For some speakers, however, the judgments of the source sentence versions of (69-70) are nearly as bad as the judgments for the TI and FFEX versions. This means that, for these speakers, the hypothesis that TI and FFEX produce results of equal grammaticality cannot be tested in these cases, since we don't know whether the ungrammaticality of (69-70),$c$ results from the badness of their sources or from the application of TI and FFEX.

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1. Introduction

In modern Greek, there exist surface alternates of the following sort:

(1) a. * Welo na figi o yanit want-log-plf. leave-JUG-SBJ John-NO
    'I want John to leave'

   b. Welo ta leio na figi
    John-AOCL
    'I want John to leave'

(2) a. Geooro pouw o yanit pie skhipnos
    consider-log CUMP RUN be-JUG smart-NOM
    'I consider John to be smart'

   b. Geooro ton yanit pouw pie skhipnos
    ACC
    'I consider John to be smart'

where the (a) sentences have an embedded clause with a fully-specified NP subject in the nominative case, and the (b) sentences have an NP, corresponding to the embedded subject of the (a) sentences, which is in the accusative case, and has moved to the left of the verbal particle on or the complementizer pou. Each sentence pair has the same basic meaning, perhaps differing only in some ill-defined way as to emphasis or focus. Moreover, with respect to similarities between the (a) and the (b) sentences, it is important to note that there is no difference, morphological or otherwise, in their respective embedded verbs—in each case, the verb is fully finite, marked for both person and number. Thus,
the case-marking and the word-order are the only superficial
differences between the (a) and the (b) sentences.

Nonetheless, it can be shown that these differences are
not merely due to idiosyncrasies of Greek case-marking and/or
word-order, but rather that they are indicative of the fact
that a rule has applied in the derivation of the (b) sentences
which has not applied in the derivation of the (a) sentences.
This rule is the rule of Subject-to-Object-Raising,
by which a subject NP in a lower clause becomes the object
in a higher clause. The concern of this paper, then, will
be two-fold. First, arguments supporting this proposed Raising
analysis for the (b) sentences will be given. Once this
analysis has been established, the nature of the Raising
process will be investigated, with the purpose of determining
whether the rule operates by removing the lower subject from
its clause, leaving behind a "punctured" clause-remnant, or
by copying that NP out of its clause, so that the embedded
clause is still intact after raising has taken place. This
last question is not as trivial as it might seem, for Greek
independently has a rule of Subject-Pronoun-Drop, so that un-
der normal conditions, a copy left by the raised subject would
not get a chance to surface as such. More will be said later
about Subject-Pronoun-Drop.

2.0 Arguments for Raising

In order to prove that the rule of Raising is operative
in the derivation of the (b) sentences above, two types of
evidence are necessary. First, it must be shown that in the
structure represented by the (b) sentences, the accusative NP
is not the underlying object of the matrix verb, as it would
be if the verb were subcategorized for two NP's, analogous to
the English verb persuade. This type of structure will be re-
ferred to throughout as an Object-EQU1 subcategorization. Sec-
ond, it must be shown that the accusative NP is in fact a mem-
ber of the upper clause.

2.1: The Greek verb πλησ "persuade" must have an Object-EQU1
subcategorization because of sentences such as the following:

(3) επισκέψει τον γιον π τον γιον λοπές Ν
περάσει-ρη-σάκ ΕΟΝ κάθη-κατό ηο-κρος ΔΟΥΡ
"I persuaded John that Larry loves George"

Thus, it is instructive to compare its properties with those
of the putative Raising verbs ἀρετε 'want' and ἀρετε 'consi-
der'. In particular, there are several differences in behav-
ior between ἀρετε and ἀρετε on the one hand, and πλησι on the
other, differences which argue against an Object-EQU1 subca-
tegorization on ἀρετε and ἀρετε.

2.1.1: For one thing, there is synonymy between a sentence
whose clause embedded under ἀρετε is active and the correspon-
ding one whose embedded clause is passive:

(4) a. ἀρετε τον γιον π τον γιον λοπές Ν
ἀρετε-πατρο χακ-κατό ηο-κρος ΔΟΥΡ
"I want John to be examined by the doctor"

b. ἀρετε τον γιον π τον γιον λοπές Ν
ἀρετε-πατρο χακ-κατό ηο-κρος ΔΟΥΡ
"I want the doctor to examine John."

The only difference between (4a) and (4b) is whatever difference of emphasis there is between active and passive sentences in general—both refer to the same event which is desired to take place. The same holds for *George*. For (5a) with an active complement is synonymous with (5b) with a passive complement (consisting here of the copula plus the past passive participle):

(5) a. *George* ton petro pos elkalessa aito ton skilo
Peter-ACC CAF stole-3sg thin-the-dog-ACC
'I consider Peter to have stolen this dog'

b. *George* aito ton skilo pos ine klemenos apo ton petro
be-3sg stolen-3mp by
'I consider this dog to have been stolen by Peter.'

Crucially, this is not the case with the verb *elpo* 'persuade':

(6) a. epila ton yatro na eksetai
ton yani
persuaded-3sg doctor examine-3sg John-ACC
'I persuaded the doctor to examine John!'

≠ b. epila ton yano na eksetai apo ton yatro
examine-PASS-3sg
'I persuaded John to be examined by the doctor.'

This is exactly the result that would be expected if *elpo* and *George* did not govern underlying *Object*-EQUI subcategorization, but rather were subcategorized for only a sentential NP complement, and would constitute an explanatory problem if these verbs governed two NPs underlyingly, since (4a) and (4b), as well as (5a) and (5b), would have different deep structures, but would have the same basic meaning. The accusative NP in (1b) and (2b) therefore cannot be underlyingly an object of the matrix verb, and consequently must gain that status in the course of the derivation.

