Copying, and Order-changing Transformations in Modern Greek*

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Abstract

The phenomenon of "redoublement de complement" in Modern Greek may straightforwardly be re-interpreted as copying: that is, in terms of a rule-series that copies the complement on to the front of the Verb-Phrase, pronominalizes one or other of the two occurrences, and then either treats the pronominalized occurrence as an enclitic or deletes it.

But evidence may be adduced that, at least for Greek, a similar copying process is also involved in the transformations for Relativisation, Subject-raising, and Conjunct-movement, as well as in the derivation of inputs for backward Gapping.

It is suggested that the difference between the English and Greek outputs results not from the fact that English employs "order-change" where Greek employs "copy" processes: rather, the processes of Copy are common, but English obligatorily deletes the relics of copy, while Greek sometimes retains them. Copying is thus to be considered an important (and universal?) mechanism of order-changing.

1. Redoublement de complement as Copying.

1.1. Copy of Direct Object.[1]

The simplest sentences of the type

1.1. O kinigos skotose ton liko

The hunter killed the wolf

have free alternants showing redoublement de complement, i.e.,

containing an additional pronoun identical in shape with the article

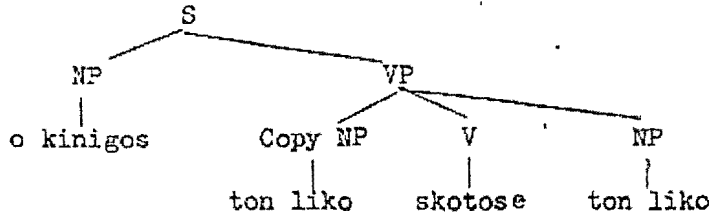of the object NP. Thus,

1.2. O kinigos ton skotose ton liko.

1.3. O kinigos ton liko ton skotose.

Now whereas 1.3. shows an ordering variant which may or may

not depend on 'free word order' type rules,[2] the additional pronoun

clearly has no connection with such re-ordering, as is clear from

the grammaticality of 1.2. itself. What is more, the ungrammaticality

of non-contrastively-stressed

1.4. *O kinigos ton liko skotose[3]

in which VP-internal permutation is employed, can hardly be explained

in relation to 1.3., since it is absurdly ad hoc to suppose that

the permutation somehow requires the additional pronoun.

On the other hand, the (apparent) copying of the article may

be motivated, for both 1.2. and 1.3., if we assume that what is

copied is the entire Direct Object NP. Such copying will produce a

tree[4] such as:

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                        S
              NP                 VP
           o kinigos      Copy NP    V        NP
                          ton liko  skotose  ton liko
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We shall assume that in the present case the choice of NP

Object to be retained in full is (stylistically) free.[5] However,

instead of being deleted, the remaining NP Object is <u>pronominalised</u>.

Thus, pronominalising the <u>Copy</u> NP results in 1.2: "O kinigos <u>ton</u>

skotose ton liko"; on the other hand, pronominalising the <u>original</u>

NP Object produces the ungrammatical[6] 1.3:"*O kinigos ton liko

skotose <u>ton</u>." The natural derivation-order for these processes is

·of course:

    1. Copy Direct Object NP (optional)--by sister-adjunction

(to left) under VP

   · 2. Pronominalisation under Identity within VP[7] (oblig)

    3. Enclitic attraction (oblig)--for most dialects.[8]

1.2. Copy of Indirect Object.

    Consider next sentences with Indirect Object NP. (The IO-NP and

any copy pronoun are underlined):

        1.5.a. O Petros edose to krasi <u>ston Mixali</u>.

                Peter gave the wine to Michael.

        1.5.b. O Petros pire to krasi <u>apo ton Mixali</u>.

                Peter took the wine from Michael.

Sentences 1.6.a. and 1.6.b. below show the alternative construction

with the inflected Article in a simple NP.

1.6.a.   O Petros edose to krasi <u>tu Mixali</u>.[9]

1.6.b.   O Petros pire to krasi <u>tu Mixali</u>.

But the IO-NP may also be copied, as may be seen in the following sentences:

1.7.a.   *O Petros <u>tu</u> edose to krasi <u>ston Mixali</u>.

