Chapter 14

Types of relative pronouns

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In this paper, I explore the possibility that relative pronouns, like personal pronouns, show different degrees of strength/deficiency. I show that, at least in Greek, the restricted relative (RR) pronoun *o opios* is semantically deficient compared to its free relative (FR) counterpart *opjos* in two interrelated respects: (i) it is referentially deficient and (ii) it does not license its own range. After showing that both FR and RR pronouns behave like transitive Ds, I propose that their differences lie in their featural composition, rather than in their structural make-up: FR determiners, unlike RR determiners, are semantically definite.

1 Introduction

That pronouns may show a different cluster of properties – diachronically, synchronically, and cross-linguistically – is a well-established fact in the literature. Existing accounts, focusing primarily on the different classes of personal pronouns, suggest two main lines of approach.[1] The first one attributes the different properties of (personal) pronouns to their external category (Cardinaletti & Starke 1999; Déchaine & Wiltschko 2002). The second type of analyses treats all pronouns as determiners projecting a DP and derives their differences from their internal structure and/or featural composition (Abney 1987; Cardinaletti 1994; Uriagereka 1995; among others).

The aim of this paper is to explore whether similar claims can be made for the class of relative pronouns.[2] I argue that, at least in Greek, RR pronouns can

[1]For a detailed overview and application to personal pronouns in Greek, see Mavrogiorgos (2010).

[2]See also Sportiche (2011) for French restrictive relative pronouns, and Wiltschko (1998) for German restrictive relative pronouns.

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be shown to be semantically deficient compared to FR pronouns in two (interrelated) respects: (i) RR pronouns are not inherently definite/referential, and (ii) RR pronouns do not license their own range. After showing that both FR and RR pronouns behave like transitive Ds, and are therefore categorially equivalent, I propose that their differences derive from their featural composition: FR determiners, unlike RR determiners, are semantically definite/referential. Because they are definite/referential determiners, they need a range that may take the form of a lexical NP complement or of an animacy restrictor.

The paper is structured as follows: §2 provides some background information concerning (Greek) relative clauses and pronouns. §3 establishes at an empirical level the semantic deficiency of RR pronouns and §4 develops an analysis that capitalizes on the featural composition of the FR and RR D head. Finally, §5 concludes the discussion.

2 Background information on relative clauses and pronouns

2.1 (Greek) relative clauses

Restrictive and free relatives are A′ movement dependencies with different functions. Whereas *restrictive relatives* function as modifiers of nominal heads, *free relatives* function as arguments/adjuncts of lexical predicates (Alexiadou et al. 2000; Bianchi 2002; Grosu & Landman 1998). This is illustrated below with Greek:[3]

(1) Greek
ðjaleksa tus maθites$_i$ [tus opius$_i$ protines t$_i$].
chose.1SG the students.M.PL.ACC which.M.PL.ACC recommended.2SG
'I chose the students who you recommended.'

(2) Greek
ðjaleksa [opjus$_i$ protines t$_i$].
chose.1SG who.M.PL.ACC recommended.2SG
'I chose who you recommended.'

In (1), the RR modifies the nominal head *maθites* 'students'. In (2), the FR complements the verbal head *ðjaleksa* 'chose'.

As far as their semantic interpretation is concerned, FRs in DP position are semantically equivalent with strong DPs (Jacobson 1995). For instance, the FR in (2) can be paraphrased with an RR headed by a demonstrative (3):

[3]On Greek RRs see Alexopoulou (2006); on Greek FRs see Alexiadou & Varlokosta (1997).

(3) Greek
ðjaleksa [aftus [tus opius$_i$ protines t_i]].
chose.1SG those.M.PL.ACC which.M.PL.ACC recommended.2SG
'I chose those ones you recommended.'

2.2 (Greek) relative pronouns

With respect to restrictive and free relative pronouns, languages differ as to whether they draw them from the same paradigm. Thus, English draws both RR and FR pronouns from the paradigm of interrogative pronouns. German, on the other hand, uses interrogative pronouns to introduce FRs and morphologically definite determiners to introduce RRs (Wiltschko 1998).

