Free and restrictive relative clauses in Greek[*]

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Abstract

This paper argues that the categorical status of relative clauses as DPs is related to the D/ϕ-features of Greek C (*pu*). Kayne's (1994) external determiner and associated NP-raising hypothesis are thus dispensed with. The consequences of this approach are discussed in relation to resumption in restrictive and free relative clauses.

Keywords: pronoun, *pu*, relative clause, resumption, agree

1. Problems with Kayne's external determiner hypothesis

This section reviews the main arguments for Kayne's external determiner hypothesis and the related bare NP-raising hypothesis.

According to Kayne (1994), a relative clause as in (1a) involves a DP headed by the (external) determiner *to*; a bare NP raises to Spec,CP as shown in (1b).

(1a) to pedhi pu idhame sto parti
         the.NOM guy.NOM that saw.1P at-the party
         'the guy we saw at the party'
(1b) [$_{DP}$ [$_D$ to [$_{CP}$ pedi$_i$ [$_C$ pu [$_{TP}$ idhame t_i sto parti]]]]]

A proper name or a numeral may be preceded by the definite determiner only when followed by a relative clause ((2) *vs* (3)) (see Kayne 1994 who credits the observation to Vergnaud 1974). Since the NP generated in-situ is bare (3), the sequence det+ProperName or det+NumP is possible in relatives because the determiner is external.

(2a) the Paris *(I love)
(2b) the three books of John's *(that I read)
(2c) the four of the boys *(that came to dinner)
(3a) I love (*the) Paris.
(3b) I read (*the) three books of John's.
(3c) (*The) four of the boys came to dinner.

Further, existential predicates resist definite NPs (4b). The trace then in (4b) (from Bianchi 1999, ex. (26a)) is a bare indefinite that raises to Spec,CP and, thus, appears immediately after the external definite determiner.

(4a) The men that there were *t* in the garden were all diplomats.
(4b) There were *the men/men in the garden.

Finally, consider idiom chunks ((5a) & (5c)), which resist definite NPs as complements. When the complement NP is relativised, it can happily accept a definite determiner ((5b) & (5d)). The apparent paradox can be captured by assuming an external determiner and a bare NP raising to Spec,CP.

(5a) *They made the fun of me.
(5b) the fun they made of me (Fabb 1990)
(5c) *We made the headway on that problem.
(5d) the headway we made on that problem (Browning 1989)

The reasoning underlying such evidence presupposes the grammaticality of the source. But, as noted by Borsley (1997), this argument does not follow in the simplest case (6b), where the bare NP is ungrammatical in the source structure (6a). Some operation is needed to allow a bare NP as the object of *read* in (6b), which, however, should be restricted to relatives given (6a) (see Bianchi 2000).

(6a) *I read book.
(6b) the book I read

Further, existential contexts support indefinite NPs with an indefinite determiner (7a), but not bare NPs (7b). But a bare NP has to be the source of (7c).

(7a) There was a/*the decent conversationalist at the party.
(7b) *There was decent conversationalist at the party.
(7c) the (only) decent conversationalist that there was at the party

The definite restrictions associated with the above contexts are systematically coerced not only when followed by a relative clause, but by restrictive modification in general. For example the 'genitive' modifier and the restrictive adjective in (8a&b) render (3a) fully grammatical, in a manner exactly parallel to (2a), where *Paris* is followed by a relative clause.

(8a) I love the Paris of the 19th century.
(8b) I love the Paris of the Impressionists.
(8c) I love the hidden Paris.

As Kayne (1994) also notes, just as the relative clause in (9b) improves (9a), the adjective in (9d) improves (9c) as does the possessive in (9e) (credited to Vergnaud 1974)[1].

(9a) *I found the two pictures of John's.
(9b) I found the two pictures of John's that you lent me.
(9c) *The sweater of John's is beautiful.
(9d) ?The yellow sweater of John's is beautiful.

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[1] Kayne (1994) captures the uniform effect of restrictive modification in these cases by assuming the same underlying structure for all relevant cases, though, at the cost of a radical departure from standard assumptions about the internal structure of DPs.

(9e)   the Paris of my youth

Crucially restrictive modification coerces the 'definiteness' restriction associated with existential predicates. Thus, superlatives improve the acceptability of definites in both English (10a) and Greek (10b) (also true in French; Etchegoyen & Tsoulas 1998).