1.7.b.   *O Petros <u>tu</u> pire to krasi <u>apo ton Mixali</u>.

1.8.a.   *O Petros <u>ston Mixali tu</u> edose to krasi.[10]

1.8.b.   *O Petros <u>apo ton Mixali tu</u> pire to krasi.

1.9.a.   O Petros <u>tu</u> edose to krasi <u>tu Mixali</u>.[11]

1.9.b.   O Petros <u>tu</u> pire to krasi <u>tu Mixali</u>.

1.10.a. O Petros <u>tu Mixali tu</u> edose to krasi.

1.10.b. O Petros <u>tu Mixali tu</u> pire to krasi.

Note that those sentences in which the copy pronoun co-occurs with the preposition-phrase are ungrammatical (1.7., 1.8), while those containing the copy pronoun and the simple NP are grammatical (1.9., 1.10.) regardless of which NP, original or copy, is retained in full. For the dialects in which 1.7. and 1.8. are ungrammatical, copy may not involve a preposition phrase.

1.3. Copy of Direct and Indirect Object Personal Pronouns.

What is most characteristically Balkan in the copying of complements appears in the personal pronoun system.[12] Consider the Direct Object, in sentences 1.11.a-d:

1.11.a. O Petros filise <u>emena</u>.

Peter kissed me.

1.11.b. O Petros <u>me</u> filise <u>emena</u>.

1.11.c. O Petros emena me filise.

1.11.d. O Petros me filise.

and the Indirect Object in sentences 1.12.a-g:

1.12.a. O Petros dini to krasi semena.

Peter gives the wine to me.

1.12.b. O Petros dini to krasi emena.

1.12.c. *O Petros mu dini to krasi semena.

1.12.d. O Petros mu dini to krasi emena.

1.12.e. *O Petros semena mu dini to krasi.

1.12.f. O Petros emena mu dini to krasi.

1.12.g. O Petros mu dini to krasi.

It is clear, again, that the preposition phrase blocks the copy rule; that when copy applies one or other of the occurrences of the DO or IO becomes an enclitic, and that this enclitic is attracted to the verb.[13, 14]

1.4. Copy of both Direct and Indirect Objects.

As was seen above, the enclitic attraction rule normally places the enclitic immediately in front of the verb--but for Imperative immediately after the verb.

The sentences below show both DO and IO enclitics.

1.12.d. O Petros mu dini to krasi emena.

Peter gives me the wine.

1.15.a. O Petros mu to dini to krasi emena.

1.15.b. O Petros to krasi mu to dini emena.

1.13.a. Dose mu to krasi emena!

Give me the wine!

1.16.a. Dose mu to to krasi emena!

1.16.b. Dose to mu to krasi emena!

1.16.c. *Dose to krasi mu to emena!

1.16.d. *Dose to krasi to mu emena!

1.16.e. *Mu to dose to krasi emena!

For the non-Imperative cases, the DO and IO enclitics clearly have the order IO + DO, and preceed the verb. However, for the Imperative, the enclitics must both immediately follow the verb (*1.16.c-e), although the order seems to be optional (1.16.a. vs. 1.16.b.). If this option is to be expressed as an optional switching rule, assuming that DO + IO is somehow basic, it is important to disengage this switching rule from the Scrambling rule--since the latter otherwise only operates on major constituents.

1.5. A Constraint on Choice of "Survival" NP.

Even for the simple sentence types so far considered, the choice of NP to survive in full seems to correlate with some degree of topicalisation--and thus, with stress. This may be confirmed from a consideration of sentences with non-contrastive stress containing Q-words, Neg, and Prohibition.

1.17.a. Pu tin evales tin lampa?

Where did you put the lamp?

1.17.b. ?Pu tin lampa tin evales?

1.18.a. Pote to extises to spiti?

When did you build the house?

1.18.b.   ?Pote to spiti to extises?

1.19.a.   Yati ton dernis ton yo su?

          Why do you beat your son?

1.19.b.   ?Yati ton yo su ton dernis?

1.20.a.   Den tin evala tin lampa eki.

          I didn't put the lamp there.

1.20.b.   *Den tin lampa tin evala eki.

1.21.a.   Min tin valis tin lampa eki!

          Don't put the lamp there!