Greek stands somewhere in between: RR and FR pronouns are similar in that they both combine interrogative and definite morphology.[4] However, they are not identical and replacing one with the other leads to strong ungrammaticality:

(4) Greek
* ðjaleksa tus maθites$_i$ [opjus$_i$ protines t_i].
chose.1SG the students.ACC who.ACC recommended.2SG
* 'I chose the students whoever you recommended.'

(5) Greek
* ðjaleksa [tus opius$_i$ protines t_i].
chose.1SG which.ACC recommended.2SG
* 'I chose which you recommended.'

Furthermore, both types of pronouns are inflected for the same range of categories. Thus, they inflect for number (singular, plural), gender (masculine, feminine, neuter), and case (nominative, accusative, genitive), displaying in this respect the main features characterizing Greek nominal inflection. The complete morphological paradigm of *opjos* and *o opios* is provided in Tables 14.1 and 14.2, respectively (Holton et al. 2004: 100).

[4]Thus, the RR pronoun *o opios* consists of the morphologically definite determiner *o* and the word *opios*. The latter, being itself complex, can be decomposed into the determiner-like prefix *o-* and the interrogative *pios* 'who' (on the morphological decomposition of the RR *o opios*, see Alexiadou 1998). A similar pattern is shown by the FR pronoun *opjos*. Like its RR counterpart, it is a complex word, consisting of the determiner-like prefix *o-* and the interrogative *pjos* 'who'. Unlike its RR counterpart though, it is not introduced by a free determiner (on the etymological decomposition of the FR *opjos*, see Chila-Markopoulou 1994).

Table 14.1: The morphological paradigm of the FR pronoun *opjos-a-o*

	Singular			Plural		
	Masc	Fem	Neut	Masc	Fem	Neut
NOM	*opjos*	*opja*	*opjo*	*opji*	*opjes*	*opja*
ACC	*opjon*	*opja(n)*	*opju*	*opjus*	*opjes*	*opja*
GEN	*opju*	*opjas*	*opjo*	*opjon*	*opjon*	*opjon*

Table 14.2: The morphological paradigm of the RR pronoun *o opios-i opia-to opio*

	Singular			Plural		
	Masc	Fem	Neut	Masc	Fem	Neut
NOM	*o opios*	*i opia*	*to opio*	*i opii*	*i opies*	*ta opia*
ACC	*ton opio*	*tin opia*	*tu opiu*	*tus opius*	*tis opies*	*ta opia*
GEN	*tu opju*	*tis opias*	*to opio*	*ton opion*	*ton opion*	*ton opion*

3 On the deficiency of RR pronouns

Despite being amenable to a similar etymological decomposition and despite being marked for the same range of morphological features, RR pronouns can be shown to be deficient compared to their FR counterparts in a number of ways that recall the differences identified between strong and weak personal pronouns. Let us consider them in turn.

3.1 Contrastive focus

To begin with, only FR pronouns may bear contrastive focus. This is shown by the contrast in grammaticality between (6) and (7).

(6) Greek
kalese mono *opjus* tu protines oxi opjes
invited.3SG only who.M.PL CL.3SG.M recommended.2SG not who.F.PL
tu protines
CL.3SG.M recommended.2SG
'He only invited whichever *men* you recommended to him, not whichever women you recommended to him.'

(7) Greek
*kalese mono aftus *tus opius* tu protines
invited.3SG only those.M.PL.ACC which.M.PL CL.3SG recommended.2SG
oxi aftes tis opies tu protines.
not those.F.PL.ACC which.F.PL CL.3SG recommended.2SG
*'He only invited those men *who* you recommended, not those women who you recommended.'