(10a) In this garden there were the most rare flowers of the world.
(10b) S'afton ton kipo ihe ta pio pania luludia tu kosmu.
       in-this the garden had.$_{3S}$ the .$_{ACC}$ most rare flowers.$_{ACC}$ the.$_{GEN}$ world.$_{GEN}$

Genitive/possessive modification has the same effect as shown in (11).

(11a) Under the Christmas tree there is your grandpa's present.
(11b) Kato apo to dhedro ehi to dhoro tu papu su.
       under from the tree has.$_{3S}$ the $_{ACC}$ present $_{ACC}$ the.$_{GEN}$ grandpa.$_{GEN}$ your

The same effect is induced by restrictive adjectives (12).

(12a) There was the usual crowd again.
(12b) Ihe tus sinithis ipoptus.
      had.$_{3S}$ the.$_{ACC}$ usual suspects.$_{ACC}$
      'There were the usual suspects.'

Crucially, definite DPs followed by a relative can appear in an existential context (13), a fact that undermines the reasoning for assuming that examples like (4a) necessarily involve a bare trace.

(13a) Under the Christmas tree there is the present your grandpa sent you.
(13b) Kato apo to dhedro ehi to dhoro pu su estile o papus su.
       under from the tree has.$_{3S}$ the present that you sent.$_{3S}$ the grandpa.$_{NOM}$ your
(13c) There were many rare books in that library. There was also the one your mother
       has been looking for.
(13d) Ihe pola spania vivlia s'aftin ti vivliothiki.
       had.$_{3S}$ many rare books in-this the library
       Ihe ki afto pu epsahne i mana su.
       Had.$_{3S}$ and this.$_{ACC}$ that was-looking-for.$_{3S}$ the.$_{NOM}$ mother.$_{NOM}$ your

Note finally, that restrictive modification has a similar effect with idiom chunks ((14) & (15)), while examples like (16) (from Carlson 1977) support a 'matching' analysis.

(14a) Mu kanane plaka /*tin plaka.
       me.$_{GEN}$ made.$_{3P}$ fun.$_{ACC}$ /*the fun
(14b) tin plaka pu mu kanane
       the.$_{ACC}$ fun. $_{ACC}$ that me.$_{GEN}$ made.$_{3P}$
(14c) Mu kanane tin plaka tis Marias.
       me.$_{GEN}$ made.$_{3P}$ the fun.$_{ACC}$ the.$_{GEN}$ Maria.$_{GEN}$
(14d) Ekane tin proodho pu perimename/ tin anamenomeni proodho.
       made.$_{3S}$ the progress that expected.$_{1P}$/ the expected progress
(15a) She made *the/*a/ progress.
(15b) The progress she made is unbelievable.

(15c) She made the progress we expected from her.
(15d) Are they making the expected/usual headway/progress?
(16)   John *pulled the strings* that got Bill the job.

Bianchi (1999) argues that the unavailability of quantifier floating (QF) in Italian relative clauses provides support for Kayne's hypothesis[2]. Italian allows QF as in (17).

(17)   Gli studenti hanno superato tutti l'esame.
       the students have passed all the~exam

The quantifier *tutti* in (17) selects an obligatorily +def DP, which then moves to some left peripheral position. Such QF is unavailable in restrictive relatives (18), a fact that is expected if the in-situ NP is bare and, thus, fails to satisfy the +Def requirement on the complement of *tutti.*

(18)   *Elencami i libri che devi leggere tutti per l'esame.
        tell-me the books that (you)-must read all for the~exam

However, according to Bianchi's reasoning, if the Q involved selects a bare NP instead, QF should be grammatical in relative clauses. Greek allows QF of the Italian type in (17) as shown in (19a). On a par with Italian *tutti,* Greek *oli* selects a definite DP. As expected, QF is unavailable in Greek relative clauses, as shown in (19b)[3].

(19a) I fitites perasane oli tis eksetasis.
       the.NOM students passed.3P all.NOM the.ACC exams
(19b) *Pes mou ta vivlia pu prepi na dhiavasis ola gia tis eksetasis.
        tell me the.ACC books.ACC that must.3S SUBJV read.2S all for the exams

QF is also possible with *poli* (20b), which selects a bare NP as its complement X. But raising of the bare complement of *poli* is ungrammatical (20c). Thus, whatever is responsible for the unavailability of floating in relative clauses does not relate to the complement of Q. At best, Q-floating does not provide further support for Kayne's analysis.