1.21.b.   *Min tin lampa tin valis eki!

With non-contrastive stress,[15] it seems that topicalisation of the DO is marginally allowed with (fronted) Q-words, but not allowed at all with Neg or Prohib. The constraint with Q-words is not well understood: on the other hand, that on Neg and Prohib probably follows simply from the requirement that these morphemes are attracted to the verb.[16]

2. Copy and Relative.

In this section, it will be suggested that (restrictive) relativisation involves the Copy rule, assuming that such Relatives derive from a Base rule of the type NP ——> NP S, where S contains an NP identical with the head NP.

2.1. Simple Relatives.

The simplest derived forms of the sentence "There's the well that the neighbour dug" are (the relatives are underlined):

2.1.a. Na to pigadi <u>to opio</u> anikse o yitonas.[17]

2.1.b. Na to pigadi <u>pu</u> anikse o yitonas.

2.1.c. *Na to pigadi anikse o yitonas.[18]

Labelling (2.1.a.) as the <u>opi</u>-relative and (2.1.b.) as the <u>pu</u> relative, consider now the parallel sentences with (underlined) copy.

2.2.a. *Na to pigadi to opio <u>to</u> anikse o yitonas.

2.2.b. Na to pigadi pu <u>to</u> anikse o yitonas.

where it is seen that <u>pu</u>-relative shows the usual enclitic trace of copying, while <u>opi</u>-relative shows none.

Now it is of course possible to maintain that we have here a stylistic dichotomy: <u>opi</u>-relative does not allow copying,[19] where <u>pu</u>-relative does. On the other hand, one might hold that the very process of relative itself <u>always</u> consists of copying, but that the enclitic-<u>deletion</u> rule is obligatory for <u>opi</u>-relative but only optional for <u>pu</u>-relative.

Thus, suppose the sentence at the stage

Na to pigadi - o yitonas anikse to pigadi.

Copying of the "identical NP" onto the front of the embedded S gives

Na to pigadi - <u>to pigadi</u> - o yitonas anikse to pigadi.

At this stage, relative replacement in the embedded S must occur; but here <u>opi</u> and <u>pu</u> relatives differ: <u>opi</u>-relative replaces the Noun only, while <u>pu</u>-relative replaces the whole NP. Thus:

Na to pigadi - <u>to opio</u> - o yitonas anikse to pigadi

but   Na to pigadi - <u>pu</u> - o yitonas anikse to pigadi.

The second, and more important difference between the two derivations is that for the <u>opi</u>-style there is no enclitic Identity-

replacement-- pronominal for the original NP-DO in the embedded S,[20]

and thus the whole NP is deleted.

We are thus in effect claiming that the difference between opi
and pu relatives is not that the one requires Fronting and the
other Copying: both require copying, but the rules for relative
replacement and the fate of the 'original' NP differ in detail.

Assuming that Relative always requires copying, it might still
appear that a rather special form of copying is involved; first,
copying is obligatory, and second, there is no choice of survival NP--
in fact we may not choose the 'original' for survival in full.[21]
But this is hardly a constraint on copying: quite simply, these are
the conditions on Relative replacement. That is, we may as well
leave the copy rule to operate unconstrainedly.

Indirect Object relatives behave in a manner similar to Direct
Object relatives. Thus:

        2.3.a. Methise o anthropos ston opion edose ta xrimata.

              The man to whom I gave the money got drunk.

        2.3.b. *Methise o anthropos ston opion tu edosa ta xrimata.

        2.4.a. Methise o anthropos pu edosa ta xrimata.

        2.4.b. Methise o anthropos pu tu edosa ta xrimata.

As before, no reflex of the original IO-NP survives in ston
opion relative, and the same explanation applies as above.

Relativisation is thus one of the configurations in which copy
is employed--what is special about relative copying is perhaps only
the fact that S-adjunction is required.

2.2. Relatives with Adverb Phrases.

Even clearer evidence for the copy nature of the relative rule
is to be seen in relatives from adverbial phrases, e.g., of Place.
In this section, it is suggested that the constraint on relative-
replacement is a sufficient cause for the obligatory total deletion
of the 'original' adverb phrase with opi-relative.

