

## Resumptivity and non-movement

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Abstract: Η παρούσα μελέτη εξετάζει τις καταχρηστικές αντωνυμίες και, κυρίως, τους τελεστές που τις δεσμεύουν. Για καινούρια γενίκευση προτείνεται, η οποία στηρίζεται σε δεδομένα από δεκαεπτά γλώσσες: ότι τέτοιοι τελεστές δεν επιτρέπεται να φέρουν πτώση. Αυτή η γενίκευση μπορεί να ερμηνευτεί εάν δεχτούμε ότι η απόδοση πτώσης γίνεται τοπικά, αλλά μόνον υπό την προϋπόθεση ότι οι καταχρηστικές αντωνυμίες δεν αποτελούν «spell-outs» ιχνών μετακίνησης.\*

Resumptive pronouns (RPs) have always occupied a crucial niche in work on wh-movement structures (long distance filler-gap dependencies), which have been at the center of generative theorizing for over three decades, because RPs are one of the typical strategies in English for amnestying island violations. One of the central questions regarding RPs is the following: are they linked to a wh-operator only by interpretive mechanisms (such as binding), or are they in fact at least in some cases related to the wh-operator by the usual mechanisms of movement (cashed out in some recent accounts as a kind of minimal ‘spell-out’ of the trace of the wh-operator)? While much of the most productive research addressing this question has concentrated on the properties of the RP itself, in this paper I would like to turn the tables a bit and focus on the properties of the wh-operators that bind RPs, operators which I will call RESUMPTIVE-BINDING OPERATORS. I argue that an examination of these operators indicates that in many cases they are not related to the RP they bind by movement, but rather must be generated independently of the RP.

This paper has two goals, the first empirical and the second theoretical. The empirical goal is to present evidence from seventeen languages, most prominently Greek, that establishes the validity of the novel generalization in (1):

- (1) *Case and resumptive-binding operator generalization*  
No resumptive-binding operator can be case-marked.

The second is to argue that this generalization follows directly if resumptive-binding operators are base-generated in SpecCP, and can never check their Case features.

Note that this is meant to apply especially to operators that are separated from the resumptive pronouns they bind by an island; when no island intervenes, languages differ in whether the resumptive element is actually the spell-out of the trace of movement or not (see Aoun and Benmamoun 1998 for a recent discussion). The fact that (1) holds, at least for binding into islands, supports several strands of evidence that resumptive pronouns inside islands are *not* related to the operators that bind them by movement (*pace* Pesetsky 1998, for example).

## 1 Case and resumptive-binding operators

The relevant languages for investigation (namely, those that have wh-movement in the first place) fall into one of three classes: (1) languages that never show case alternations in their wh-systems (interrogative and relative pronouns, for present purposes), (2) languages that always show such case alternations, and (3) languages that sometimes show such case alternations.

The first class of languages contains most of the languages which have been most extensively investigated for the occurrence and distribution of RPs, and includes Irish, Welsh, Hebrew, the various varieties of spoken Arabic, and Palauan. Examples for Irish are given in (2) and (3), for subject and object questions without and with RPs, respectively.

**Irish** (McCloskey 1990:231; 1979:63)

- (2) a. Cé a<sup>L</sup> bhí \_\_ ann? ‘Who was there?’  
       *who C<sub>trace</sub> was there*
- b. Cé a<sup>L</sup> chonaic tú \_\_? ‘Who did you see?’  
       *who C<sub>trace</sub> saw you*
- (3) a. Cé a<sup>N</sup> shíl tú go mbeadh sé ann?  
       *who C<sub>pro</sub> thought you C would.be he there*  
       ‘Who did you think would be there?’ [adapted < McCloskey 1990:238]
- b. Cé a<sup>N</sup> molann na léirmheastóirí é?  
       *who C<sub>pro</sub> praise the critics him*  
       ‘Who do the critics praise?’ [adapted < McCloskey 1979:53]

In relative clauses, these languages make use only of null operators (*that*-relatives: e.g. Irish *a*, Welsh *a/y*, Hebrew *še*, Egyp./Pal. Arabic *illi*).

Because these languages are exactly the languages best studied for properties of RP-structures, the generalization in (1) was never noted; perhaps, indeed, there is some connection between the poverty of these languages’ case-systems and the extensive possibilities for the use of RPs in them, though this speculation must remain unexplored at present. Because the literature on these languages is quite extensive and well-known, I will refrain from citing the relevant data here, focusing on the novel data documented for the other types of languages below.