(20a) Poli fitites perasan tis eksetasis.
       many.NOM students.NOM passed.3P the.ACC exams.ACC
(20b) Fitites perasan poli tis eksetasis.
       students passed.3P many.NOM the.ACC exams
(20c) *Irthan fitites pu perasan poli tis eksetasis.
        came.3P students.NOM that passed.3P many.NOM the.ACC exams.ACC

    Alexiadou & Anagnostopoulou (2000) provide a further argument for Kayne's hypothesis; resumptive clitics are (optionally) available in relative clauses 'headed' by an indefinite (21a), but ungrammatical in relatives headed by a definite X, an observation due to Stavrou (1984).

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[2] For a more general discussion of semantic scope in relative clauses and the raising analysis, see Heycock (2005).
[3] As in the case of Italian, Q-floating is possible in non-restrictive relatives.

(21a) Dhiavasa ena vivlio pu (to) pira apo ti vivliothiki.
  read.1S a book.ACC that it-CL got.1S from the library
  'I read a book that I got from the library.'
(21b) *Dhiavasa to vivlio pu to pira apo ti vivliothiki.
  read.1S the book.ACC that it-CL got.1S from the library

The source of (21a) involves Clitic Doubling, that is, the resumptive 'doubles' the raised phrase in a manner parallel to (22).

(22) To PINO pu-ke-pu ena uzaki.
  it-CL drink.1S every-now-and-then an uzo.ACC
  'I have an uzo every now and then.'

A crucial (crosslinguistic) property of Clitic Doubling is that it may not involve bare NPs (see (23) from Alexiadou & Anagnostopoulou 2000 and (24)). Thus, (21b) involves doubling of a bare NP, which is ungrammatical.

(23) *Ta idha pedhia na erhonde
  them-CL saw.1S children ACC SUBJV come.3P
  'I saw children coming.'
(24) *To pira vivlio apo ti vivliothiki.
  it-CL got.1S book from the library

The crucial difference between "definite" and "indefinite" relatives is that, unlike the definite determiner, the indefinite one is not external. Rather, it raises along with the NP. Example (21a) therefore involves doubling of an indefinite as in (22).

   This analysis faces a number of problems. First, the generalisation that "definite" relatives resist clitics is too strong. Stavrou (1984) and Tsimpli (1999) offer the following examples to note that a generic interpretation of the predicate of the relative clause may improve the availability of a clitic in a relative headed by a definite to full acceptability.

(25a) Ta pedhja pu (ta) aghapane oli ine kala.
  the.NOM children.NOM that them-CL love.3P all are good
  'The children that everyone loves are good.'
(25b) Aghorasa tis kremes pu (tis) forane i jinekes.
  bought.1S the ACC creams.ACC that them-CL wear.3P the.ACC women ACC.
  'I bought the creams that women wear.'

According to Alexiadou & Anagnostopoulou (2000), the effect of the generic interpretation ought to be detectable in the source, that is, generic readings ought to improve doubling of bare NPs. However, no such improvement is detected in (26).

(26a) *Pedhia ta agapane oli.
  children.ACC them-CL love.3P all.NOM
(26b) *Kremes tis forane i jinekes.
  creams.ACC them-CL wear.3P the.NOM women.NOM

Further note that clitic doubling of indefinites in episodic sentences is generally dispreferred (27a) and certainly degraded compared with its Clitic Left Dislocated (27b)

equivalent rendering the parallel between (21a) and (22) problematic. The source of (21a) is the unacceptable (27a) and not (22), which involves a habitual reading, known to improve doubling of indefinites.

(27a) *?To pira ena vivlio apo ti vivliothiki.
        it-CL got.1S a book.ACC from the library
(27b) Ena vivlio to pira apo ti vivliothiki.
        a.ACC book.ACC it-CL got.1S from the library

2. Are relative clauses DPs?

Daskalaki (2005) provides arguments for a DP analysis of free and restrictive relative clauses. She compares relative clauses with indirect questions, the latter uncontroversially assumed to be CPs, and notes a number of important differences. First, unlike indirect questions (28b) the 'head' of the relative clause bears matrix case as in (28a) and (28c).