Thus, in (6), the FR pronoun *opjus*, encoding masculine gender, can be contrastively focused with the FR pronoun *opjes*, encoding feminine gender. Crucially, in the same contrastive configuration, the RR pronoun *tus opius* is not permissible with contrastive stress (7).[5]

3.2 Null counterparts

Secondly, only FR pronouns are obligatorily realized (Alexiadou et al. 2000: 22). To this end, example (8) shows that replacing a FR pronoun with the uninflected complementizer *pu* 'that' leads to strong ungrammaticality:

(8) Greek
a. ðjaleksa [opjus protines].
chose.1SG who.ACC recommended.2SG
'I chose whoever you recommended.'

[5]The English translation of (6) and (7) in the main text fails to convey the contrast between FR and RR pronouns with respect to focus. This is because English relative pronouns do not encode gender distinctions (that is *who* can be used to refer to both female and male entities). The same effect, though, can be conveyed with the English FR pronouns *who* (a FR pronoun used for animate entities) and *what* (a FR pronoun used for inanimate entities).

(i) Greek
*ðen θeli mono afta ta opia exis ala ke aftus
NEG want.3SG only those.N.PL.ACC which.N.PL have.2SG but and those.M.PL.ACC
tus opius exis.
who.M.PL have.2SG
intended: 'He doesn't only want those (things) which you have, but also those (persons) *who* you have.'

(ii) Greek
*ðen θeli mono oti exis ala ke *opjon* exis.
NEG want.3SG only what have.2SG but and who.M.SG have.2SG
'He doesn't only want what you have but also *who* you have.'

b. * ðjaleksa [pu protines].
chose.1SG that recommended.2SG
*'I chose that you recommended.'

By contrast, complementizer RRs (9b) are a very common alternative to pronominal RRs (9a) in Greek and in other languages:

(9) Greek
a. ðjaleksa aftus [tus opius protines].
chose.1SG those.M.PL.ACC which recommended.2SG
'I chose those ones who you recommended.'
b. ðjaleksa aftus [pu protines].
chose.1SG those.M.PL.ACC that recommended.2SG
'I chose those ones that you recommended.'

3.3 Animacy

Furthermore, only FR pronouns appear to license an animacy restriction.

Thus, FR pronouns marked for masculine/feminine gender licence by default a [+animate] interpretation, whereas FR pronouns marked for neuter gender license a [−animate] interpretation. For example, the masculine FR pronoun *opjus* in (10a), under its more natural interpretation, refers to a male animate entity, whereas the neuter FR *opja* in (10b), evokes a [−animate] entity.

(10) Greek
a. ðjaleksa opjus protines.
chose.1SG who.M.PL recommended.2SG
'I chose who you recommended.'
b. ðjaleksa opja protines.
chose.1SG what.N.PL recommended.2SG
'I chose what you recommended'

A similar point is made by the minimal pair in (11): whereas the neuter FR pronoun *opjo* is perfectly grammatical as the subject of verbs that typically take thematic/inanimate subjects (11a), it sounds awkward, when it occupies the subject position of verbs that typically require agentive/animate subjects (11b).

(11) Greek
a. opjo espase
what.N.SG broke.3SG
'What(ever) broke.'

b. ## opjo eɣrapse tin epistoli
what.N.SG wrote.3SG the letter.ACC
##'What(ever) wrote the letter.'

The distribution of RR pronouns, on the other hand, does not appear to be regulated by animacy considerations. To illustrate, RR pronouns are admissible with both animate and inanimate antecedents, independently of whether they are marked for masculine (12) or neuter gender (13).

(12) Greek
a. ðjaleksa tus maθites tus opius protines.
chose.1SG the students.ACC which.M.PL recommended.2SG
'I chose the students who you recommended.'
b. ðjaleksa tus pinakes tus opius protines.
chose.1SG the paintings.ACC which.M.PL recommended.2SG
'I chose the paintings which you recommended.'

(13) Greek
a. ðjaleksa ta peðja ta opia protines.
chose.1SG the kids.ACC which.N.PL recommended.2SG
'I chose the kids who you recommended.'
b. ðjaleksa ta pexniða ta opia protines.
chose.1SG the toys.ACC which.N.PL recommended.2SG
'I chose the toys which you recommended.'

