduced only by wh-word: a wh-word can turn a CP into a nominal constituent while a wh-phrase cannot. The validity of this approach depends on the solidity of the generalization that free relatives can be introduced only by words. In turn, this depends on the proper analysis of **free choice free relatives**. Only if they can be assimilated to headed relatives (despite their name), the generalization may hold true.

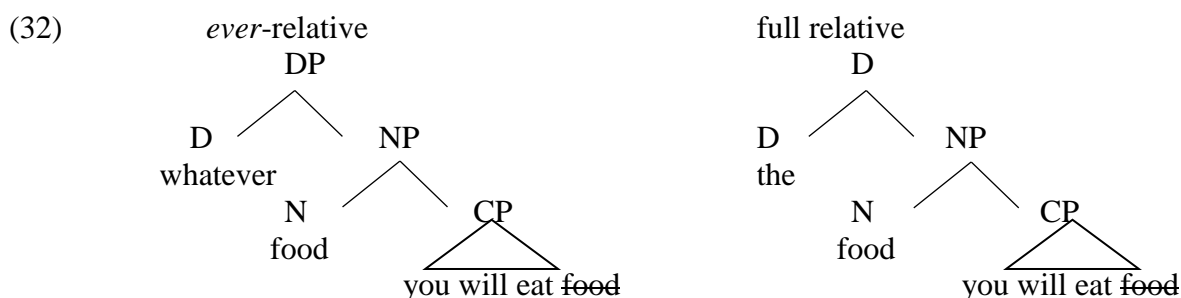


V. The debate on *ever* free relatives

Free-choice free relatives are set apart from ordinary free relatives not only by their semantics but also by syntactic properties, as originally discussed by Battye (1989) for Italian.

Since they can contain a *wh*-phrase they represent **a potential counterexample** to C&D approach.

→ C&D claim that they are **not** free relatives, but rather full relatives. The *wh-ever* element is analyzed as a Determiner, externally merged to the raised NP.



They argue that there is evidence for this. Caponigro (2019) contests this evidence and concludes that C&D are wrong.

1. Compatibility with a complementizer

→ While a complementizer is totally unacceptable in ordinary free relatives, it is allowed in free-choice free relatives, at least in some varieties.

- (33) Correggi [qualunque parola che venga scritta male] Italian (adapted from Battye 1989)
Correct whichever word that is written incorrectly

Caponigro acknowledges that this is indeed the case in English.

- (34) a. You can read [whatever books (that) are on the table]
b. She can provide [however much financial support is/that's needed].

→ But he notes that this possibility does not hold for *ever*-relatives introduced by a bare *wh*-word

- (35) a. I can talk to [whoever is/??that's on the phone].
b. He can sleep [wherever (*that) he likes].
c. I'll do it [however (*that) you do it].

Crucially, the different distribution of the complementizer in *ever*-relatives introduced by a bare *wh*-word (35) and in *ever*-relatives introduced by a phrase (34), remains mysterious in Caponigro's account.

→ But it is straightforwardly explained under D&C's theory of phrase structure: in (34) a free relative analysis is impossible since the *wh*-element is a phrase. If they are headed relatives, this would straightforwardly explain the occurrence of the complementizer. In (35), on the other hand, the *wh*-category is a lexical item, therefore the structure is that of a free relative. This explains why the complementizer is not allowed. We tested the robustness of the facts in two experiments.

Experiment 1: testing compatibility with the complementizer in Italian

The experiment is an acceptability judgment study. We compared sentences like (36a-b), which contain *che* following either a bare wh-element (*chi*, ‘who’), or an *ever*-phrase (*qualunque* NP). We also included a control sentence of the type of (36c), a relative clause headed by a quantified NP, which is obligatorily introduced by *che* in Italian.