(28a) Kseri opion/*opios tis mila.
        knows.3S who.ACC/*who.NOM her.GEN talk.3S
        'She knows whoever talks to her.'
(28b) Kseri pios/*pion tis mila
        knows.3S who.NOM/who.ACC her.GEN talk.3S
        'She knows who talks to her.'
(28c)   Adipatho ton tipo/*o tipos pu mila stin adherfi mu.
        dislike.1S the.ACC guy.ACC/the.NOM guy.NOM that talk.3S to-the sister my
        'I dislike the guy that talks to my sister.'

Second, there is number agreement between the matrix verb and the head of the relative clause, which is absent from indirect questions.

(29a) Osa/o,ti vivlia grafi puljunde/*puliete amesos.
        what books.ACC write.3S sell.PASS.3P/*sell.PASS.3S immediately
        'Whatever books she writes are sold immediately.'
(29b) Ti vivlia grafi apoteli/*apotelun mistiko.
        what books.ACC write.3S is/ *are secret
        'What books she writes is a secret.'
(29c) Ta vivlia pu grafi *apoteli/apotelun skandhalo.
        the.ACC books.ACC that write.3S is/are scandal
        'The books she writes are a scandal.'

Finally, extending Roussou's (1994) arguments on the determiner/nominal properties of *pu*, Daskalaki notes that, unlike questions, relative clauses resist nominalisation.

(30a) Tha eksartithi apo (*to) osus psifisun.
        FUT depend.3S from the.ACC who.ACC vote.3P
        'It will depend on whichever number of people will vote.'
(30b) Tha eksartithi apo *(to) posi tha psifisun.
        FUT depend.3S from the.ACC how many.NOM FUT vote.3P
        'It will depend on how many people will vote.'

These facts indicate a contrast between relative clauses and questions, which can be naturally captured by the assumption that relative clauses are DPs rather than CPs. Further, the similarities between free and restrictive relatives call for a unified structure.

3. Analysis

Following Roussou (1994), *pu* is associated with D/ϕ-features; further evidence for this hypothesis comes from a specificity match between *pu* and the relative 'head' (see Alexopoulou 2006 on this)[4].

(31a) *Kanenas pu irthe sto party dhe mou ekane kali ediposi.
      no-one.$_{NOM}$ that came.$_{3S}$ to-the party not me.$_{GEN}$ made.$_{3S}$ nice impression
        'No-one that came to the party made a good impression on me.'
(31b) *Dhen xero kanena pu irthe sto arty.
      not know.$_{1S}$ no-one.$_{ACC}$ that came.$_{3S}$ to-the party
      'I don't know any of the people who came to the party.'

The insight that relative clauses are DPs can be maintained by attributting the categorical status of relative clauses to C, more precisely the D/ϕ-features of *pu*. Technically, this is implemented by assuming C-to-D movement following Roussou & Roberts (2001).

    In Alexopoulou (2006) I assume that gap relatives like (32) are CPs in which an uninterpretable *uWh* feature on C enters an AGREE relation with an element within its c-commanding domain (building on McCloskey 2001). The (null) operator then moves to Spec,CP for the satisfaction of EPP.

(32)   to koritsaki pu idhes
        the.$_{NOM}$ girl.$_{NOM}$ that saw.$_{2S}$
        'the girl you saw'

In addition to AGREE of *uWh* between C and the in-situ operator (before movement for EPP), there is also AGREE of ϕ-features; this AGREE relation fails when the relativised site involves a non-argument. Failure of identification of ϕ-features of non-arguments leads to resumption for LF identification[5].