Assuming the copy rule has operated normally for these cases,
consider the stage in the derivation giving sentences such as:

>   2.5.   Vrika to kalivi-mesa sto kalivi-meni o yiftos-mesa
>
>   sto kalivi.
>
>   I found the hut-in the hut-stays the gypsy-in the hut.

The relative-replacement rule here gives not two but three possible
outputs, involving opi, opu, and pu:

>   2.6.   Vrika to kalivi-mesa sto opio-meni o yiftos.
>
>   2.7.   Vrika to kalivi-opu-meni o yiftos.
>
>   2.8.   Vrika to kalivi-pu-meni o yiftos.

Note that, as before, opi replaces only the Noun in the copy, whereas
opu and pu replace the whole Preposition Phrase. However, while opi
has but one acceptable output (2.6.), opu and pu have two further
alternatives:

>   2.9.a.   Vrika to kalivi-opu-mesa tu-meni o yiftos.[22]
>
>   2.9.b.   Vrika to kalivi-pu-mesa tu-meni o yiftos.
>
>   2.10.a.   Vrika to kalivi-opu-mesa-meni o yiftos.
>
>   2.10.b.   Vrika to kalivi-pu-mesa-meni o yiftos.

In 2.9. and 2.10., we find the debris of the 'original' adverb
phrase.[23] The possibility of making the enclitic tu, enables the

whole remnant-phrase to be treated as an enclitic and thus attracted to the pre-verb position. Notice that we cannot interpret these cases as cases of simple copying within the embedded S, as we might with the cases of Section 2.1. above.[24]

Sentences 2.10. show that, as before, the pronominal in the 'original' may be deleted.[25] If the preposition is also deleted, the simplest sentences with opu and pu (2.7., 2.8.) are derived.

3. Copy and Complement Sentences.

3.1. Copy of Whole Complement.

Greek Complement sentences may be introduced by oti, 'that', or na, 'for to'. For both types, to (the IT particle) is seen to survive optionally, as in:

    3.1. Ego to perimeno oti tha yirisi o Petros.

          I expect that Peter will return.

    3.2. Ego to perimeno na yirisi o Petros.

          ""I expect Peter to return.

But while to might here be held to be the IT particle shifted to pre-verb position by the enclitic rule, the following variant sentences cannot be thus explained.

    3.3. Ego to perimeno to oti tha yirisi o Petros.

    3.4. Ego to perimeno to na yirisi o Petros.

It is clear that the whole complement sentence may be copied, with the usual consequences--option on NP survival, pronominalisation, etc., as is confirmed by the alternatives with survival of the copy NP.

3.5. Ego to oti tha yirisi o Petros to perimeno.

3.6. Ego to na yirisi o Petros to perimeno.

An embedded question may similarly be copied, as is seen in

3.7. Tha su po pios ine o dolofonos.[26]

I'll tell you who the murderer is.

3.8. Tha su po to pios ine o dolofonos.

3.9. Tha su to po pios ine o dolofonos.

3.10. Tha su to po to pios ine o dolofonos.

Sentence 3.8. shows the (optional) survival of IT; 3.9. shows the copy pronominal, but with IT-deletion; while 3.10. shows both copy pronominal and IT.

3.2. Subject Raising as Copying.

Unlike Latin,[27] both 'that' and 'for to' complements allow Subject-raising to occur with certain verbs in Greek. Thus, "I expect Thanasis to win the lottery" may be rendered as:

3.11. Perimeno oti o Thanasis tha kerdisi to laxio.

3.12.a. Perimeno o Thanasis na kerdisi to laxio.

3.12.b. Perimeno ton Thanasi na kerdisi to laxio.

Here, subject-raising is seen only in 3.12.b., while 3.12.a. shows that it is optional. As we expect, the raised subject having become a (derived) object, copying may occur, as in:

3.12.c. Ton perimeno ton Thanasi na kerdisi to laxio.

3.12.d. Ton Thanasi ton perimeno na kerdisi to laxio.

However, a variant also occurs in which copying of the kind demonstrated may occur without the expected Accusative case in the

NP. Thus:

      3.12.e. <u>Ton</u> perimeno <u>o</u> Thanasis na kerdisi to laxio.