3.4 Referentiality

A further difference between FR and RR pronouns concerns their ability to introduce new referents. Consider in this regard the examples in (14) illustrating coordination of FRs:

(14) Greek
a. kalesa opjon simbaθi i Maria ke opjon adipaθi i Lina.
invited.1SG who.ACC like.3SG the Maria.NOM and who.ACC dislike.3SG the Lina.NOM
'I invited whoever Maria likes and whoever Lina dislikes.'
[✓ Maria likes X & Lina dislikes Y; ✓ Maria likes X & Lina dislikes X]

b. kalesa opjon simbaθi i Maria ke adipaθi i
invited.1SG who.ACC like.3SG the Maria.NOM and dislike.3SG the
Lina.
Lina.NOM
'I invited whoever Maria likes and Lina dislikes.'
[*Maria likes X & Lina dislikes Y; ✓ Maria likes X & Lina dislikes X]

When coordination takes place at the FR pronoun level, the coordinated phrases may either refer to two distinct discourse referents or to a single participant (14a). Of the two possible readings, the first one is the preferred one. However, when coordination takes place below the FR pronoun, the coordinated phrases may only refer to a single participant (14b). In other words, there appears to be a correlation between the number of FR pronouns and the number of referents.[6]

The correlation between number of pronouns and number of referents is not replicated by RRs:

(15) Greek
a. kalesa afton ton opio simbaθi i Maria ke
invited.1SG this.one.ACC which.ACC like.3SG the Maria.NOM and
ton opio adipaθi i Lina.
which.ACC dislike.3SG the Lina.NOM
'I invited this one who Maria likes and who Lina dislikes.'
[*Maria likes X & Lina dislikes Y; ✓ Maria likes X & Lina dislikes X]

[6]In this respect the FR pronoun *opjos* behaves like the definite determiner *o* 'the' in argumental DPs. Alexiadou et al. (2007: 67–68), replicating a point originally made by Longobardi (1994) for Italian, show that there appears to be a correlation between the number of definite determiners in coordinated DPs and the number of referents. Thus, whereas there is only one referent in (i), there are two referents in (ii):

(i) Greek
irθ-e/*-an o antiprosopos tis dikastikis arxis ke proedros tis eforeftikis
came-3SG/PL the delegate of.the court and chair of.the elective
epitropis.
committee
'The representative of the court and chair of the elective committee have arrived.'

(ii) Greek
irθ-an/*-e o antiprosopos tis dikastikis arxis ke o proedros tis eforeftikis
came-3PL/SG the delegate of.the court and the chair of.the elective
epitropis.
committee
'The representative of the court and the chair of the elective committee has arrived.'

b. kalesa afton ton opio simbaθi i Maria ke
invited.1SG this.one.ACC which.ACC like.3SG the Maria.NOM and
ton opio adipaθi i Lina.
which.ACC dislike.3SG the Lina.NOM
'I invited this one who Maria likes and Lina dislikes.'
[*Maria likes X & Lina dislikes Y; ✓ Maria likes X & Lina dislikes X]

What the above examples serve to show is that multiple occurrences of an RR pronoun do not produce a multiple index interpretation.

3.5 Overt NP complement

Finally, only FR pronouns may licence overt NP complements. This is shown by the contrast in grammaticality between (16) and (17):[7]

(16) Greek
ðjaleksa opjus (ipopsifius) protines.
chose.1SG who.ACC candidates recommended.2SG
'I chose whichever candidates you recommended.'

(17) Greek
a. * ðjaleksa tus opius ipopsifius protines.
chose.1SG which.ACC candidates recommended.2SG
*'I chose which candidates you recommended.'
b. * ðjaleksa tus ipopsifius tus opius ipopsifius protines.
chose.1SG the candidates which.ACC candidates recommended.2SG
*'I chose the candidates which candidates you recommended.'