The second set of languages are those that obligatorily show case alternations in their wh-systems (interrogative and relative pronouns), such as (standard) German, Russian, and Czech.

**German**

- (4) \* {Welcher Gefangene / welchen Gefangenen / welchem Gefangenen}  
       *which.NOM prisoner which.ACC prisoner which.DAT prisoner*  
       will sie jemanden finden, der ihn geholfen hat?  
       *wants she someone find who him.DAT helped has*  
       ‘{Which prisoner / who} does she want to find someone who helped him?’
- (5) \* {Wer / wen / wem} glaubst du, daß Italien besser spielt, seitdem  
       *who.NOM who.ACC who.DAT think you that Italy better plays since*  
       sie ihn in der Mannschaft haben?

*they him.ACC in the team have*  
 ‘Who do you think that Italy has been playing better since they got him on their team?’

### Russian

- (6) \* {Kto / kogo} ty dumaeš' Italjancy stali lušče posle togo  
*who.NOM who.ACC you think Italians became better after that*  
 kak oni vključili ego v komandu?  
*how they put him in team*  
 ‘Who do you think that the Italians got better since they got him on their team?’
- (7) \* {Kakaja p'esa / kakuju p'esu} Ivan xočet vstretit' ženščinu kotoraja  
*which play.NOM which play.ACC Ivan wants meet woman who*  
 napisala ee?  
*wrote it*  
 ‘Which play does Ivan want to meet the woman who wrote it?’

### Czech

- (8) \* {Kterou hru / ktera hra} chce mluvit s tou ženou, která  
*which play.ACC / which play.NOM wants talk with the woman who*  
 napsala tu?  
*wrote it*  
 ‘Which play does he want to talk to the woman who wrote it?’

These languages (in the standard varieties, at least) lack *that*-relatives, employing obligatorily case-marked relative pronouns in relative clauses. In each case, the use of a RP is impossible, even into an island, as seen in (4)-(8).

The third class of languages show case alternations on interrogative pronouns and overt relative pronouns, while also having *that*-relatives; these languages include Romanian, Bulgarian, Slovene, Serbo-Croatian, Polish, varieties of non-standard German, and Greek (and perhaps English).

### Romanian (Grosu 1994:212)

- (9) băiatul (\*pe) care ți -am spus că am  
 lucrat cu el  
*boy.the ACC which/that you-have.1sg said that have.1sg worked with him*  
 ‘the boy who I told you that I worked with him’

### Bulgarian (Rudin 1985: Ch. 5)

- (10) a. Vidjah edna kniga deto faktut če \*(ja) prodavat me iznenada.  
*I.saw a book that fact.the that it they.sell me surprises*  
 ‘I saw a book that the fact that they’re selling it surprises me.’
- b. \* Vidjah edna kniga kojato faktut če (ja) prodavat me iznenada.  
*I.saw a book which fact.the that it they.sell me surprises*

### Slovene (Marvin 1997)

- (11) ?? {Kdo / koga} se posvetuje z nami, preden ga povabi  
*who.NOM who.ACC REFL consult.3sg with us before him invite.3sg*

na srečanje?

*to meeting*

‘Who does she consult with us before she invites him to the meeting?’

- (12) oseba, {ki / ??kateri } ji zaupam ‘the person who I trust’  
*person that who.DAT her.DAT trust.1sg*

**Serbo-Croatian** (Franks 1995: 82)

- (13) učitelj, {što / \*koga } ga Lucija voli  
*teacher that who.ACC him.ACC Lucija loves*

**Polish** (Pesetsky 1998)

- (14) ten chłopiec, {co / \*którego} go widziałeś wczoraj  
*the boy that who.GEN him.GEN you.saw yesterday*

**Swiss German** (Demirdache 1991:21)

- (15) a. de vrund wo ich immer mit em gang go suufle  
*the friend that I always with him go go drink*  
‘the friend that I always go drinking with’  
b. s auto wo du gsäit häsch das es sich de Peter nod chönti läischte  
*the car that you said have that it REFL the Peter not could afford*  
‘the car that you said that Peter couldn’t afford’

**English**

- (16) Who(\*se) did the police say that finding his car took all morning?  
(17) That’s the guy {who / that / \*whose} the cops said finding his car took all day.