2.1.2. Furthermore, for at least some speakers of Greek, an idiom consisting of a verb plus an accusative object can be passivized and embedded under *elpo* in the construction of (1b) and still preserve the idiomatic reading. This is impossible with *pilo*, where such a sentence is ungrammatical. Thus in the phrase *pilo kato to skilo*, literally 'I give wood to someone', *kato* 'wood' can be passivized, and the whole phrase embedded under *elpo* with the idiomatic reading intact:

(7) *elpo kato na tou doloi*

him-GEN give-PASS-3sg
'I want him to be spanked!' (Idiomatic)

The corresponding *elpo* sentence is ungrammatical in the idiomatic reading:

(5) *elpo kato na tou doloi*

'I persuaded him to be spanked'.

It would be impossible for *elpo* to have *Object*-EQUI subcategorization and still preserve the idiomatic reading of this phrase, under the reasonable assumption for semantic interpretation that only the parts of idioms that are together in deep structure will be interpreted idiomatically. Even more importantly, *pilo* here has no reference, and therefore could not trigger EQUI, whose primary condition for applicability is co-reference. The facts in (7) are exactly what would be expected if *elpo* had only a sentence as complement in underlying structure.
Essentially the same argument can be constructed on the basis of subject idioms such as *kelo pefti* (see kappa), literally "wood falls (on some one)" but idiomatically ‘someone gets hurt/suffers (in a fight)’. As expected, the idiomatic reading is preserved when this expression is embedded under *kelo* and *georo*, but crucially, not when under *pigo*:

(9) a. *kelo keilo na pefti se ahton*
    "I want him to suffer (in the fight)" (Idiomatic)
    b. *georo keilo na ekti pefti se ahton*
    "I consider him to have suffered in the fight"

(10) *eplis keilo na pefti se ahton*
    "I persuaded him to get hurt (in the fight)"

Again, these facts follow if *kelo* and *georo* do not have Object-EQUI subcategorizations, but rather are subcategorized for a bare sentential complement in underlying structure.

2.1: Finally, given the evidence of the preceding sections, there is another argument against taking *kelo* and *georo* to be Object-EQUI verbs. If these verbs were subcategorized for the Object-EQUI construction, then heavy restrictions would have to be put on the appearance of this subcategorization. In particular, sentences of the type *kelo/georo NP COMP NP VP*, would have to be prevented from surfacing; that is, when such a construction occurred underlyingly, the conditions for Object-EQUI would have to be met obligatorily to avoid such sentences as:

(11) *kelo ton yani na figi i maria*

Whereas there are verbs that do require such restrictions, for example, *anpigo* ‘force’, it is important to note that these verbs do not behave like *kelo* and *georo* with respect to the properties mentioned in the previous sections. Thus, while the need for a restriction on *anpigo* in principle, the need for a similar restriction on *kelo* and *georo*, and any other verbs exhibiting similar properties is purely an artifact of the decision to regard these verbs as being able to govern NP + D complements underlying. Thus it may be concluded that *kelo* and *georo* do not have Object-EQUI subcategorization underlying, but rather have only a bare sentence as their object complement in deep structure.

2.2: The evidence that the accusative NP in (1b) and (2b) is in fact a member of the upper clause comes from two sources, Reflexivization facts, and the allowable readings for sentential adverbs.

2.2.1: Reflexivization in Greek involves the use of the nominal form *ton o getenv*, "literally ‘the self’, plus a possessive pronoun coreferent with the antecedent—although this type of reflexivization is somewhat elevated stylistically, and is representative of more educated speakers, nonetheless it is a part of current colloquial Greek. The process which introduces this reflexive must be clause-bounded, as indicated by the following sentences:
(12) a. *ego nomiso popon den agapai ton eafonu mu
    *I think that she doesn't love me*
    
    b. ego nomiso popon den me agapai
    me-ACC-CLIF
    'I think that she doesn't love me'.

In (12), we see that the presence of a clause-boundary between two coreferent NP's requires that the second NP be a non-reflexive form, under normal discourse conditions. We shall refer to this Reflexivization process as Ordinary Reflexivization, a process which is restricted to operating within the limits of the simple clause.

The evidence for Raising comes from the fact that the accusative NP in (1b) and (2b) may be the reflexive form, *ton eafonu*, when coreferent with the matrix subject:

(13) a. gela *ton eafonu mu na petixi
    want-1sg. the-self-of me succeed-3sg
    'I want myself to succeed'.

b. Geero *ton eafonu mu pou ine ekkipipon
    consider-1sg be-3sg smart-NCL
    'I consider myself to be smart'.

If the accusative NP in the putative Raising sentences were not a member of the upper clause, then Ordinary Reflexivization would have to be needlessly complicated to account for these cases. Raising therefore has indeed made the downstairs NP a member of the upper clause.

2.2.2. The argument from the reading of adverbs is based on the following sentences:

(14) a. Sela yani fonakta na wlausa to vivilie
    wanted-1sg NGH loudly read-3sg the book
    *I wanted John to read the book loudly*

b. Iro elo yani fonakta na wlausa to vivilie
    John-ACC read-3sg
    '(I made it known) loudly (that) I wanted John
    to read the book'.

(15) a. Geero o yani wlausa ine klaguru
    consider-1sg be-3sg, criminel
    'I consider John to be, unfortunately, a criminel'.

b. Geero o yani wlausa pop ine klaguru
    'John, NGH
    'Unfortunately, I consider John to be a criminal'.

The (a) and (b) sentences in (14) and (15) differ as to what the adverb modifies. In (14a) and (15a), the adverb modifies the embedded verb, while in (14b) and (15b), it describes the manner in which the action of the main verb is carried out.