Crucially, FR pronouns with overt NP complements (complex FR pronouns, henceforth) differ from the simple FR pronouns discussed so far, in two respects: First, they cannot bear contrastive stress. In instances of contrastive focus it is their complement that is focused (18):

[7]It is only in appositive relatives that *o opios* may take an overt NP complement:

(i) Greek
to computer, to opio computer epemenes na aɣoraso, ðen ðulevi.
the computer, which computer insisted.2SG SBJV buy.1SG NEG work.3SG
'The computer, which you insisted that I buy, is not working.'

(18) Greek

a. * kalese mono *opjus* maθites tu
invited.3SG only which.M.PL students.M.PL CL.3SG.M
protines oxi opjes maθitries tu
recommended.2SG not which.F.PL students.F.PL CL.3SG.M
protines.
recommended.2SG
intended: 'He only invited *whichever* male students you recommended to him, not whichever female students you recommended to him.'

b. kalese mono opjus *maθites* tu protines
invited.3SG only which students.M.PL CL.3SG.M recommended.2SG
oxi opjes maθitries tu protines.
not which students.F.PL CL.3SG.M recommended.2SG
'He only invited whichever *male* students you recommended to him, not whichever female students you recommended to him.'

Second, they may take both animate and inanimate complements, independently of whether they are marked for masculine/feminine gender, as in (19), or for neuter gender, as in (20):

(19) Greek

a. ðjaleksa opjus maθites protines.
chose.1SG which.M.PL students.ACC recommended.2SG
'I chose whichever students you recommended.'

b. ðjaleksa opjus pinakes protines.
chose.1SG which.M.PL paintings.ACC recommended.2SG
'I chose whichever paintings you recommended.'

(20) Greek

a. ðjaleksa opja peðja protines.
chose.1SG which.N.PL kids.ACC recommended.2SG
'I chose whichever kids you recommended.'

b. ðjaleksa opja pexniða protines.
chose.1SG which.N.PL toys.ACC recommended.2SG
'I chose whichever toys you recommended.'

3.6 Summary

A schematic summary of the differences between restrictive and free relative pronouns (simple and complex) is provided in Table 14.3.

Table 14.3: The properties of RR and FR pronouns.

	Pronouns		
	FR (simple)	FR (complex)	RR
Contrastive focus	Yes	No[a]	No
Null counterparts	No	No	Yes
Animacy	Yes	No	No
Disjoint reference under conjunction	Yes	Yes	No
Overt NP complement	No	Yes	No

[a](only their complement)

The list of differences between free and restrictive relative pronouns can be narrowed down into two main points of divergence:

1. FR pronouns (simple/complex), unlike RR pronouns, are referential. This explains the correlation between the number of FR pronouns and the number of referents (14), a correlation that does not hold in the case of RR pronouns (15).

2. FR pronouns (simple/complex), unlike RR pronouns, may license their own range. The range may take the form of an animacy restriction licensed by the FR pronoun (10) and (11) (in the case of simple FR pronouns), or the form of a lexical NP complementing the FR pronoun (19) and (20) (in the case of complex FR pronouns). This explains why simple FR pronouns can be contrastively focused. Being inherently specified as [+animate] or [−animate], they can bear contrastive focus with respect to animacy (6). RR pronouns, on the other hand, not being specified for animacy cannot bear contrastive focus for a property they lack (7).

Under this view, FR pronouns lack null counterparts because their deletion would result in unrecoverable loss of both referentiality and range (8).

4 Towards an analysis

Having established at an empirical level that RR pronouns are deficient compared to FR pronouns, I will now consider the question of theoretical implementation. After showing that both types of pronouns are transitive determiners (§4.1 and §4.2), I will suggest that their differences lie in their featural composition: whereas both RR and FR determiners are morphologically definite, only the latter ones are semantically definite (§4.3).

4.1 Both free and restrictive relative pronouns are DPs

It is possible that the referential deficiency of RR pronouns is reflective of a kind of structural deficiency. Thus, adopting and adapting Déchaine & Wiltschko's (2002) account of personal pronouns, we could assume that whereas FR pronouns are Ds projecting a DP, RR pronouns are the mere spell out of phi features (phi Ps). Within this approach, RR pronouns fail to refer because they lack an external D layer, which is typically taken to be the locus of definiteness/referentiality.