- (36) a. I giornali criticheranno **chi** che vincerà il premio
the newspaper criticize.fut who that win.fut the price
‘The newspapers will criticize who will win the price’
b. I giornali criticheranno **qualunque scrittore** che vincerà il premio
the newspapers criticize.fut whichever writer that win.fut the price
‘The newspapers will criticize whichever writer will win the price’
c. I giornali criticheranno ogni scrittore che vincerà il premio
the newspapers criticize.fut every writer that win.fut the price
‘The newspapers will criticize every writer who will win the price’

Participants

Eighteen Italian adults participated in this study..

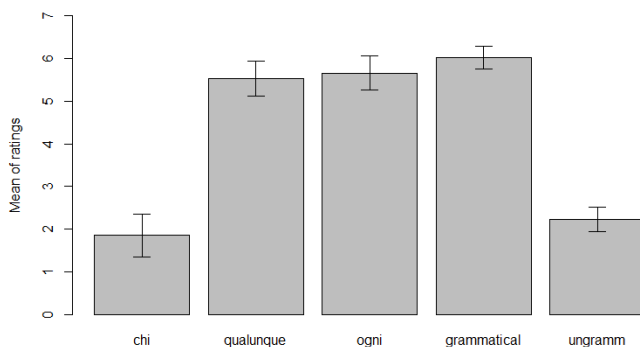
Materials

Materials included 24 experimental items in the three experimental conditions described above in (36), and 24 filler items (half grammatical, half ungrammatical), presented in an individually randomized order for each participant after three practice items. Henceforth we refer to conditions (a-c) as *free*, *ever*, and *headed*, respectively.

Procedure

Participants were asked to judge each sentence on a 7-point Likert scale in which 1 meant “not natural at all” and 7 meant “perfectly natural”. They were instructed not to judge the content of the sentences, but only to pay attention to their “form”. They were also explicitly told not to rely on grammatical rules learned at school, but simply to judge the sentences on the basis of how natural they sounded to them as speakers of Italian. The experiment was implemented and administered online on Ibox Farm (Drummond, 2013) and lasted approximately 15 minutes.

Results



We can conclude from these results **that Italian *ever*-relatives do not behave like free relatives.** Moreover, **they behave exactly like headed relatives**, as far as the compatibility with the complementizer is concerned.

Experiment 2: testing the compatibility with *that* in English

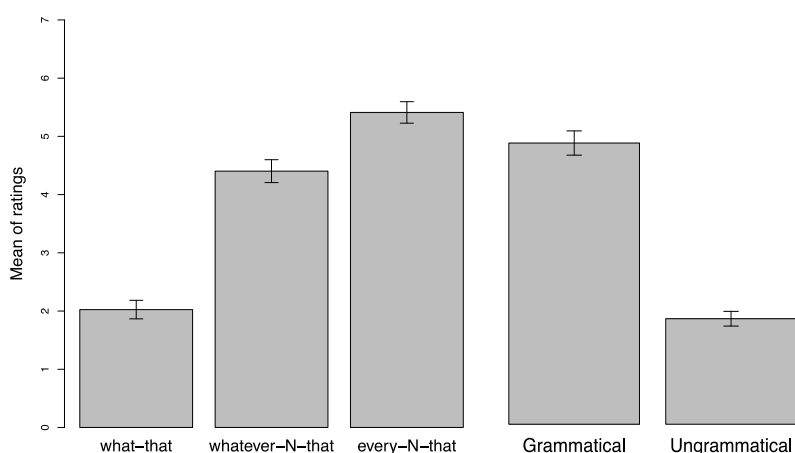
We compared sentences like (37a-b), which contain *that* following either a bare wh-element ('what'), or an *ever*-phrase (*whatever NP*). We also included a control sentence of the type of (37c), a relative clauses headed by a quantified NP, which can systematically be introduced by *that*.

- (37) a. The newspapers will criticize what that the government makes.
b. The newspapers will criticize whatever move that the government makes
c. The newspapers will criticize every move that the government makes

Participants

Forty-five adult participants.

Results



The English data confirm that **ever-relatives do not behave like free relatives** as far as the presence of the complementizer *that* is concerned. Unlike in Italian, **they do not behave like headed relatives either**.