Here, for the copy to have occurred we must assume the embedded

subject to have been raised: but "o Thanasis" is Nominative, and

clearly belongs to the lower Sentence still. It may be the case that

<u>another</u> (and identical) NP acts as the basis for the copy, i.e.,

that the lower Subject has been <u>copied</u> into the upper sentence,

re-copied in the usual way, then deleted. An alternative solution

is to suppose that the initial <u>ton</u> in 3.12.e. is the enclitic

replacement for the "raised" subject itself, which again must mean

that that subject is raised by copying.

      We may conclude that "subject raising" is always performed by

copying, and that the difference between 3.12.b. and 3.12.e. lies

mainly in the choice of NP to survive in full. That the 'raised'

subject may itself be copied (3.12.c.) demonstrates in turn that

copying is in fact iterative.

3.3. Flip Verbs and the Copy Rule.

      I assume that Flip verbs (Lakoff, 1968) require a structure NP -

V+Prep-IT-S where the initial NP is animate. The pairs of sentences

        3.13. I am surprised at S'.

           Ego ksafniazome me to S

        3.14. S surprised me

           To S me ksafniase

show only minor differences as between English and Greek, these

appearing (e.g.) in the prepositions and the (Greek) non-deletion

of IT initially.

However, while it is clear that the derived object after Flip
is subject to copying,

      3.15.   To oti ilthe arga ton ksafniase ton Petro.

             That he came late startled Peter.

it is not obvious why the whole complement sentence is not copyable,
as was seen to be possible above (section 3.1.).

  Thus

      3.16.   Ego to perimeno to oti tha yirisi noris o Petros.

             I expect that Peter will come home early.

but   3.17.   *Ego to ksafniastika me to oti yirise noris o Petros.

             I was startled at Peter's coming home early.

At first sight, the exclusion here might appear to depend on the
presence of Passivisation in the verb. But parallel structures are
also possible for Flip verbs like tromazo (I'm frightened): tromazo
has no passive forms, yet copying is still unacceptable for the non-
Flip sentences of the type

      3.18.   *Ego to tromaxo me to oti S.

             I'm frightened at IT S.

Recalling the structures discussed under Relatives, it is feasible
to suggest that what blocks Copy is the presence of a Preposition
Phrase instead of a NP--and that the structure here is of the former
type.

3.4. A Constraint on Passive.

The following sentences show that the direct and indirect
objects may be permuted in Greek.

3.19. O prothipurgos edose to parasimo $\begin{Bmatrix} \text{ston} \\ \text{tu} \end{Bmatrix}$ stratioti.

The Prime-Minister gave the medal to the soldier.

3.20. O prothipurgos edose $\begin{Bmatrix} \text{ston} \\ \text{tu} \end{Bmatrix}$ stratioti to parasimo.

Moreover, the direct and indirect objects may be copied, with the usual results, in either of the above versions. Thus; e.g.

3.21. O prothipurgos tu to edose to parasimo tu stratioti.

However, while the passive corresponding to 3.19. is grammatical, that corresponding to 3.20. is not

3.19.a. To parasimo dothike $\begin{Bmatrix} \text{ston} \\ \text{tu} \end{Bmatrix}$ stratioti apo ton prothipurgo.

3.20.a. *O stratiotis dothike to parasimo apo ton prothipurgo.

It is thus clear that the permutation in 3.20., i.e., Direct-Indirect object switch, can only arise after Passive.

Now it must be the case that the copy rule follows Passive, since it is clear that the derived subject cannot be copied, but that the indirect object may always be copied. This accounts for the partial failure of copying in passives, as in

3.2.. *To parasimo to dothike ston stratioti apo ton prothipurgo.

but   3.23. To parasimo tu dothike tu stratioti apo ton prothipurgo.

3.5. Copy and the Sentential Subject Constraint.

In Ross (1967) we find the notion that a subject S from NP cannot have its constituents removed--e.g., for Relative formation. Thus,

3.24.a. That I bought the hat seemed strange to the nurse.

3.24.b. The nurse who that I bought the hat seemed

strange to--is stupid.

but   3.24.c.   *The hat which that I bought seemed strange to

the nurse--is red.

3.24.d.   ?The hat which that I bought _it_ seemed strange

to the nurse--is red.