There are two main issues with this approach. First, as mentioned in the introduction, both free and restrictive relative pronouns incorporate a morphologically definite determiner (*o* 'the'). Thus, morphological considerations suggest that they are both Ds. The second issue is syntactic in nature and concerns their distribution. Even though both pronouns surface in [Spec,CP], they can be theta related to all the major argument positions, including the subject of (in)transitive verbs, the subject of primary and secondary predication, the (in)direct object, and the prepositional object position. The latter is illustrated in (21) and (22) with a FR and RR pronoun, respectively:

(21) Greek
jia opjus (maθites / pinakes) mu milises
about which students paintings CL.1SG.GEN talked.2SG
'About whichever (students/paintings) you talked to me.'

(22) Greek
o maθitis / pinakas jia ton opio mu milises
the student.NOM painting.NOM about who.PL.ACC CL.1SG.GEN talked.2SG
'The student/painting about whom you talked to me.'

On the assumption that argumenthood is a property of DPs (Longobardi 1994), it follows that both *opjos*-phrases and *o opios* phrases are associated with a DP projection.

4.2 Both free and restrictive relative pronouns are transitive Ds

Furthermore, it can be argued that in addition to showing the external distribution of DPs, both types of pronouns show the internal syntax of determiners. Complex FR pronouns clearly behave like transitive determiners, since they allow an NP complement. The latter can be overt, as in (23) repeated from (16) above, or elided under identity with a discourse antecedent, as in (24).[8]

(23) Greek
kalesa [opjus ipopsifius protines].
invited.1SG who.ACC candidates recommended.2SG
'I invited whichever candidates you recommended.'

(24) Greek
a. pjus ipopsifius kaleses?
which candidates invited.2SG
'Which candidates did you invite?'
b. opjus mu protines.
who CL.1SG.GEN recommended.2SG
'Whoever you recommended to me.'

In the absence of a salient discourse antecedent, we saw that FR pronouns (simple FR pronouns in our terms) receive a [±animate] interpretation, depending on their gender specification (10–11). One way to implement this observation is to assume that they bear interpretable phi features that are responsible for licensing a null complement. Thus, an interpretable masculine/feminine gender licenses an empty [+animate] NP complement, whereas an interpretable neuter gender licenses a [−animate] NP complement. Within this account, the difference

[8]Evidence suggesting that the FR pronoun in (24b) is a transitive determiner with a deleted NP restrictor comes from its similarities with other instances of nominal subdeletion attested in Greek, such as the one illustrated in (i):

(i) Greek
a. pja fusta aɣorases?
which.F.SG skirt bought.2SG
'Which skirt did you buy?'
b. tin kokini.
the.F.SG red.F.SG

In this regard, see Daskalaki (2009) who shows how the conditions on nominal subdeletion identified by Giannakidou & Stavrou (1999) can be replicated for FR phrases.

between complex and simple FR pronouns does not lie in their (in)transitivity. Rather it depends on whether the FR determiner has entered the derivation with an uninterpretable set of phi features (that will be valued by an overt lexical NP) or with an interpretable set of phi features that is responsible for licensing a null, [±animate] NP complement.[9]

Let us, finally, consider the RR pronoun *o opios*. At a first approximation its treatment as a transitive determiner seems implausible, given that, at least in its restrictive use, it never surfaces with an overt NP complement (17). However, this would be incompatible with both the *raising analysis* (Kayne 1994; for Greek RRs, see Alexiadou & Anagnostopoulou 2000, among others) and the *matching analysis* (Sauerland 1998; for Greek RRs, see Kotzoglou & Varlokosta 2005 of relative clauses). Motivated by independent considerations, such as reconstruction effects, both analyses maintain the claim that the RR pronoun is a determiner taking an NP complement. In the case of the raising analysis, the NP complement is raised to the antecedent position, whereas in the case of the matching analysis it is deleted under identity with an externally Merged antecedent.[10] In view of these independent considerations, I will be assuming that RR pronouns, like FR pronouns, are transitive determiners.[11]

4.3 RR pronouns, unlike FR pronouns, have an expletive D head

If both FR and RR pronouns are transitive Ds, then the referential deficiency of RR pronouns cannot be treated as an instance of structural deficiency. A conceivable alternative would be to treat it as an instance of featural deficiency. Under this view, the difference between FR and RR pronouns depends on whether their D head is semantically definite/referential, as in the case of FR pronouns, or semantically inert, as in the case of RR pronouns.