→ Caponigro offers a specific argument against a headed relative analysis for *ever*-relatives, based on subject relatives in English: a headed relative clause with a relativized subject like (38a) requires the complementizer *that* in English, unlike the subject *ever*-relative in (38b), in which the complementizer is optional (judgments are from Caponigro's paper).

- (38) a. *You can read [any book is on the table].
b. You can read [whatever books are on the table]

→ The generalization that a complementizer cannot be omitted in headed subject relatives might not be entirely solid.

→ Yale Grammatical Diversity Project English in North America (cf. <https://ygdp.yale.edu/phenomena/subject-contact-relatives>), subject relatives without a relative pronoun or the complementizer (called "subject contact relatives" in the Yale project) *are* attested in many varieties of English.

→ The following quote from Oscar Wilde contains an example.

- (39) I wonder who it was defined man as a rational animal.
(Oscar Wilde, *The Picture of Dorian Gray*)

As for their distribution, the Yale Grammatical Diversity Project English in North America contains the following statement: "Subject contact relatives are observed in many different varieties of

English (...). Several authors suggest that subject contact relatives are also observed in many speakers of standard English”.

Experiment 3: testing complementizer deletion in English subject relatives

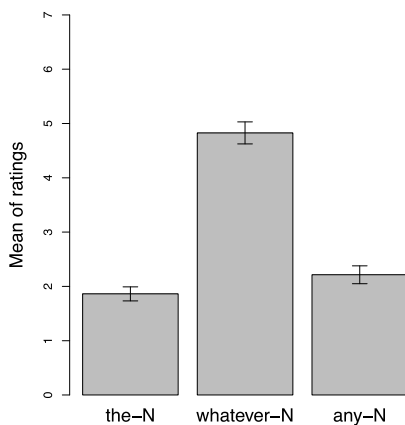
- (40) a. You can read any article is triggering much controversy
b. You can read whatever article is triggering much controversy
c. You can read the article is triggering much controversy

Participants

Forty-nine adult participants.

Results

These results confirm the received wisdom about standard English: subject headed relatives do not allow complementizer deletion, while subject *ever*-relatives do. The difference between *ever*-condition and *headed*-condition is indeed significant ($z=-8.313$, $p<.001$). These data might go against a unification of *ever*-relatives and headed relatives in English, **but do not jeopardize the conclusion that *ever*-relatives are not free relatives.**



2. Compatibility with relative pronouns

→ While a *wh* element is totally unacceptable in ordinary free relatives (41), it is allowed in free choice free relatives (32).

(41) *I'd participate in [what **for which** there is a reward].

(42) I'd participate in [whatever competitions **for which** there is a reward].

Caponigro concedes that relative pronouns can occur in some *ever*-relatives introduced by *wh*-phrases, while this is not possible in garden variety free relatives.

However, he notices that in other cases a relative pronoun cannot occur in *ever*-relatives and mentions cases like (43).

(43) I'll talk to [whatever students (*who) are problematic].

For this reason, we decided to investigate the distribution of relative pronouns in these relativization constructions both in English and in Italian with two parallel experiments.

Experiment 4: testing compatibility with relative pronouns in Italian

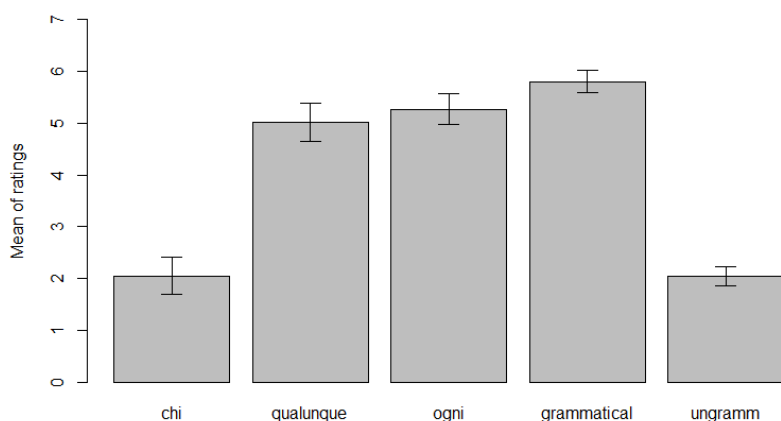
The experiment is again an acceptability judgment study. We compared sentences like (44a-b), which contain a PP with a relative pronoun following either a bare wh-element ('chi'), or an ever-phrase (qualunque NP). We also included a control sentence of the type of (44c), a relative clause headed by a quantified NP, which can clearly be followed by a pied-piped relative pronoun.