Given these contrasts, there is an argument for the accusative NP *ton yani* in (14b) and (15b) being in the upper clause based on the following principle, formulated in Fotel (1974).

(16) A "sentential" adverb cannot be inserted in a complement clause.

This principle allows "insertion of main clause 'sentential' adverbs between the immediate constituents of the main clause, but not in a position inside complement sentences" (Fotel 1974, p. 147). Assuming this principle to be applicable to languages other than English, all the facts of (14) and (15) can be accounted for straightforwardly if the accusative NP's in the putative Raising sentences are members of the upper clause. That is, the contrasts of (14) and (15) are explicable if the
operation of raising changes the clause-boundaries, so that
the adverb's position between the accusative NP and the com-
plementizer for or the particle na is to the left of the em-
bbeded clause-boundary. This presupposes that in sentences
such as (14a), where the nominative NP is to the left of the
particle na, it is still under the domination of a sentence-
node. These contrasts in adverbial reading would be difficult
to account for if raising did not change the clause boundaries.
In that case, one might try to base these contrasts on the
case-marking of the adjacent NP (that being the only super-
flicial difference between (14a) and (14b), for instance), but
that is a sort of analysis that cries for explanation, for
there is no reason to presuppose that case-marking on an adjacent
noun should have any effect at all on adverb interpretation.

However, if we take the change in case-marking to be a
reflection of a structural change in the position of the em-
bbeded clause-boundary, then we can easily account for the
difference in adverbial reading, because in the (a) sentences,
the adverb will be in the lower clause, while in the (b) sen-
tences, it will be in the upper clause. In this regard, it
should be noted that the case-marking of accusative on the
putative raised NP is exactly what would be expected for a
direct object of a verb, whereas if that NP were not the ob-
ject of the matrix verb, the case-marking assigned to it
would be anomalous. Thus, we may conclude that sentences of

Type of (18) and (26) are in fact derived by a rule of rais-
ing which makes a subject of a subordinate clause into an
object of a superordinate clause.

2.0. The nature of the raising process

Given then, that such a rule of raising does exist in
English, there are some properties of the raising sentences in
particular and Greek syntax in general which make it possible
to consider the following question concerning the nature of
this process--i.e., the raising accomplished by the actual reno-
val of the subject N of the lower clause or by the copying
of that NP out of its clause? What is to say, is the process
one in which the lower clause becomes deprived of a subject,
or one in which the lower clause remains intact after the ap-
plication of raising? The surface structure under a copying
analysis would be derived by pronominalization of the lower NP,
if it is not already a pronoun, and then deletion by the in-
dependently-needed rule of Ungrammatically Neutered Subject Pronoun Drop.
An analysis similar to this has been proposed for raising in
English, but was ultimately rejected by Postal (1974, p. 266-
267) because it would require an otherwise unmotivated rule
for English to delete the lower occurrence of the NP.

It is important to note that the independent rule of EQUI-
NP-Deletion, which in earlier accounts (e.g. Postal (1971) and
Grinder (1972)) was taken to be the rule performing the neces-
sary deletion of the lower N in fact cannot operate here, for
as Postal (1974) points out, it would then have to delete such if's as there, tabs (in tabs be kept on), and others, which can be Raised, but which must be considered to be non-referential, and thus unable to trigger the rule of EQUI, which depends on conditions of co-reference. Moreover, even if it were possible to redefine the conditions on EQUI so that NF's such as there could be subsumed under it, there would still be a problem with having EQUI apply to the output of a raising-by-copying process in English. This is so because EQUI would have to be obligatory whenever raising occurred, since no overt NF can surface in the lower clause of a raising sentence, even though it is generally a lexically-governed rule which is optional with many verbs (e.g. I expect that I'll go, I persuaded John, that he should go). That is to say, for the raising cases, EQUI would be governed not by the matrix verb involved, but rather would depend on the application of another rule. Thus, by any account, a copying analysis for English raising would involve an unmotivated complication of the grammar, either by extra statements about the application of EQUI, or by the addition of an otherwise unnecessary deletion rule.

For Greek, though, raising by copying would not entail any such complication of the grammar. As has been mentioned earlier, Greek independently has a rule deleting unstressed subject pronouns. A normal raising sentence would not be a situation in which the subject pronoun would receive stress, to the deletion, and in all cases, form, would automatically be accounted for by the grammar. Thus the theoretical problem for English inherent in an analysis of raising as a copying process does not appear to hold for Greek.

Moreover, there is one superficial property of raising sentences in Greek which might lead one to suspect that Greek raising is something other than a rule by which the lower verb is simply deprived of its subject. As noted above in section one, the verb in the embedded clause after raising is fully finite, showing marking for both person and number. Thus, there is no de-finitization accompanying the raising process. 14 Postal (1974, p. 264, 364) has conjectured that raising is always accompanied by the de-finitization of the clause that loses its subject. Though Postal does not make explicit what he actually means by “finite verb”, his remarks make sense if we take it to mean a verb inflected for person and number. Although this hypothesis cannot be maintained in its strongest form, because in Japanese, raising leaves behind a fully finite clause, it may be tenable, as Postal himself suggests, but does not make explicit (1974, p. 364), in a weaker form, ad hoc, though it may seem, that excludes verb-final languages. Greek, however, would be a counter-example to even the weakened form of this universal, for it is not a verb-final language, yet the verb in the lower clause continues to keep the person and number marking appropriate before raising.
In this regard, it should be mentioned that in general, Greek does not have non-finite verb-forms—there is no infinitive proper in the language, only inflected subjunctive verb forms marked with the verbal particle $\mathcal{O}$, which appear where other languages have infinitives. However, under at least one interpretation of Fossal's claim, that only languages with appropriate non-finite verb forms could have a rule of Raising, we might expect to find that Greek did not have a Raising rule. Thus the Greek facts can be taken to bear on the validity of Fossal's claim, and conversely, whatever validity his claim may have can be grounds for suspecting that there may be more to Raising in Greek than just the simple removal of a subject from its clause, for if the subject of the lower clause is copied out of its clause, the lower clause would still have a subject after Raising and there would be no reason to expect the verb to become de-infinitized.