The final language I will examine here is Greek. It is similar to Romanian, Bulgarian, Slovene, Serbo-Croatian, and Polish in having both overt and null operator strategies for relative clause while also possessing fairly rich overt morphological case. Greek has four morphological cases: nominative, accusative, genitive, and vocative, the functions of the historical dative having been taken over by the genitive. The vocative will not be relevant here, for obvious reasons. Relative clauses are formed in one of two ways: the first strategy employs a form of the relative pronoun *o opios*, whose paradigm is given in (18). The form *o opios* consists of the definite article *o* followed by a *wh*-like element (incorporating the interrogative pronoun *pios* ‘who, which’); cf. parallel forms found in other languages: Spanish *el cual*, Italian *il quale*, French *lequel*, Bulgarian *kojto*, Albanian *i cili*, archaic English *the which*, archaic Dutch *hetwelk*.

- (18) Declension of Greek relative pronoun *o opios* ‘the which’

	sg			pl		
	masc	neut	fem	masc	neut	fem
nom	o opios	to opio	i opia	i opii	ta opia	i opies
acc	ton opion	to opio	tin opia	tous opious	ta opia	tis opies
gen	tou opiou	tou opiou	tis opias	ton opion	ton opion	ton opion

Examples of relative clauses formed with *o opios* are given in (19) (see Alexiadou 1997, Alexiadou and Anagnostopoulou 1998, Alexiadou and Anagnostopoulou to appear for discussion and references).

- (19) a. o andras o opios me idhe ‘the man who saw me’  
*the man the which.NOM me.ACC saw.3sg*  
 b. o andras ton opion idha ‘the man who I saw’  
*the man the which.ACC saw.1sg*  
 c. % o andras tou opiou edhosa ta klidhia mou  
*the man the which.GEN gave.1sg the keys.ACC mine*  
 ‘the man to whom that I gave my keys’

Although Greek is a productive clitic-doubling language (see Anagnostopoulou 1994, 1997), clausemate clitic doubles are not found with *o opios*. I illustrate this for the accusative and genitive only: since Greek is a *pro*-drop language that lacks nominative clitics, the nominative case will be indistinguishable from the regular case of extraction of *o opios*.

- (20) a. \* o andras ton opion ton idha ‘the man who I saw’  
*the man the which.ACC him.ACC saw.1sg*  
 b. \* o andras tou opiou tou edhosa ta klidhia mou  
*the man the which.GEN him.GEN gave.1sg the keys.ACC mine*  
 ‘the man to whom I gave my keys’

(Holton et al. 1997:444 state that “[the clitic doubling] strategy is also used occasionally with ... *o opios*”, noting that this is only possible if the clitic is fairly deeply embedded; see also Theophanopoulou-Kontou 1986-87, Androulaki 1998 for examples.)

The second strategy that Greek possesses for the formation of relative clauses uses a null operator with the invariant complementizer *pou*, which is the complementizer also found in complements to factive predicates. With this complementizer, resumptive clitics are possible, though their presence is somewhat less preferred than their absence (see also Joseph 1980, Milapides 1990:93, Holton et al. 1997:444 for examples)<sup>1</sup>:

- (21) a. o andras pou (?ton) idha xtes  
*the man that him.ACC saw.1sg yesterday*  
 ‘the man that I saw yesterday’  
 b. o andras pou (tou) edhosa ta klidhia mou  
*the man that him.GEN gave.1sg the keys.ACC mine*  
 ‘the man that I gave my keys to’

In island contexts, predictably, only the null operator strategy will be able to yield a (relatively) well-formed result. I give examples here from a relative clause island and an adjunct island, both strong islands in Greek as in English.

- (22) a. \* O Giannis ine o andras ton opion psaxnun mia gineka pou na  
*the Giannis is the man the which.ACC seek.3pl a woman that SUBJ*

- (ton) pandrefthi.  
*(him.ACC) marry.3sg*  
 ‘Giannis is the man who they’re looking for a woman who will marry him.’
- b. O Giannis ine o andras pou psaxnun mia gineka pou na  
*the Giannis is the man that seek.3pl a woman that SUBJ*  
 \*(ton) pandrefthi.  
*(him.ACC) marry.3sg*
- (23)a. \* O Giannis ine o andras ton opion i Maria efige apo to parti  
*the Giannis is the man the which.ACC the Maria left from the party*  
 otan (ton) idhe.  
*when him.ACC saw.3sg*  
 ‘Giannis is the man who Maria left the party when she saw him.’
- b. O Giannis ine o andras pou i Maria efige apo to parti otan  
*the Giannis is the man that the Maria left from the party when*  
 \*(ton) idhe.  
*him.ACC saw.3sg*