- (44) a. I giornali criticheranno chi a cui daranno il premio
the newspaper criticize.fut who to which give.fut.3pl the prize
'The newspapers will criticize the person to which they will give the prize'
b. I giornali criticheranno qualunque scrittore a cui daranno il premio
the newspapers criticise.fut whichever writer to which give.fut.3pl the prize
'The newspapers will criticize whichever writer to which they will give the prize'
c. Il giornali criticheranno ogni scrittore a cui daranno il premio
the newspapers criticise.fut every writer to which give.fut.3pl the prize
'The newspapers will criticize every writer to which they will give the prize'

Participants

Twenty-five Italian adults participated in this study.

Results



We can conclude from these results that **Italian *ever*-relatives do not behave like free relatives**, but rather **they behave like headed relatives** as far as the compatibility with the relative pronouns.

Experiment 5: testing the compatibility with relative pronouns in English

We compared sentences like (45a-b), which contain a relative pronoun following either a bare wh-element (*what*), or an *ever*-phrase (*whatever NP*). We also included a control sentence of the type of (45c), a relative clause headed by a quantified NP.

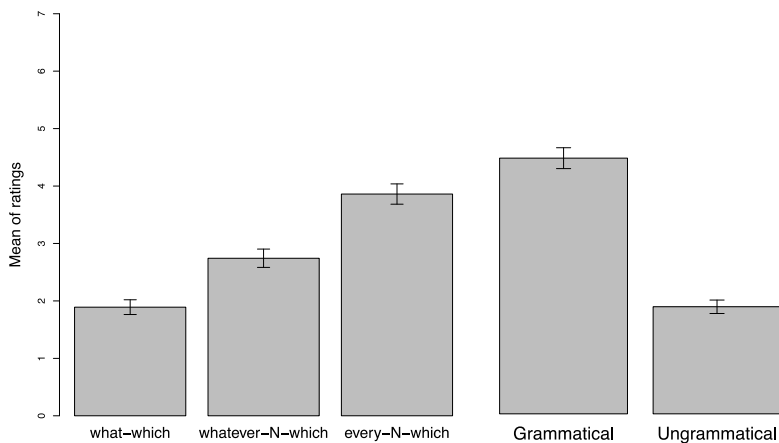
- (45) a. They will remember what which our decision depends on
b. They will remember whatever factor which our decision depends on
c. They will remember every factor which our decision depends on

Notice that the experimental items here are different from those in the Italian experiment, in that the preposition licensing the pronoun is systematically stranded, not pied-piped (preposition stranding is impossible in Italian).

Participants

Fifty-three adult participants.

Results



With respect to experiment 2 involving the complementizer *that*, the acceptability rates in this study are in general lower, suggesting that *which*-relatives are much less acceptable than the corresponding *that*-relatives (even headed *which*-relatives receive a rate of 3.86). The difference between the free condition and the *ever* condition is significant, suggesting that ***ever*-relatives cannot be assimilated to free relatives**. On the other hand, **also the difference between *ever*-relatives and headed relatives is significant**.

3. Infinitival use

→ free relatives in Italian can appear in infinitival complements (cf. 46) while *ever*-relatives cannot (cf. 47). As headed relatives cannot appear in infinitival complements either (cf. 48), this is another case where *ever*-relatives and headed relatives pattern alike and contrast with free relatives.