2.1. The syntactic evidence for Raising-by-Copying in Greek is of two types. The first concerns both the fact that a pronominal form corresponding to the Raised NF can appear overtly on the surface, and also the conditions under which it can occur. The second is based on the nature of the apparent clause-remanant after Raising. If Raising is accomplished by Copying, then the prediction is that the embedded clause will behave with respect to certain processes as if it were a full clause that had a subject, and not a "punctured" clause that had lost its subject before the operation of the process in question. Thus the nature of the complement after raising can specifically be compared with the one in Object-E2U1 structures, as with the verb πιέσει 'persuade', under the crucial assumption that there does, exist a rule of Object-E2U1 in the language. This is not a trivial assumption, since Greek has a rule of Subject Pronoun Drop. Thus, it is conceivable that instead of E2U1 applying, what is operative in the derivation of (16) from (17):

\[(17)\quad \text{επιθυμε} \quad \text{τον} \quad \text{γάντι} \quad \left[ \text{προσ ο γάντι} \quad \text{τέστι} \right] \]
\[(18)\quad \text{επιθυμε} \quad \text{τον} \quad \text{γάντι} \quad \text{προσέγγισα} \quad \text{John} \quad \text{περιμόνος} \quad \text{διαφορών} \quad \text{ούμενος} \quad \text{περιμόνος} \quad \text{ούμενος} \]

"I persuaded John to leave" in simply from nominalization of the lower occurrence of a γάντι and then Subject Pronoun Drop, which is presumably a late rule, since, among other things, it is discourse-conditioned. Evidence that bears on this assumption comes mainly from the contrasts in the behavior of the respective sentential complements to πιέσει and to raising verbs such as σελερ, for they seem to be hard to account for if πιέσει sentences have a subject in their lower clause throughout the course of their derivation, up to the point at which Subject Pronoun Drop applies. Although the question of Raising-by-Copying and the existence of E2U1 are independent problems, they interact in the second set of data to be treated here. Thus, these data will in essence be testing the following bi-partite hypothesis:

\[(19)\quad \text{Modern Greek has Raising-to-Object-Position by} \]
Copying and not by removal of the subject of the lower clause, and an actual rule of EλU1- 
M-deletion from Object-position (Object-EλU1) 
while the first set of data will be of relevance only to the first part of (19), namely, that Greek Raising is by Copying. Finally, it should be said here that in testing to see whether Greek Raising is by a Copying process, it is being tacitly assumed that a language would not have both Raising-by-Copying and Raising-by-Removal of the lower subject. If this assumption is wrong, then the task becomes one of determining what the conditions for Copying as opposed to Removal actually are. Nothing more will be said about this assumption here.

3.3: As mentioned above, a pronoun coreferent to the Raised NP can appear in the downstairs clause, under appropriate conditions, so that (20) is a possible variant of the Raising construction in (21).

(20) (?)Georo ti maria pom a[t]i ine ekspn
    consider-ing mary-ACC she=HON be-JUG smart-HON-PLA.
    'I consider Mary to be smart'
(21) Georo ti maria pom ine ekspn
    'I consider Mary to be smart'
This is a situation which directly points to Raising as a Copying process, for the occurrence of the pronoun would be difficult to account for if Raising removed the lower subject entirely from its clause. Such sentences would either have to be due to an underlying Object-EλU1 subcategorisation on these verbs, a possibility which was rejected earlier (see pp. 3-7), or else to an ad hoc rule which, after Raising had operated, copied the appropriate pronoun downstairs.

Sentence (20) is marked (?) to indicate that it is well-formed only if the pronoun receives emphasis. Otherwise, the presence of the coreferent pronoun downstairs is superfluous and makes the sentence unexplained—while it is perhaps not ungrammatical, neither is it really Greek. The reason for this is that subject pronouns in Greek generally must be stressed on the surface compare (22), with no surface subject pronoun, with (23), where the pronoun appears:

(22) 14a. ton yani ksei xe a mu lpe kai
    saw-th then said-ACC yesterday and he told something
    'I saw John yesterday and he told me something.'
(23) (?)14a ton yani xwau ke afe lpe kai
    told-ACC tell-TH-then said-ACC
    'I saw John yesterday and he told me something.'
Sentence (23) without emphasis on xwau, has the same unwieldy feel to it as the Raising sentence (20). Thus it appears that the conditions governing Subject Pronoun Drop are the same as those which control the appearance of the pronominal form in the Raising cases. This in an important point, because one of the theoretical considerations which made it conceivable that Greek Raising was by Copying was the fact that an extra rule to delete the lower occurrence of the NP would not be needed, for a rule already existing in the language would be able in principle to perform the necessary deletion. This would only hold, though, if that rule did not have to be complicated in any way in order to account for the Raising sentences.
The parallelism of the conditions on Subject Ironoun Drop and the occurrence of the pronoun downstream in Raising Sentences is confirmed by the following data. Certain conditions favor or in fact require the presence of a pronoun. The adverb mono 'only', for instance, requires that the pronoun be retained in order to have the reading in which it modifies the subject of a sentence; compare (24) with (25) as responses to the question 'What do you think of Peter?':