Since the clitic pronouns in the acceptable versions of the (b) examples ameliorate island violations, these clitic pronouns are resumptives, and not simply CLLD pronouns, which do show island effects (see Demirdache 1991, Anagnostopoulou 1997 for recent discussion). Earlier work on Greek had used only case-marked operators, primarily in matrix questions, where no null operator strategy is available<sup>2</sup>; we see here that the interaction of case-properties of the resumptive-binding operator itself rule out true resumptive binding. Once this factor is controlled for, by using the null operators, we can see that Greek does possess a marginal resumptive strategy. (Similar effects can be seen in clefts as well.)

Across a wide range of languages, then, the generalization given in (1) above holds: a syntactic operator XP that binds a resumptive pronoun (and only such a pronoun—obviously, operators that also bind traces are irrelevant here) cannot be marked for case.<sup>3</sup>

## 2 Case and the locality of feature checking

The generalization documented above finds a fairly straightforward theoretical explanation if the *wh*-operator in question is base-generated in SpecCP. In the limited space remaining, I will have to forgo delving into the details of case theory in these various languages. The basic idea, however, is simple, if unorthodox: resumptive-binding operators do not need case, in fact cannot have case. Thus in an example like (24), the DP *who* has no case:

- (24) Who<sub>2</sub> do you think that if the voters elect him<sub>2</sub>, the country will go to ruin?

I assume, as is standard, that resumptive-binding operators are base-generated in an A'-position, which we can take to be SpecCP. Two questions arise with regard to such caseless operators: first, why do they not *need* case? And second, why *must* they not have case?

I will give here only a brief answer to the first question: they don't need case because they can be interpreted at LF without it. Since they're in an A'-position already, they can be interpreted in situ, with integration into predicate structure mediated by the resumptive element. There is no theoretical reason to expect elements base-generated in A'-positions to need Case in the technical sense at all.

The second question, why resumptive-binding operators must not have case, has a clear answer within any restrictive theory of case-assignment. Clearly, case is a syntactic phenomenon, regulated by predicates, and mediates incorporation into local clausal structure. This has been implemented in various ways, the details of which are not all relevant here. Assume for simplicity that there are Case features on arguments, represented by F, which need to be checked in the course of the derivation (a common implementation is to assume that checking is a configurational relation limited to the specifier-head relation, though the argument is identical under other approaches as long as one assumes a sufficiently local condition on case-assignment.)

Under this conception of Case-assignment, the answer to why resumptive-binding operators cannot have case is simple: since these are base-generated in SpecCP, they are never in a position to receive it. If a resumptive-binding operator *is* given a case feature (i.e., if its D head is selected from the lexicon with a case feature F), then this feature must be checked in order for the derivation to converge. But since the operator is base-generated above the relevant checking projections, it can never be in an appropriate specifier position to check its case feature. The case feature, being an unchecked (uninterpretable formal) feature, causes the derivation to crash at LF. (Alternatively, if case-assignment is contingent on some other local structural notion, the fact that the resumptive-binding operator is base-generated above the relevant domain will prevent case-assignment from succeeding.) This account therefore requires that operators that bind resumptive pronouns (at least those RPs inside islands) must *not* be related to the RP they bind by movement, contra Pesetsky 1998, but rather by an interpretive mechanism such as binding.

## Notes

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<sup>1</sup> Many speakers find especially the accusative clitic odd with *pou*, when the DP that contains the relative clause is definite. It has sometimes been claimed that accusative clitics in *pou*-relatives inside definite DPs are completely ungrammatical (Stavrou 1984, Alexiadou and Anagnostopoulou to appear); it seems that the examples that led to this conclusion are all monoclausal, and I have found considerable variation in this domain. Even for speakers who dislike (21a), however, acceptability increases with depth of embedding, as in (i).

- (i) Aftos ine o andras pou nomizo oti (ton) idha sto parti.  
*that.one is the man that think.1sg that (him.ACC) saw.1sg at.the party*  
 'That's the man that I think I saw at the party.'

Thus for these speakers, while (21a) with *ton* is somewhat marginal, (i) with *ton* is fine. This recalls the English data presented by Erteschik-Shir 1992, who shows that

acceptability of ‘intrusive’ pronouns in non-islands with null operators positively correlates with the distance between the operator and the pronoun.