- (46) Cerco **chi** mandare al mio posto.
I-search who to-send in my place
(47) *Cerco **qualunque studente** mandare al mio posto.
I-search whichever student to-send in my place
(48) *Cerco **ogni studente** mandare al mio posto.
search.1SG every student send.INF to-the my place

Caponigro claims that: “the fact that ever-FRs cannot be infinitival does not make them closer to headed relative clauses. Headed relative clauses can be infinitival in Italian, as shown in (49)”.

- (49) Cerco [qualche studente **da** mandare al mio posto].
 search.1SG some student COMP send.INF to-the my place
 ‘I am looking for some students to send in my place.’

But this is a different construction!

That we are facing two different constructions is confirmed by the fact that they display the opposite pattern.

Infinitival complements

- (50) Cerco **chi** mandare al mio posto.
 I-search who to-send in my place
 (59) *Cerco **qualunque studente** mandare al mio posto.
 I-search whichever student to-send in my place
 (60) *Cerco **ogni studente** mandare al mio posto.
 search.1SG every student send.INF to-the my place

Infinitival relatives

- (61) ***Chi** da promuovere a tutti costi risulta antipatico.
 who COMP pass.INF at all costs looks nasty
 (62) **Qualunque studente** da promuovere a tutti costi risulta antipatico
 Whichever student COMP pass.INF at all costs looks nasty
 ‘Whichever student that you are forced to pass becomes unpleasant’
 (63) **Ogni studente** da promuovere a tutti costi risulta antipatico
 every student COMP pass.INF at all cost looks nasty
 ‘Every student that you are forced to pass becomes unpleasant’

We summarize the pattern of free relatives, *ever*-relatives and headed relatives in the following table:

	INFINITIVAL CLAUSES INTRODUCED BY NO COMPLEMENTIZER	INFINITIVAL CLAUSES INTRODUCED BY THE COMPLEMENTIZER DA
Free relatives	√	*
<i>Ever</i> -relatives	*	√
Headed relatives	*	√

4. Absolute use

→ The *wh*-word that introduces a free-choice free relative can stay alone as an argument (cf. 64 which sharply contrasts with 65, which contains a *wh* word without the *-unque* suffix).

- (64) L’opposizione cerca il voto di **qualunque elettore**
 The opposition seek the support of **whatever elector**
 (65) *L’opposizione cerca il voto di **chi**
 The opposition seek the support of **who**

→ Caponigro 2019 does not object to this.

5. Adverbial use of *ever*-relatives

→ *ever*-relatives have an adverbial use while ordinary free relatives do not. This is illustrated by the contrast in (66).

- (66) a. [**Whatever** story you tell me], I won't change my mind.
b. *[**What** you say], I won't change my mind.

Caponigro does not deny this point, but he points out that headed relatives do not allow an adverbial use either: (67).

- (67) *[The things you say], I won't change my mind.

He overlooks however an important exception to this generalization: headed relatives introduced by *any* (arguably the ones that are semantically closer to *ever*-relatives) can have an absolute use as well. Some examples collected randomly from the web are given in (68).

- (68) a. Anything you say now, I believe you
b. Any note you can reach, I can go higher.

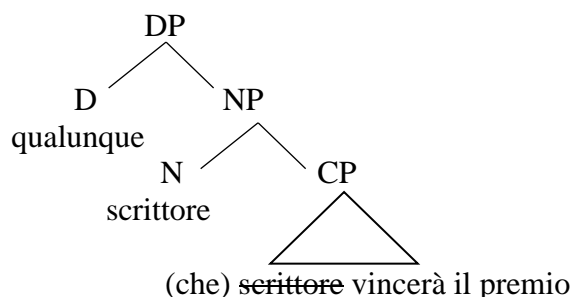
VI. What is an *ever*-relative?

Italian

The (experimental) data show that they systematically behave like full relatives.

→ They are headed relatives and *wh-unque* is an external determiner. Since its *wh*-feature has been de-activated, 'qualunque' is generated in its surface position.