(24) o petros e bary
  only he-NOM be-Jug smart-NOM
  'Only he is smart'

(25) o petros e bary
  he is only smart (and nothing else)
  only he is smart

We find the exact same situation in the Raising cases:

(26) georo ti maria pou mono afti ine ekzipn
    she-NOM smart-NOM-DEM
    'I consider only Mary to be smart'

(27) georo ti maria pou mono afti ine ekzipn
    he is only smart (and nothing else)
    only Mary to be smart'

To treat this as an idiosyncrasy of pronominalization in Greek, saying perhaps that the adverb mono requires a pronoun along with it which is copied onto it from its antecedent, so that if Raising deprived mono of its head NP, some later rule would copy the appropriate pronoun back onto it, would completely miss the clear connection between the occurrence of the pronoun in (26) and its appearance under emphasis in (20), not to mention the totally ad hoc nature of the copying rule required. Thus, the conclusion seems to be warranted that Raising in

Greek is by copying, and that the lower occurrence of the NP that is copied out of its clause in later deleted by the rule of Unmention Subject Ironoun Drop.

[2.3] The second argument for Raising-by-Copying centers on the hypothesis given in (14), and is based on the behavior of the intensive reflexive o idio: 'the same, very, oneself, etc.', a form which is inflected for gender, number, and case. It generally occurs next to its antecedent, as in (28):

(28) o petros e bary
    Peter be-Jug smart-NOM
    Peter himself saw John

but can float to the right in a simple sentence:

(29) o petros e bary
    Peter be-Jug smart-NOM
    Peter himself saw John.

And, it need not float to sentence-final positions:

(30) o petros e bary
    Peter be-Jug smart-NOM
    Peter himself saw John on the street.

One restriction on this floating is that in complex sentences, it seems that o idio cannot float over a full embedded sentence:

(31) o petros e boro i maria oge, o idio,
    Peter-Jug and-Jug Mary-NOM left-Jug NOM
    Peter himself said that Mary had left

(32) o petros e boro i gl ine tetragoni o idio,
    Peter be-Jug and-Jugucumber idio
    Peter himself believes that the earth is square

(33) o petros e boro i maria agapi ton yorgo
    Peter be-Jug and-Jug loves-Jug George-NOM
    Peter himself thinks that Mary loves George

with the Raising verb elle 'want' and the verb piko 'per-
subject, we find the following: *facing-un-jawal cannot float off of the subject of *wulo over the clause left after raising, but it can float off of the subject of *pilo in the end of the sentence, over the complements clause; these facts are shown in (34) through (37).

(34) *o petro; i geli emena na ton agupiso o idolos; want-3sg me him love-3sg
    'Peter himself wants me to love him'

(35) *i marla; geli ton yani ma ete la edo i ida;
    mary-NOM come ACC come-3sg here N6A-3sg, 3sg
    'Mary herself wants John to come here'

(36) i marla; epise ton yani na ine kalos; i ida;
    persuaded-3sg be-3sg good-NOM-MASC
    'Mary herself persuaded John to be good'

(37) i marla; epise ton petro na ine kalo arogi i ida;
    persuaded-3sg be-3sg good-boy-NOM-NOM
    'Mary herself persuaded Peter to be a good boy'

If the hypothesis of (19) were not accepted, then separate restrictions would be needed to account for the impossibility of floating a *idlo across a full clause and across the apparent clause-remnant left by raising. Furthermore, some ad hoc statement would be needed to distinguish the *pilo remnant from the *wulo remnant, because of the contrast in their behavior. On the other hand, hypothesis (19) would account for the observed facts straightforwardly, for at the time the Float rule applies, the raising remnant would be a full clause and the EQUI remnant would not be. Therefore, the one restriction on the Float rule, independently needed because of (31) through (33), plus hypothesis (19), would explain (34) through (37).

In the face of this evidence, it is quite hard to maintain the counterclaim that there is no subject-ejul and that raising, in by complete removal of the subject of the lower sentence, for it in *jul sentences and by ironization and then subject fronting stop, we would expect raising not to be able to float off of the subject of *pilo, if the first rule applied before subject fronting drop, or if the ordering were the opposite, then both *jul and *pilo should behave alike in this regard. It is crucial to this argument that raising and EQUI occupy similar positions in derivations, in particular, that raising may be post-cyclic if EQUI is cyclic. The evidence for the cyclicity of EQUI has to do with the removal of the EQUI trigger from the position from which it would ordinarily trigger the rule, by other rules such as Passive or Question Formation. The evidence for the cyclicity of raising is of the same type as is found in English, e.g. interaction with Reflexivization and with Passive. Thus, these facts of a *idlo Float provide rather strong evidence in favor of the hypothesis advanced in (19).

And, the argument can be taken even one step further, for having raising be by Copying eliminates the need for an extrinsic ordering of cyclical rules. If raising is by Copying, then free ordering of the rules of raising and a *idlo-Float is possible, because a *idlo will not be able to float over the complement clause either before or after raising under this hypothesis, for the complement clause in a full clause both be-
For example after raising. On the other hand, if raising is not byCopying, the Tagom-Float rule would have to be extrinsically ordered before raising to prevent it from allowing a float to float across the 'punctured' clause left after raising. In that hypothesis, or else an ad hoc extra statement would have to be placed on a Tagom-Float blocking its application specifically whenever raising has first applied. In view of the lack of evidence for extrinsic orderings between cyclic rules in syntax, such a consequence has to count against a non-copying analysis for raising in Greek. It should be stressed, however, that this is not necessarily a separate argument for raising by Copying, but is rather a further consequence that the facts of (34) through (37) would impose on a grammar that did not have raising by a copying process and did not have a rule of Object-EQUI.