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[4] Examples like (31) improve if *kanenas* is followed by a lexical restriction.
   (ia) ??Kanenas fititis pu irthe sto party dhe mou ekane kali ediposi.
        no-one.$_{NOM}$ student.$_{NOM}$ that came.$_{3S}$ to-the party not me.$_{GEN}$ made.$_{3S}$ nice impression
        'No student that came to the party made a good impression on me.'
   (ib) ??Dhen xero kanena fititi pu   irthe sto party.
        not know.$_{1S}$ no-one.$_{ACC}$ student.$_{ACC}$ that came.$_{3S}$ to-the party
        'I don't know anyone of the students who came to the party.'
   (ic) Kanenas apo tous fitites pu irthan/*irthe sto party dhe mou ekane kali ediposi.
        no-one.$_{NOM}$ from the.$_{ACC}$ students.$_{ACC}$ that came.$_{3P}$/*came.$_{3P}$ to-the party not me.$_{GEN}$ made.$_{3S}$
        nice impression
        'No student that came to the party made a good impression on me.'
   (id) Dhen xero kanena apo tus fitites pu irthane/*irthe sto party.
        not   know.$_{1S}$ no-one.$_{ACC}$ from the students that came.$_{3P}$/came.$_{3S}$ to-the party
        'I don't know anyone of the students who came to the party.'
[5] Resumption in non-argument positions is distinct from optional resumption in object positions; the latter, I assume, involves a clitic doubled operator.

(33a) To pedhi pu *0/tu dhanises lefta ine o yos mu.
       the.NOM kid that it.GEN lent.2S money is the.NOM son.NOM my
       'The kid you lent money to is my son.'
(33b) O fititis pu dhanistika to aftokinito *0/tu ine o Yanis.
       the.NOM student.NOM that borrowed.1S the.ACC car.ACC his is the.ACC Yanis
       'The student whose car I borrowed is Yanis.'
(33c) O adras pu idhame ti yineka *0/tu stin trapeza ine to afediko mu.
       the.NOM man.NOM that saw.1P the.ACC wife.ACC his at-the bank is the boss my
       'the man whose wife we met at the bank is my boss.'

In free relatives an argument is shared by two predicates, in the sense of Manzini &
Roussou (2000); in particular, the operator is merged at Spec,CP matching the *uWh*
feature born by (null) C[6]. The merged operator realises the D-features of the matrix
predicate and, thus, matrix case. In addition, an AGREE relation is established between
the operator and the D-features associated with the relative clause predicate[7]. In case of
non-arguments, AGREE of D/ϕ-features fails; as in *pu*-relatives, resumption surfaces then
for the LF identification of the (ϕ–features of the) relativised site.

(34a) Irthe opios tu/*0 dhanises lefta.
       came.3S who.NOM him.GEN lent.2S money.ACC
       'Whoever you lent money to came.'
(34b) Kalesa opion tu/*0 dhanisa lefta.
       invited.1S who.ACC him.GEN lent.1S money
       'I invited whoever I lent money to.'
(34c) ?Kalesan opion dhialexan to vivlio tu/*0 ya dhimosiefsi.
       invited.3P who.ACC chose.3P the.ACC book.ACC his for publication
       'They invited whoever they chose his book for publication.'
(34d) ?Opios mu arese to aftokinito tu/*0 tha simetashi ston agona.
       who.NOM me.GEN liked.3S the.NOM car.NOM his FUT participate.3S to-the competition
       'Whoever I liked the car of will participate in the competition.'

This analysis of Alexopoulou (2006) fails to capture the similarities between restrictive
and free relatives presented in section 1 as well as the DP category of relatives. In order
to address these issues I assume the following: (i) as indicated earlier, relative clauses
are DPs taking a CP as a complement; *pu* undergoes C-to-D movement; (ii) the relative
"head" is merged at Spec,CP in both free and restrictive relatives[8].

4. Conclusion

The analysis presented dispenses with the problems associated with the external
determiner hypothesis, while, at the same time preserving Kayne's insight that relative
clauses are DPs. It provides a natural account for conflicting evidence from idiom
chunks; if the DP is 'shared' by two predicates — an intuition captured technically by
assuming the DP is merged at Spec,CP rather than moved to Spec,CP — an idiom can

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[6] In the absence of Spec-Head relations this assumption is technically problematic.
[7] Manzini & Roussou define an ATTRACT operation restricted to the A-domain, essentially involving (D-features of) subjects and predicates. This operation is here replaced by the more general AGREE that can account for long distance A-bar dependencies (by cyclic AGREE between matrix and intermediate C, see McCloskey 2002).
[8] See also Adger & Ramchand (2005).

be construed with either predicate. Finally, the current analysis captures a number of structural similarities between free and restrictive relative clauses.

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