- (69) Leggo [_{DP} qualunque [_{NP} [_N libro] [_{IP} tu scriva ~~libro~~]]]
read.1sing whatever book you write.subj
'I read whatever book you write'
(C&D are right!).



qualunque scrittore (che) vincerà il premio
whichever writer (that) win.fut the price
'whichever writer will win the price'

English

The (experimental) data show that *ever*-relatives never behave as free relatives, but they do not consistently pattern with headed relatives either.

→ A possible interpretation of this state of affairs is that while in Italian the counterpart of *whatever* is a fully lexicalized determiner, *whatever* in English is a syntactically derived determiner. *Whatever* would result from a movement operation by which the *wh*-element *what* incorporates into a higher quantifying head *ever*.

→ A piece of evidence comes from Appalachian English (cf. Johnson 2015). In this variety of American English, *ever* precedes *what* in *ever*-relatives, as shown in the following attested example.

(70) You can ride **everwhat** three-wheeler you want. Besides, it's goin' to be what it's goin' be.

Here *ever* heads a DP, and *what three-wheeler* sits in the specifier of its complement CP. Crucially here the nominal label is given by the determiner *ever*, and not by the *wh*-phrase. The order observed in Standard English is the result of a D to D movement conflating *what* and *ever*. As a result of this syntactic movement, *whatever* can act as a determiner itself, like in Italian. This derivation is schematized in (71).

(71) [DP \uparrow ever [CP [what three-wheeler] [IP you want ~~what three-wheeler~~]]]

There are strong reasons to conclude both for English and for Italian that so-called free choice relatives of the *ever*-king are **not** free relatives. As such, they are not a counterexample to C&D's hypothesis that free relatives can only include bare *wh*-heads.

VII. Romanian free relatives

Finally, Caponigro discusses what we believe to be a serious challenge to D&C's approach to free relatives, namely the pattern of Romanian, where free relatives introduced by a phrase are possible, as illustrated in (72).

(72) Am citit ce carte/ce cărți ai citit și tu
have.1SG read what book/what books have.2SG read also you
'I read what book(s) you read.'

Romanian is an isolated case in Romance in this respect and we propose that this is related to another property that sets Romanian apart, namely the fact that **an overt demonstrative** can precede the *wh*-word in free relatives.

(73) Imi place ceea ce ai cumparat
1SG.DAT like.PRS. DEM what AUX.PRS.2SG buy-PST.PTCP
Lit. I like the what you bought (Dobrovie Sorin & Giurgea 2013: 638)

It is only natural to analyze a case like (72) just like the case in (73): in both, a demonstrative is externally merged, and the *wh*-element moves at the edge of the relative clause. The D-label that is necessary for relativization does not come from the relabeling movement of the *wh*-category, but from this demonstrative. Therefore no restriction on bare *wh*-element is observed: even if a phrase moves, there is a source for the D label, namely the external determiner.

Notice that this amounts to say that for Romanian (but crucially only for Romanian) one should assume a structure which corresponds to the analysis of free relatives proposed by Caponigro

(among many others): a light headed relative involving a *wh*-movement embedded under an externally merged D which is silent.

Caponigro puts Romanian in the same boat with those varieties of American English that allow sentences as the following.

(74) He read what books she read

However, here the *wh*-phrase must be plural, unlike what happens in the Romanian cases illustrated in (72). The fact that the noun must be plural suggests that the *wh*-phrase has a special status in (74). More generally, in the few cases reported in the literature where free relatives are introduced by a *wh*-phrase in English, the restriction of the *wh*-determiner must be either a plural noun, as in (74), or a mass noun as in (75):

(75) I gave him what money I had (Huddleston & Pullum 2002: 1068)

Wh-phrases in other syntactic contexts can be singular, of course. Theories that allow free relatives to be introduced by a *wh*-phrase face the challenge to explain this weird restriction on plurality/mass. Another challenge that these theories face is explaining why (alleged) free relatives introduced by a *wh*-phrase are exceedingly rare cross-linguistically. Caponigro mentions Romanian (for which we proposed an account) and Melchor Ocampo Mixtec, an interesting, if little studied, language. Although more research is needed, we conjecture that for speakers who accept free relatives introduced like (74) and (75), ‘what’ has a double life as a non-*wh* determiner selecting plural/mass noun.