6. Conclusion

In conclusion, it can be stated that the evidence of section three makes it very likely not only that Greek does have a true rule of Object-EQUI-NP-Deletion, but furthermore, that raising to Object-Position in Greek is a Copying rule, and not a rule which deprives the lower clause of a subject altogether. In that case, the putative universal discussed in section 2.0, Postal's de-finitization universal, is not violated by the facts of Greek, for the lower verb will continue to have a subject after the operation of raising, and so would not be expected to become non-finite.

Finally, we can consider the more interesting question of whether languages that have no infinitival verb forms can have rules such as raising operate on as to raise verbs embedded verbs of their subjects. We can entertain the possible hypothesis that only languages without infinitives will have raising-by-copying and furthermore, that in such languages, raising necessarily will be a copying process. This is similar to what is said in its syntax, in that they are both rules which operate between two and only two clauses. Moreover, both share an embedded sentence of its subject, just as raising does in those languages where it does not operate by copying. Also, the fact that English has been shown to exist in Greek would seem to indicate that a non-copying raising rule should be possible in a language with no infinitives. These, however, are all questions that can be described empirically, and so it is better that they be left to further investigation.
Possible Counter-Evidence

The evidence of section three does in fact appear to support the claim that raising in Greek is a copying process, and that furthermore, Greek has a rule of Object-KOJ. However, there are a few sets of data which at first glance appear to be troublesome to these results, in that under certain assumptions about the process involved, hypothesis (19) makes the wrong predictions. However, such counter-evidence will turn out to be just apparent and not real counter-evidence, since there are reasonably well-motivated analyses of the phenomena involved under which the data become irrelevant to the issues which hypothesis (19) deals with. The first such set of data is concerned with the reference of the present active participle, and the second with the conditions under which the complementizer pos may be deleted.

A.A. The present active participle is indeclinable in form, and occurs with no overt subject, so that there can be ambiguity as to which NP in a given sentence the participle refers to. In general, it seems that the participle is interpreted as going with a nominative NP, that is, the subject of some verb. Thus in a simple sentence, the participle is read as going with the subject:

(38) idaj ton yani1 perpatondas1 a sto dromo
saw-1sg John-ACC walking-VERB. on-the street

In a complex sentence, where there is more than one nominative NP subject, the position of the participle generally affects the possible readings - when it in sentence-initial, it goes with the matrix subject only, but when it is sentence-final, it can be read with the matrix or embedded subjects:

(39) kapnizodnai1 a sto paro tu, o petros1 nomize
smoking-VERB. on-the cigar and Petros-1sg thought
pos o yani1 xamogeloue
and he 1sg laughed
GGSF John-1sg smiled
while he1 was smoking his cigar, Peter1 thought
that John1 smiled.

(40) o petros1 nomize pos o yani1 xamogeloue kapnizodnai1 a sto paro tu
while he1 was smoking his cigar, Peter1 thought
that John1 smiled.

Whether this process is one of finding a referent by an interpretive rule for a participle generated with no subject underlyingly, or one of deleting, by some form of an EQV rule, the subject of the participle under coreference with another NP in the sentence, probably cannot be decided on the basis of the Greek facts, regardless of the theoretical status each approach may have. It will be assumed here that the two are equivalent with respect to these facts, and the neutral terminology of the "reading" the participle has will be used, with no theoretical bias to be understood.

Concerning the raising and Object-KOJ sentences, there are the following facts which would seem to run counter to the
claim of hypotaxis (19):

(41) belo, ton petro, na skotosi, apo ton yani, lag' pater-ACC, kill-PASS-3sg by John
fevgeta(1)/3sg apo to spiti
leaving-END from the house
'I want Peter to be killed by John, as I/he am/is leaving (from) the house.'

(42) epina ton yani, na mej kamanj, fevgeta(1)/3sg
lag' john-ACC me see-again-3sg
apo to spiti
'I persuaded John to see me again, as I/he was leaving (from) the house.'

In (41), where Raising has occurred, the present active participle is not read with the former lower subject, but instead goes with the matrix subject, whereas in (42), an Object-EQUI sentence, the participle is read with either the matrix subject or the matrix object. Sentence (41) contrasts with (43), where Raising has not taken place, and both referents are possible with the participle:

(43) belo, na skotosi o petro, apo ton yani, lev-
ga, lag' pater-LOC by
fevgeta(1)/3sg apo to spiti
'I want Peter to be killed by John, as I/he am/is leaving (from) the house.'

These facts run counter to what hypothesis (19) would predict, under the necessary assumptions that the process by which the referent of the participle is fixed takes place after Raising, possibly post-cyclically, and, before Subject Pronoun Drop. In that case, (19) would predict that the participle will be read with the former lower subject in Raising cases, because there would be a nominative NP present in the lower clause, in the

in the form of the initial downtonigh subject, which the participle could be associated with, and, for the Object-EQUI cases, since (19) predicts for there being no subject in the lower sentence after EQU, the participle should be read only with the matrix subject, inasmuch as it otherwise does not appear to be able to go with accusative NP objects.

However, (41) is not representative of the whole situation with Raising and the reading of the participle—it seems to be more complicated than (41) would indicate, for in fact, there do exist some sentences in which the participle is read with the Raising NP:

(44) o petro, belo. ton yani, na traganj, permaton-
lag' pater-3sg, kill-PASS-3sg, walking-
day/3sg apo to school
'I want Peter to be killed, while he is walking to school.'

(45) luco, ton yani, poz ina filirum, milanda(1)/3sg
consider-LOC ACC bez-3sg talkative talking
eti takal
in the class
'I consider John to be talkative, when he is talking in class.'