We note that the relative from the NP "(to) the nurse" is

acceptable, while that out of the embedded S from a subject NP is

not (3.24.c.)--although the non-deletion of the (pronominalised)

original object seems to improve matters, at least for some speakers

(3.24.d.).

Consider the parallel Greek sentences:

3.25.a.   To oti agorasa to kapelo fanike parakseno sti

nosokoma.

3.25.b.   I nosokoma stin opian to oti agorasa to kapelo

fanike parakseno, ine kuti.

3.25.c.   *To kapelo pu'to oti agorasa fanike parakseno

sti nosokoma ine kokino.

3.25.d.   To kapelo pu to oti _to_ agorasa fanike parakseno

sti nosokoma ine kokino.

Here 3.25.b. from a simple NP is again acceptable: 3.25.c.,

from the embedded S, is not acceptable; but 3.25.d., with survival

of the pronominalized 'original' Object, is acceptable.

At least so far as Greek is concerned, Ross' principle can

hardly stand. A better formulation of the problem requires us to

modify the rule allowing deletion of the 'original' NP after copying:

the deletion simply may not operate within a Sentential Subject.

4. Two Remarks on Conjunction.

4.1. Conjunct Movement and Copy.

The main rules given in Lakoff-Peters (1966, 1969) for phrasal conjunction are (in derivation-order) Preposition-adjunction, Conjunct-movement, and Agreement. With these rules in mind, consider the following alternative sentences:

> 4.1. O Petros ke i Maria sizitisane to thema.
>
> Peter and Mary discussed the matter.
>
> 4.2. O Petros me ti Maria sizitisane to thema.
>
> 4.3. O Petros sizitise to thema me ti Maria.
>
> Peter discussed the matter with Mary.
>
> 4.4. O Petros sizitisane to thema me ti Maria.

Sentence 4.1. corresponds to the English gloss. But 4.2. shows that Preposition-adjunction is independent of conjunct-movement, in that the former does not entail the latter. Now whereas 4.3. shows the expected (singular) agreement of the verb with the remaining subject after conjunct-movement, 4.4. shows an anomalous plural in the verb.

Within the present framework, it is feasible to suggest that conjunct-movement is in fact conjunct-copying: the agreement rule then operates either before or after deletion of the 'original' right-hand conjunct.[28]

4.2. Conjunction and IT-Replacement.

Lakoff's (1968) "further argument" for IT-replacement is that verb-gapping is blocked if there are three constituents in the

superficial structure of the right-hand sentence. Thus,

        4.5. I saw Bill, and John Harry.

but   4.6. *I gave John a nickel, and Bill Harry a dime.

as also   4.7. I believe that John is rich, and Bill that Arthur

             is poor.

but   4.8. *I believe John to be rich, and Bill Arthur to be

             poor.

Lakoff goes on to speculate that the Latin equivalent to 4.8. may
well be acceptable, pointing out that this would prove simply that
It-substitution had not applied here.

    The case of Greek is equally pertinent. Thus:

        4.9. O Petros perimeni ton Perikli na figi, ke I Maria

            tin Keti na elthi.

          Peter expects Pericles to go, and Mary Kathy to come.

is perfectly grammatical, a fact which, according to Lakoff, we might
hold to prove the non-application of It-replacement.

    However,

        4.10. O Petros ton perimeni ton Perikli na figi, ke i

            Maria tin Keti na elthi

is also acceptable, and shows a copy of the embedded subject--a fact
that we have held to prove the occurrence of It-replacement.[29]

    What is more, the simple conjunction in

        4.11. Ego edosa tu Pavlu mia lira, ke i Maria tis Ketis

            mia Drachme.

          I gave Paul a gold sovereign, and Mary Kathy a

           Drachma.

is also acceptable.

It seems we must seek further for the cause of the English
exclusion, for it is unlikely that the constituent structure for
the Greek cases (especially 4.11.) differs from the English in
any essential manner.

5. Copy and Definiteness.

The possibility of copying is, all other things being equal,
closely correlated with Definiteness in the constituent to be
copied.

5.1.   Thus, both direct and indirect objects must be definite, as in

      5.1.a.   O kinigos ton skotose ton liko.

           The hunter killed the wolf.

      5.1.b.   *O kinigos ton skotose kapion liko.