References

- Battye, Adrian. 1989. "Free relatives, pseudo-free relatives, and the syntax of CP in Italian". *Rivista di Linguistica* 1: 219–250.
- Caponigro, Ivano and Anamaria Fălăuş. 2017. "Free Choice Free Relatives in Italian and Romanian". *Natural Language and Linguistic Theory*, <https://doi.org/10.1007/s11049-017-9375-y>
- Caponigro, Ivano. 2003. Free not to ask: On the semantics of Free Relatives and wh-words cross-linguistically. Ph.D. dissertation. University of California, Los Angeles.
- Caponigro, Ivano. 2019. In defense of what(ever) free relative clauses they dismiss: a reply to Donati and Cecchetto (2011), *Linguistic Inquiry*, Volume 50, 356-371.
- Cecchetto, Carlo and Caterina Donati. 2015. *(Re)labeling*. Cambridge, MA: MIT Press.
- Cecchetto, Carlo and Caterina Donati. 2012. "Perché" Rizzi is right". In Valentina Bianchi & Cristiano Chesì (ed.) *ENJOY LINGUISTICS! Papers offered to Luigi Rizzi on the occasion of his 60th birthday*, CISCL Press.
- Chierchia, Gennaro and Ivano Caponigro. 2013. Questions on questions and free relatives. *Sinn und Bedeutung* 18.
- Citko, Barbara. 2004. "On headed, headless, and light-headed relatives". *Natural Language & Linguistic Theory*, 22(1): 95-126.
- Dobrovie-Sorin, C., Giurgea, I. (eds.). – *A Reference Grammar of Romanian: The noun phrase*. – Vol.1. – Amsterdam: John Benjamins, 2013.
- Donati, Caterina and Carlo Cecchetto. 2011. Relabeling heads: a unified account of relativization structures. *Linguistic Inquiry* 42: 519–560.
- Drummond, Alex 2013. Ibex farm. Online server: <http://spellout.net/ibexfarm>.
- Grosu, Alexander. 1994. *Three Studies in Locality and Case*. London: Routledge.
- Grosu, Alexander . 2003. "A unified theory of standard and transparent free relatives". *Natural Language and Linguistic Theory* 21 (2): 247–331.
- Hirschbühler, Paul and Maria-Luisa Rivero. 1983. "Remarks on free relatives and matching phenomena". *Linguistic Inquiry*. 14. 505-520.
- Johnson, G. 2015. The Morphosyntax of Whatever in Free Relatives: Variation and optionality in Appalachian English. Talk given at LSA 2015. <https://msu.edu/~john2517/ew-lsa-hndout1.pdf>.
- Kato, Mary A. and Jairo Nunes. 2009. A uniform raising analysis for standard and nonstandard relative clauses in Brazilian Portuguese. In Nunes, J. (Ed.), *Minimalist essays on Brazilian Portuguese*. Amsterdam/Philadelphia: John Benjamins.
- Konrad, Ingrid. (2019). *Quand la nominalisation envahit la subordination : Étude sur "ce que" dans les propositions subordonnées en français, selon une approche comparative, diachronique et expérimentale*. Doctoral Dissertation, Université Paris Diderot.
- Mioto, Carlos and Maria Lobo. 2016. Wh-movement. Interrogatives, Relatives and Clefts. In W.L. Wetzels, J. Costa and S. Menuzzi (eds.) *The Handbook of Portuguese Linguistics*, Wiley-Blackwell, 275-293.
- van Riemsdijk, Henk 2006. Free Relatives. In M. Everaert and H. van Riemsdijk (eds.) *The Blackwell Companion to Syntax Vol. II*, Oxford: Blackwell, 338-382.
- Rivero, María-Luisa. 1984. "Diachronic Syntax and Learnability: Free Relatives in Thirteenth-Century Spanish" *Journal of Linguistics*, 20:1, 81-129.