These sentences, especially (45) suggest that semantic factors may well be at work in allowing the various possible readings:

Talking is more likely to be an action connected with someone who is identified as gurrulemu, rather than with one who is doing the mental activity implicit in luco. Furthermore, even though sentence-initial participles are generally read with the matrix subject, the preposed version of (45) still
has the reading of the participle going with the raised Pfi

(46) milóu(ma) υιος του γενέτευρος ο Código τον γιαν

'when he is talking in class, I consider John to be (to him) garrulous'.

If semantic factors control the participial readings, then the apparent generalization that the participle is read with nominative NP's only cannot be maintained, and the counter-evidence to hypothesis (19) disappears. A particular set of semantic factors, possibly, though not necessarily, coupled with any considerations of particular structural configurations, would be the crucial determinant for the participial reading.

Moreover, there are other grounds for why the counter-evidence to hypothesis (19) may not be real counter-evidence, for the two assumptions that the participial-referent reading process takes place after raising and before Subject Pronoun Drop, have no independent motivation. Clearly, the deep structure configuration is not crucial to this process, because a subject derived by Passive, and not the denoted subject, is linked to the participle:

(47) o 'petroj; skotone ton yanik fevgonados /j

KOW killed-JBG ACC leaving-PSTCL

apos to spiti

'Peter, killed John, as he /j was leaving (from)

the house'.

(48) o yanik; ekotojik apo ton 'petroj; fevgonados /j

KOW ' kill-PASS-JBG by

apos to spiti

John was killed by Peter, as he /j was leaving (from)

the house'.

Since the process must therefore wait until after passive has applied, we can hypothesize that it is the cycle-final state of affairs which is crucial to the operation of this process.

If this hypothesis is valid, not clearly, it is a question that must be determined empirically, then the participial-referent process becomes irrelevant to the hypothesis of (19). This would be so because if the process in dependent on the cycle-final subject, then it would either be a cyclic process itself or else be global and able to determine the cyclic subject of any earlier stage in a derivation. The process would then operate only with the pre-Raising and pre-EW situation, when the complement clauses of these two are identical in terms of having a subject, and then be irrelevant to hypothesis (19).

And, as to the second assumption, we need only look at the contrast between (41) and (49), where Raising has taken place, but Subject Pronoun Drop has not deleted the lower occurrence of the NP because it is stressed, occurring with the verb mono. Accordingly, the participle can only be read as going with the lower subject:

(49) idiaj; ton yanik, en ekotojik mono after; apo ton 'petroj; fevgonados /j/k apo to spiti

'Peter, killed John, as he /j was leaving (from)

the house'.

Sentences such as (41), then, may indicate that where various derivations are possible, and there is no semantic factor that
influences the appropriateness of a particular reading, then the participle is interpreted as going with the nearest nominative NP on the surface. The participial-referent reading process would then be dependent on the surface structure configurations, and so would be affected by the application of Subject Pronoun Drop.

It is unclear which of these various proposals is in fact correct, and obviously, more work will have to be done concerning these problems with the reading of the participle. But, it seems likely that at least some of the suggestions given here will prove to have relevance to the final solution. Thus, the apparent counter-evidence to (19) can be considered to be no more than just apparent.

A.2. The second set of apparently troublesome data centers on the deletion of the complementizer *po* 'that'. We find the following pattern for raising verbs such as *gorei* 'consider' which occur with *po*:

(50) *peter* *gorei* (*po*) *yani* *ike* *ki* *ekepopos* (30) *Peter* considers John to be smart.

(51) *peter* *gorei* ton *yani* *ike* *ki* *ekepopos* (31) *Peter* considers John to be smart.

That is, *po*, apparently optional with full clauses, is obligatory with the clause left over after raising.22 This is potential counter-evidence to the analysis of raising as a copying process because it appears to be a way in which the embedded clause after raising does not behave like a full clause. The non-optional nature of *po* in (51) would then indicate that there is in fact no subject to the lower verb *yani*. This counter-evidence, however, does not hold up, for the ungrammaticality of (51) may be attributed to factors which make it irrelevant to the question of raising by copying. In particular, it is the case that *po*-deletion, although not completely impossible, does not produce perfectly acceptable sentences when a complement clause has lost its subject by subject pronoun drop:

(52) nomi *po* *eke* *ta* *yani* *ake* *eke* *po* *yani* think that be-left-yog for the Athena's I think that he be left for Athens.

(53) nomi *po* *eke* *ta* *yani* *ake* *eke* *po* *yani* I think that he be left for Athens.

The disappearance of the subject pronoun contributes to the unacceptability of (51). This suggests that *po*-deletion applies late in a derivation, after subject pronoun drop has deleted the lower pronoun in (51), and then in (51). In that case, *po*-deletion would have no bearing on the question of how raising is carried out.

Still, though, *po*-deletion in (53) is not as bad as in (51), so other factors may be at work as well. It is possible, although perhaps not provable, that the juxtaposition of an accusative NP with a finite verb in what causes the further unacceptability of (51). The impossibility of *po*-deletion in
the Raising cases could then perhaps be connected with the
need to be able to identify clause-initial boundaries; the
presence of the complementizer would facilitate this process,
whereas its absence would hinder it. The non-deletion data
therefore would not constitute counter-evidence to the claim
that Greek Raising is by Copying.