<sup>2</sup> For example, the question in (i) is impossible:

- (i) \* {Pjos / pjon} psaxnun enan giatro pou na ton voithisi?  
*who.NOM who.ACC they.seek a doctor that SUBJ him helps*  
 ‘Who are they looking for a doctor who can help him?’

<sup>3</sup> One must be wary of the fallacy of denying the antecedent: just because an operator does not participate in a morphologically distinct paradigm of case alternations does not mean that it will be able to bind RPs. A case in point is Modern Dutch, which is like English in its case system, but like German in disallowing RPs (older stages of Dutch, e.g. ca 1750, allowed RPs, as J. Hoeksema points out to me):

- (i) \* Wie wou je weten of ze Duits kon spreken?  
*who wanted you know if she German could speak*  
 ‘Who did you want to know whether she could speak German?’

## References

Abbreviation: *SGL* [*Studies in Greek linguistics*. University of Thessaloniki.]

- Alexiadou, Artemis. 1997. On the structure of Greek relative clauses. *SGL* **18**:15-29.  
 Alexiadou, Artemis and Elena Anagnostopoulou. 1998. Clitics in restrictive relatives: An antisymmetric account. *SGL* **17**: 304-317.  
 Alexiadou, Artemis and Elena Anagnostopoulou. To appear. Asymmetries in the distribution of clitics: The case of Greek restrictive relatives. In F. Beukema and M. den Dikken (eds.) *Clitics in the languages of Europe*.  
 Anagnostopoulou, Elena. 1994. *Clitic dependencies in Modern Greek*. PhD thesis, University of Salzburg.  
 Anagnostopoulou, Elena. 1997. CLLD and contrastive left dislocation. In E. Anagnostopoulou et al.(eds.), *Materials on left dislocation*, 151-192. J.Ben., A’dam.  
 Androutaki, Anna. 1998. Wh- and direct object clitics. *SGL* **18**: 30-40.  
 Aoun, Joseph and Elabbas Benmamoun. 1998. Minimality, reconstruction, and PF movement. *Linguistic Inquiry* **29**: 569-597.  
 Demirdache, Hamida. 1991. *Resumptive chains in restrictive relatives, appositives, and dislocation structures*. PhD thesis, MIT.  
 Erteschik-Shir, Nomi. 1992. Resumptive pronouns in islands. In H. Goodluck and M Rochemont (eds.), *Island constraints*. Pp. 89-108. Kluwer: Dordrecht.  
 Franks, Steven. 1995. *Parameters of Slavic morphosyntax*. CUP: Cambridge.  
 Grosu, Alexander. 1994. *Three studies in locality and case*. Routledge: London.  
 Holton, David, Peter Mackridge, and Irene Philippaki-Warbuton. 1997. *Greek: A comprehensive grammar of the modern language*. Routledge: London.  
 Joseph, Brian. 1980. Recovery of information in relative clauses: Evidence from Greek and Hebrew. *Journal of Linguistics* **16**: 237-244.  
 Marvin, Tatjana. 1997. Wh-movement in the generative theory with special reference to Slovene. Diploma thesis, University of Ljubljana.  
 McCloskey, James. 1979. *Transformational syntax and model theoretic semantics: A case study in Modern Irish*. Reidel: Dordrecht.  
 McCloskey, James. 1990. Resumptive pronouns, A'-binding, and levels of representation in Irish. In R. Hendrick (ed.) *The syntax of the modern Celtic languages*. *Syntax and semantics* **23**: 199-248. Academic Press: New York.



- Milapides, Michael. 1990. *Aspects of ellipsis in English and Greek*. PhD thesis, Univ. of Thessaloniki.
- Pesetsky, David. 1998. Some Optimality principles of sentence pronunciation. In P. Barbosa et al. (eds.) *Is the best good enough?* MIT Press: Cambridge.
- Rudin, Catherine. 1985. *Aspects of Bulgarian syntax: Complementizers and wh-constructions*. Slavica Publishers: Columbus, Ohio.
- Stavrou, Melita. 1984. I klitiki antonimia stis periopistikes anaphorikes protaseis me eksartisi amesou antikeimenou pou eisagontai me to 'pou'. *SGL* 2: 121-136.
- Theophanopoulou-Kontou, Dimitra. 1986-87. Kenes katigories ke klitika sti Nea Elliniki: I periptosi tou amesou antikimenou. *Glossologia* 5-6: 41-68.