           The hunger killed some wolf.

      5.2.a.   O Thanasis tu edose to sitari tu ftoxu.

           Thanasis gave the corn to the poor man.

      5.2.b.   *O Thanasis tu edose to sitari kapiu ftoxu.

           Thanasis gave the corn to some poor man.

5.2.   The Relative presents an apparent contradiction: relativisation
may occur whether or not the head noun is Definite.

      5.3.a.   Vrika to pigadi, pu mesa tu ipirxe xrisafi.

           I found the well in which there was gold.

      5.3.b.   Vrika { ena / kapio } pigadi, pu mesa tu ipirxe xrisafi.

           I found a/some well, in which there was gold.

But rather than cast doubt on the formulation of Relative as resulting from copying, this suggests that the relativised NP _is_ in fact Definite in the underlying representation.   This hypothesis is of course quite confirmed by the existence of the alternative relative in opi,[30] as in

> 5.4.   Methise kapios naftis, o opios foruse ena pardalo
>
>   panteloni.
>
>   A certain sailor who was wearing highly coloured
>
>   trousers got drunk.

5.3.   An Object complement sentence can be copied regardless of the Definite status of its constituents.   Thus

> 5.5.a.   Ksero oti o igumenos lipi apo to monastiri.
>
> 5.5.b.   _To_ ksero to oti o igumenos lipi apo to monastiri.
>
> 5.6.a.   Ksero oti kapios monaxos lipi apo to monastiri.
>
> 5.6.b.   _To_ ksero to oti kapios monaxos lipi apo to monastiri.

But this apparent anomaly follows from the fact that the head noun in such cases is always IT, which is of course inherently [+Def].

5.4.   The subject of a complement sentence may be raised if it is Definite.   However, as was noted in Lakoff (1968), the mere occurrence of Accusative would not prove raising to have occurred,   since Accusative is a possible exponent of "for' in "for-to" complements. For example,

> 5.7.a.   Perimeno ton Kosta na elthi.
>
>   I'm expecting Kosta to come.

is paralleled by

      5.7.b. Perimeno kapion na elthi.

            I'm expecting someone to come.

But we wish to hold that 5.7.b. does not exhibit subject raising.

The diagnostic sentences ought to be those in which copy is

operated, as in

      5.8.a. Ton perimeno ton Kosta na elthi.

      5.8.b. *Ton perimeno kapion na elthi.

    Unfortunately, however, the matter is impossible to disambiguate

in this way since, while the copy in 5.8.a. proves subject-raising

to have occurred, an Indefinite like kapio- may not be copied even

in a simple sentence such as

      5.9. *Ton skotose kapion.

           I killed someone.

5.5. In Conjunction, it may be shown that copy may occur before or

after conjunction-reduction. Thus (where to is singular and ta is

plural)

      5.10. $\left.\begin{array}{c} \text{To} \\ \text{Ta} \end{array}\right\}$ kurdisa to buzuki ke tin kithara.

           I tuned the buzuki and the guitar.

But notice that if either of the conjuncts is non-definite, no

conjunction-reduction can occur; e.g., if the second is indefinite

only the first conjunct may be copied, as in:

      5.11.a. To kurdisa to buzuki ke mia kithara.

      5.11.b. *Ta kurdisa to buzuki ke mia kithara.

5.6. Non-specific (attributive) indefinites may not be copied,

      5.12.a. O Petros kani ton yatro.

                Peter pretends to be a doctor.

      5.12.b. *O Petros <u>ton</u> kani ton yatro.[31]

5.7. It remains a problem why generic indefinites <u>may</u> be copied. Thus we find:

      5.13.a. Den xonevo to mosxari.

                I can't stomach veal.

and   5.13.b. Den <u>to</u> xonevo to mosxari.

6. <u>Copy and Greek Scrambling.</u>

6.1. Scrambling.

In addition to the major order-changing rules (such as Passive) applying within single clauses, a further and later rule applies in many languages which optionally scrambles the order of certain constituents. Languages employing such stylistic constituent-scrambling are traditionally called "free-word-order" languages, and Greek is said to be one of them.