Footnote:
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1. This Raising process is restricted to subjects of lower
clauses. Despite the existence of sentences such as:

(i) *Olo ton yapi na (ton) agaptei i maria
John-ACC him love-by Mary-HOV.
"I went John that Mary love him"

which superficially appear to involve the raising of a non-
subject (since ton yapi is the object of agaptei), it is clear
that ton yapi has not become part of the upper clause. For
one thing, such an NP cannot become the reflexive form ton
suffon, but can only be a non-reflexive pronoun, and the Re-
flexivization process in clause-boundary (see pp. 7-8):

(ii) *iOlo omea/ton suffon na pa agaptei i maria
me the-neg self of me
'I wanted Mary to love me'

nor can it criticize onto Olo

(iii) *me iOlo na agaptei i maria
me CLIT
'I wanted Mary to love me'.

Therefore, (i) must be the result of a Scrambling rule which
moves constituents around within a clause. The presence of
the little ton, then, would be due to a dislocation process
occurring within the lower clause. Furthermore, the verbal
particle na must be regarded as not signaling a clause-bound-
dary, and so is not a complementizer proper.

2. I assume here that a Phrase-Structure rule generation of
the putative Raising sentences is not at all motivated—the
standard sorts of arguments against such a generation, e.g.,
those based on lexical facts, the possibility of passive mor-
phology in the embedded clause, etc., all hold for Greek.

3. This clause of verbs is rather small, and throughout, Olo
and Omea will be taken as paradigmatic for this clause.

4. The literal reading is also ungrammatical with pLhe, pre-
sumably because pLhe requires an animate NP object, and telle
is non-animate.
1. This presumes that Greek has a rule of self-evident evidence supporting this assumption; see below pp. 19-22, section 1.32.

6. The middle voice of the verb is by far the most common way of expressing reflexive action.

7. This last stipulation is necessary because of sentences such as:

(iv) ego nomizo pos o eftos mu wa fijj ne ligo
   'I think that as for myself, I will leave shortly'
   Here the reflexive appears across a clause-boundary from its antecedent, and is nominative; this, however, seems to be a different case from the reflexivization in (12). The nominative reflexive can be used only in contexts which imply a marked dichotomy between opposing desires or effects within the same person (a distinction that is hard to capture in an English translation). Furthermore, it can appear several clauses away from its antecedent, and in fact, need not have any overt antecedent—the non-nominative reflexive requires an antecedent, though:

(v) a. nomizo pos i maria epise
   'I think that Mary persuaded John to leave.'
   John-ACC say
   posi prepil is flexi ennoe o eftos mu
   'Marry persuaded John to leave (even though I really wanted to stay)
   b. o eftos mu Ga fevgi se ligo
   'I think that Marry persuaded John to leave.'
   the-self-ACC of-me put leave short.
   John-ACC say
   c. *o yane stiplies ton eftos mu
   'I think that Mary persuaded John to leave (even though I really wanted to stay)
   John-ACC hit-3sg the-self-ACC of-me
   'John hit myself.'

Since (iv) cannot have the unmarked reading of "I think that I'll go soon", with no emphasis or contrast involved, and (12) does not have the contrastive reading, we can conclude that the phenomenon in (iv) and (v) is truly distinct from that in (12).

8. Note that the Reflexive form ton eftos requires that the downstairs verb have third person agreement on it. For a dis-
verbal because it lacked the appropriate non-finite verb forms, but see p. 15.

16. This in itself is an interesting point. For raising in modern Greek appears to be rather limited in its scope—there do not seem to be many predicates that allow it, and those that do have the non-raised form more common variant. In earlier stages, Greek had raising as a much more productive and widespread rule, and furthermore, had infinitival verb forms. Thus, we may have here an instance of a language in the process of losing a syntactic rule.

17. This float process is not restricted to occurring only off of subjects, but such cases are the only ones of interest to us here. Other quantifier-like elements can float but do not show the relevant properties for this argument.

18. The proper generalization it seems, must involve the notion of 'null' clause, as opposed to one that has been 'punctured' by the loss of its subject due to a rule such as EQUI. This must be so because a tóma cannot float over embedded sentences containing WEATHER-PREDICATES, which presumably have no subject underlyingly (although possibly this could be taken to support a view that such verbs have dummy subjects in the deepest structure).

(vii) * tóma plēstevi ev rviati/xionisi torn g tóma
John-NOM believe-DG rain / snow now NOM-MASC
'John himself believes it is raining / snowing now' .

Furthermore, the level at which this constraint applies must be before Subject Pronoun Drop, or else the removal of a subject by this rule must be considered different from the removal by a rule such as EQUI (a proposal which may be independently justifiable in languages where EQUI triggers de-finitification of a verb but Subject Pronoun Drop, naturally, does not), because of sentences such as (viii), in response to the question 'What does Mary want concerning Peter?'.

(viii) * tóma plēstevi ev rviati/xionisi torn g tóma
Mary-NOM say-DG good-boy NOM-GEN
'Mary herself wants him to be a good boy' .

This fact ties in with the observations regarding tóma-Float in Raising sentences.

19. This assumes that the Float rule applies before Subject Pronoun Drop and after raising and EQUI. Subject Pronoun Drop

has been argued to be post-cyclic at least for other languages, and a late ordering for the rule in Greek means to be warranted on the basis of trace facts (and, cf. footnote 19), of the Float rule and tóma. If it applied before tóma, special statements would be needed to allow tóma to float across the complement clause.

20. Evidence for raising being cyclical is of the same type as in English, cf. p. 21. If a tóma-Float had to apply before raising, then it too would have to be cyclic.

21. The verbal particle -o that occurs with tóma can never be deleted; thus, only -is of interest here.

22. These facts can also be used on an argument that the tóma has in fact been raised into the upper clause, under the assumption that tóma is required to maintain the delineation of the clause boundaries (cf. below and footnote 29).

23. This functional constraint on complementizer deletion was inspired by a similar observation for English made in Prinz (1974), p. 134, n.16.
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