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CLITICS, ANAPHORS, AND A
PROBLEM OF COINDEXATION
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The purpose of this squib is to investigate sentences like (1) in Modern Greek (MG):

- (1) O Costas ton thavmazi ton eafton tu.
Costas him admires himself
'Costas admires himself.'

This sentence raises two questions. The first one can be accounted for within the framework of the binding theory as postulated in Chomsky (1981) and related works, but the second one cannot. It will appear, however, that the two issues are ultimately related.

1. The First Problem

The peculiarity of (1) is obvious: if the anaphor *ton eafton tu* is properly bound by *Costas*, then the preverbal *ton*, as a pronoun, should violate Principle B of the binding theory (Chomsky (1981)).¹ Nevertheless, (1) is fully acceptable.

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¹ The distribution of the Greek short-distance anaphor [ton eafton tu] obeys Principle A of the binding theory, as stated in Chomsky (1981):

- (i) O Costas vlepi ton eafton tu.
Costas sees himself
'Costas sees himself.'

The clitic pronominal and the anaphor need not cooccur. The anaphor can be present alone, giving, as expected, the reflexive reading (2a), or the pronominal clitic can be the only argument, permitting, as predicted by the binding theory, only the reading indicated in (2b):

- (2) a. O Costas thavmazi ton eafton tu.
'Costas admires himself.'
b. O Costas ton thavmazi.
'Costas admires him/*himself.'

How then does the combination of (2a) and (2b) yield only the reflexive reading, as shown in (1)? Moreover, why isn't (1) ruled out as a violation of Principle B, which MG pronouns are subject to?

As is well known, a clitic agrees in gender, number, and Case with the object of the verb, whether the latter is present overtly (clitic doubling) or not. I will assume here the suggestion of Borer (1983) according to which a clitic is the lexical realization of the content of the θ -grid of the verb. The content of the θ -grid of the verb can be seen from the morphology of the clitic and/or that of the overt object. In order to see the exact features involved, let us examine all the relevant morphemes of (1), repeated here in more detail as (3):

- (3) O Costas ton thavmazi
Costas(nom) Cl(acc,masc,sing) admires
ton eafton tu.
Det(acc,masc,sing) self his(gen,masc,sing)
'Costas admires himself.'

The anaphor term *ton eafton tu* contains the definite article *ton*, a head *eafton*, and a possessive pronoun *tu*. The fact that the possessive pronoun follows the head has, of course, nothing to do with anaphora, as all possessors follow the head noun in MG:

- (4) a. i adhelpi
Det(nom,fem,sing) sister(nom)
tu Costa
Pron(gen,masc,sing) Costas (gen)
'Costas's sister'
b. i adhelpi
Det(nom,fem,sing) sister(nom)
tu
Pron(gen,masc,sing)
'his sister'

Returning to (3), let us assign *j* as the index of the anaphoric

(ii) *O Costas xeri oti i Maria vlepi ton eafton tu.
Costas knows that Maria sees himself

NP. The index of the possessive pronoun *tu* contained within the anaphoric NP cannot be *j*. This follows from what at times has been called the “*i*-within-*i* Condition” (Chomsky (1981) and others):

(5) * $[_{NP_i} \dots N \dots X_i \dots]$

Although the *i*-within-*i* Condition has become rather controversial (see, among others, Bouchard (1985)), I believe that there would still be general agreement that a possessive pronoun cannot bear the same index as the NP containing it, preventing in this way the generation of (6), for example:

(6) * $[_i \text{his}_i \text{ friend}]_i$

The index of *tu* in (3) can thus never be the same as that of the whole anaphoric NP. Let us then assign *tu* the index *k*. Two questions naturally arise: What is the index of the clitic, and what is the index of the subject of sentence (3)?

We know that the clitic shares the features of the object NP through the θ -grid. In other words, the index of the clitic is *j*.

In order for the subject of sentence (3) to properly bind the anaphoric NP, the two must carry the same index. This would imply that the index of *Costas* in (3) is *j*, the same as that of the anaphoric NP object. This assumption gives us the following indexing pattern for (3):

(7) O $Costas_j$ ton_j *thavmazi* $[_{ton} \text{ eafton } tu_k]_j$.

The indexing of (7) cannot be correct, however, because the pronominal clitic *ton* is bound by the subject, which is impossible.

Since reflexivity implies some binding within the sentence, the other (remaining) option is for *Costas* to carry the index *k*. This would yield the indexing pattern shown in (8):

(8) O $Costas_k$ ton_j *thavmazi* $[_{ton} \text{ eafton } tu_k]_j$.

This indexing pattern implies that by sharing the referential index *k*, *o Costas* and *tu* will also share lexical features. This predicts that if the features of the subject were to change, it would be the item sharing its index (the possessive pronoun) that would change its morphology, *not* the head of the anaphoric NP. This prediction is verified:

(9) a. I Maria ton thavmazi
 Maria(nom) him(acc,masc,sing) admires
 ton eafton tis.
 Det(acc,masc,sing) self her
 ‘Maria admires herself.’

- b. Egho ton xero
 I him(acc,masc,sing) know
 ton eafon mu.
 Det(acc,masc,sing) self my
 'I know myself.'