[9] Alternatively, it could be the case that the phi features of the FR determiner are always uninterpretable. In the case of complex FR pronouns they get valued through agreement with an overt lexical NP, whereas in the case of simple FR pronouns they get valued through agreement with the gender specification of a null NP meaning 'man', 'woman', or 'thing'. An analysis along these lines would be compatible with Panagiotidis (2003) and would allow us to treat homogeneously complex and (apparently) simple FR pronouns. However, it is not clear how it would derive the contrast between the two types of FR pronouns with respect to contrastive focus. In other words, if both simple and complex FR pronouns bear uninterpretable gender it is not clear why only the former ones can bear contrastive focus (compare (6) with (18)).

[10] Thanks to an anonymous reviewer for pointing this out to me.

[11] Within this analysis, (17a) is ungrammatical not because there is no NP position projected in syntax, but because the RR determiner, being expletive (see §4.3) cannot introduce a clause that functions as an argument. Accordingly, (17b) is ungrammatical because due to some economy consideration the complement of the RR determiner needs to be deleted under identity with a c-commanding antecedent.

That the definite morphology of RR pronouns is void of any semantic contribution is not a novel claim (see, among others, Bianchi 1999: 80; for Greek, see Alexiadou 1998). Independent evidence in support of this analysis comes from the expletive uses of the Greek definite determiner in contexts other than RRs. Consider, for example, the phenomenon of polydefiniteness, illustrated in (25):

(25) Greek
to spiti to megalo
the house the big
'the big house'

In (25), a noun (*spiti* 'house') is modified by an adjective (*megalo* 'big'), and noun and adjective are each introduced by a morphologically definite determiner (*to* 'the'). Despite the multiple occurrences of the definite article, the construction does not receive a multiple reference interpretation. Thus, (25) refers to a single entity at the intersection of the set of houses and the set of big entities (Lekakou & Szendrői 2012). This fact has been taken to show that the definite determiner in Greek, at least in some contexts, can be used as an expletive (for an overview of the proposed analyses, see Alexiadou 2014). It is this claim that we reiterate here for the RR determiner.

Our second claim, that the FR pronoun encodes definiteness/referentiality, has been more controversial in the literature. Recall from §2.1 that FRs can be paraphrased with definite DPs. One group of analyses derives the referentiality/definiteness of FRs from the referentiality/definiteness of FR pronouns (see, for instance, Jacobson 1995 and Pancheva 2000, among others). A different group of analyses suggests that the reason why FRs are interpreted like definite DPs is because of a null c-commanding determiner/element that turns them into referential expressions (Groos & van Riemsdijk 1981; Caponigro 2003; Grosu & Landman 1998, among others).

One of the main semantic arguments in favor of the null D analysis is that many languages use the same range of relative pronouns both in definite FRs and in irrealis FRs (Caponigro 2003). Irrealis FRs differ from definite FRs in a number of ways (Caponigro 2003; Pancheva 2000; Grosu & Landman 1998): Irrealis FRs always complement existential predicates (mainly the existential *have* or *be*), they include irrealis verbal morphology, and, crucially, they cannot be paraphrased by definite DPs. Rather they appear to be semantically equivalent with weak NPs. As an illustrative example, we may consider the Polish examples below, illustrating a standard and an irrealis FR, respectively:

(26) Polish (Caponigro 2003: 27)
Posmakowalam [co ugotowałes].
tasted.1SG what cooked.2SG
'I tasted what you cooked.'

(27) Polish (Caponigro 2003: 88)
(Nie) mam [co robić].
not have.1SG what do.INF
'There {is something, isn't anything} I can do.'

As pointed out by Caponigro (2003), the fact that the same range of pronouns is used both in standard/definite (26) and in irrealis FRs (27) is problematic for the claim that these pronouns are inherently definite. Significantly, though, this counterargument does not apply to the Greek data. As illustrated below, FR pronouns fail to introduce irrealis FRs (28a). Rather an interrogative pronoun is used for this purpose (28b):

(28) Greek
a. * ðen exo se opjon na miliso.
NEG have.1SG to who SBJV talk.1SG
b. ðen exo se pjon na miliso.
NEG have.1SG to who SBJV talk.1SG
intended: 'I don't have anyone to talk to.'

If *opjos* is not semantically definite, it is not clear what rules out its use in (28a).

An additional challenge for the extension of the null D analysis to Greek is posed by the fact that the presumed null definite D fails to be replaced by the overt definite determiner *o* 'the' that independently exists in the language (29):

(29) Greek
*Kalese ton opjon θes.
invite.2SG the who want.2SG
*'Invite the whoever you want.'

Of course, it could be the case that the morphologically definite determiner is always expletive and that definiteness is always provided by a null c-commanding functional head.[12] Even in this case though, one would expect that *o opios* would be able to introduce a FR (when embedded under the null definite D) and that *opjos* would be able to introduce an RR (when not embedded) under the null D). As shown below, neither of the two predictions is borne out:

[12]This has actually been proposed by Lekakou & Szendrői (2012) on the basis of polydefinites.

(30) Greek
*Kalese [∅ [ton opio maθiti θes]].
invite.2SG which student want.2SG
intended: 'Invite which student you want.'

(31) Greek
*Kalese afton / ton maθiti [opjon θes].
invite.2SG this.one the student who want.2SG
*'Invite him/the student whoever you want.'

In view of the above facts, I conclude that, at least in Greek, the FR determiner, unlike the RR determiner, is semantically definite/referential.[13] Thus, whereas the RR determiner *o opios* is [−def, +rel], the FR determiner *opjos* is [+def, +rel]. Because it is semantically definite, it needs a range that is provided by its NP complement. The latter can be an overt NP, a deleted NP, or an empty NP that receives a [±animacy] interpretation.

5 Conclusions

In this paper, I explored the possibility that relative pronouns, like personal pronouns, show different degrees of strength/deficiency. I showed that, at least in Greek, the RR pronoun *o opios* is semantically deficient compared to its FR counterpart *opjos* in two interrelated respects: (i) it is referentially deficient and (ii) it does not license its own range. After showing that both FR and RR pronouns behave like transitive Ds, I proposed that their differences lie in their featural composition: FR determiners, unlike RR determiners, are semantically definite. This analysis suggests that, at least in some cases, referential deficiency can be indicative of featural rather than structural deficiency (cf. Cardinaletti & Starke 1999; Déchaine & Wiltschko 2002). Furthermore, it opens up the possibility of attributing the distribution of free and restrictive relative clauses to the properties of their introductory determiners. FR determiners, being [+def], turn a clause into a referential DP. RR determiners, on the other hand, being expletive, turn a clause into a predicate that can function as a nominal modifier. The implications of these conclusions for existing analyses of free and restrictive relatives can be the topic of future research.

[13] If this conclusion is on the right track, then it seems that the semantic import of FR pronouns could be subject to cross-linguistic variation. On the one hand, there are FR pronouns like the Greek *opjos* that may take an NP complement and encode definiteness. On the other hand, there are FR pronouns like the Polish *co* or the English *who* that may not take an NP complement, and, according to Caponigro's convincing analysis (2003), encode animacy (they are mere set restrictors).

Abbreviations

1	first person
2	second person
3	third person
ACC	accusative
CL	clitic
F	feminine
FR	free relative
GEN	genitive
INF	infinitive
M	masculine
N	neuter
NEG	negation
NOM	nominative
PL	plural
RR	restricted relative
SBJV	subjunctive
SG	singular

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