As these examples show, the clitic *ton*, as well as *eafon* and its determiner *ton*, remain in the masculine, third person morphology, even though the subject is feminine (9a) or first person (9b). The features of the antecedent of the anaphor appear on the possessive pronoun in (9a–b).²

The above examples confirm the suggestion that the subject of the sentence is coindexed not with the anaphoric NP but with the possessive pronoun inside it. Since the clitic and the anaphoric NP are coindexed, the clitic is not coindexed with the subject of the sentence. This explains why sentence (3) (= (1)) does not violate Principle B.³

2. The Second Problem

Now that we have used the clitic as a diagnostic, its presence becomes irrelevant for our purposes since cliticization is op-

² The masculine morphology of *ton eafon* remains as such with any gender and with abstract nouns as well, the agreement with the subject appearing on the possessive pronoun:

- (i) I anthropotita katadhikase ton
 mankind(nom,fem,sing) sentenced Det(acc,masc,sing)
 eafon tis se thanato.
 self her to death
 'Mankind sentenced itself to death.'

In fact, the "immutability" of *ton eafon* extends to the domain of number as well: the plural *tus eafus* can occur when the subject is in the plural, yet the singular *ton eafon* can also be used in the same contexts, and for some speakers it is even preferable. Of course, the plurality of the subject can be seen on the possessive pronoun following *ton eafon*:

- (ii) I ghinekes thavmazoun ton eafon tus.
 the women(fem,pl) admire Det(masc,sing) self their
 'The women admire themselves.'

³ There is, of course, nothing a priori problematic with clitic doubling of an anaphor. For instance, the following sentences are all equally acceptable in Italian:

- (i) Queste cose Mauro se le nega.
 these things Mauro Refl Cl denies
 (ii) Queste cose Mauro le nega a se stesso.
 these things Mauro Cl denies to himself
 (iii) Queste cose Mauro se le nega a se stesso.
 these things Mauro Refl Cl denies to himself
 'Mauro denies himself these things.'

Here, however, the doubling clitic *se* is anaphoric by itself (see (i)); hence, in (iii) the subject *Mauro* can legally bind the clitic as well as the anaphoric NP *se stesso*. Thanks to M. Scorretti for these data.

tional in MG. We have seen that in MG the anaphoric NP consists of the phrase in (10):

(10) [ton eafton Poss]

The Poss (possessive pronoun) agrees in gender and number with the subject with which it also shares its referential index. We have also seen that the index of the whole NP of (10) is not the same as that of the subject of the sentence:

(11) NP_i V [ton eafton Poss_i]_j

As is obvious from (11), this means that, technically, the subject cannot bind the anaphoric NP. In light of these facts we might have to reconsider the formulation of the binding principles for MG, since "binding" is partly understood as sharing the same index. This, however, cannot account for the MG data since, as we have seen, no possible indexing will save sentences like (1) within the framework established so far.

Neither can we use the index of Poss to postulate binding, because Poss, when modifying any head-of-NP except *eafton*, signifies not reflexivity but simply possession:

(12) O Costas dhiavazi to vivlio tu.
Costas reads the book his
'Costas_i reads his_{i/j} book.'

(12) reflects exactly the well-known behavior of the English possessive pronoun, which in a sentence like (12) can also be either coreferential with the subject, or free. However, when the head of the NP containing the possessive pronoun is *eafton*, then the possessive pronoun is necessarily understood as coreferential with the subject of the sentence:

(13) O Costas thavmazi ton eafton tu.
Costas_i admires ton eafton his_{i/*j}

We therefore cannot use Poss of (10) to mark reflexivity any more than we can use indexing. These data might suggest that indexing may not be an adequate mechanism for binding and thereby confirm the need to explore other mechanisms.

Alternatively, we might consider that the difference between (12) and (13) seems to point toward properties of the head *eafton* of the anaphor NP. As Ken Hale (personal communication) has suggested, we might be dealing with a mechanism of obviation, similar to that proposed for Hopi anaphora by Jeanne (1978) and Jeanne and Hale (1986).⁴ This would entail that the NP we have been dealing with is of roughly the form proposed by Helke (1971) (see Chomsky (1981, 102)); thus, in Greek the structure would be [_{NP}[_N self] pronoun], in which the pronoun is bound. What obliges the pronoun to be bound would

⁴ This mechanism is generally referred to as "obviation," although it can mark a constituent as either [+obviative] or [+proximate].

be a feature [+proximate], associated with the head *eafton*. This determines the status of the pronoun as anaphoric. In other words, contrary to what I have been calling it so far, the NP [ton eafton Poss] is not an anaphor. Its distribution is determined by the distribution of the anaphoric pronoun contained within it. Since the latter must always be c-commanded by a coindexed antecedent inside its governing category, the whole NP [ton eafton Poss] will only occur in environments where Principle A for Poss is satisfied. In these environments, however, the whole NP would not itself be bound. This is in accordance with the conclusion reached in the first part of this squib. The NP is not, strictly speaking, an anaphor. That its distribution is determined by Principle A is, in a way, an illusion; it is the pronoun Poss whose distribution is regulated by that principle.

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PREDICATIVE APs
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1. Subject-predicated APs Are in VP

The sequence . . . V (NP) AP shows up in several different English constructions. Three of these constructions are illustrated in (1):¹

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¹ There are other classes, which I leave out of consideration here. I am not concerned, for example, with APs that are selected by V, as in (i):

- (i) John considers Bill crazy.

This kind of AP has properties quite different from those of the APs considered in the text. There is a selectional/thematic relation between *consider* and *crazy*, but not between *consider* and *Bill*; moreover, (i) is ungrammatical if the AP is left out, which is not the case for the examples in (1). (i) is thus a plausible candidate for small-clause status on semantic