Evidence for the free-word-order status of Greek may apparently be found in simple sentences of the type "The farmer killed the wolf": thus,

      6.1. O agrotis skotose ton liko.

      6.2. Skotose ton liko o agrotis.

      6.3. Skotose o agrotis ton liko.

These alternants require no special stressing, and permute SVO

(assumed as a base) to VOS and VSO respectively. A further three
variants are possible in theory, however. These are

      6.4. O agrotis ton líko skotose.

      6.5. Ton líko skotose o agrotis.

      6.6. Ton líko o agrotis skotose.

However, these may be found only with contrastive stress on the

object NP. If we define "free-word-order" as requiring no special

stress conditions, then Greek is certainly not a free-word-order

language. The scrambling illustrated in 6.1.-3. above is subsumed

under the rule

      Scramble: any two major modes within the same S

      Condition: Not under VP

and the case of contrastive stress is covered by the additional sub-

condition "except under contrastive stress."

    The parallel negative, question, and negative-question sentences

may be shown to follow the same constraints.

6.2. Gapping, Scrambling, and Copying.

    The relation said to hold for many free-word-order languages

between Gapping and Scrambling may be shown for Greek to hold:

      a) With contrastive stress, for Gapping and Scrambling,

but   b) With non-contrastive stress, only for Gapping and

          Copying.

      6.7.a. O Periklis ipye[32] tin bira, O Sokratis tin

          lemonada, ke o Manolis to nero.

Pericles drank the beer, Socrates the lemonade,

and Manolis the water.

6.7.b.   *O Periklis tin bíra, o Sokratis tin lemonáda, ke

o Manolis ípye to neró.

6.7.c.   O Periklis tin bíra ípye, o Sokratis tin lemonáda,

ke o Manolis to neró.

6.7.d.   O Periklis tin bíra, o Sokratis tin lemonáda, ke o

Manolis to neró ípye.

From a triple conjunction, sentence 6.7.a. arises by simple
application of the Gapping rule: for an underlyingly SVO language
like Greek, Gapping normally applies forward, i.e., the identical
verbs after the first are lost. This is confirmed by the ungram-
maticality of 6.7.b., where Gapping has been applied backwards.

Note now that 6.7.c. and d. are also acceptable. We suppose,
with Ross, that Gapping may occur before or after Scrambling.
Then if Gapping applies first (and forwards) 6.7.c. arises. However,
Scrambling may apply first--since under contrastive·stress VP-internal
constituents may be switched--in which case backward Gapping
produces 6.7.d.

The following sentences 6.8. show the power of the copy rule to
supply the missing inputs for backwards Gapping, viz., strings in
which, without contrastive stress, each S has a verb finally. Thus,

6.8.a.   O Periklis tin ípye tin bira, o Sokratis tin

lemonada, ke o Manolis to nero.

6.8.b.   O Periklis tin bira tin ípye, o Sokratis tin

lemonada, ke o Manolis to nero.

6.8.c. O Periklis tin bira, o Sokratis tin lemonada,

ke o Manolis to nero to inye.

Here, 6.8.a. shows copying with copy-pronominalisation; this is

naturally an input for forward Gapping. 6.8.b. and c. on the

other hand (like 6.7.b. and c.) show retention of the copy NP, with

the result--following pronominalisation and enclitic attraction--

that a verb-final string arises. Thus Gapping may apply forwards

or backwards, under non-contrastive stress, depending on whether

the copy or the 'original' NP is pronominalised.

Footnotes

[1]Copy of NP with Nominative case is excessively rare, being confined to the exclamatory-deictic Na tos o Petros, "There's Peter!," and the question Puntos o Petros? "Where's Peter?".

[2]See Section 6.1. below, for the relation of Copy to Scrambling.

[3]Section 6.1. takes up the occurrence of such sentences, which arise under contrastive stress on the object.

[4]It is assumed that the copy NP is sister-adjoined under VP.

[5]Cf. Section 2 below (Relative), where this choice is not free.

[6]The enclitic undergoes attraction to the verb, and is preposed to it for most dialects. As may be seen from a consideration of the constraints on Scrambling and topicalisation, this particle is truly an enclitic--i.e., becomes part of the node Verb.

[7]Whether or not this is the correct condition, the rule must avoid pronominalisation of the subject NP in case that NP is identical with the Object NP.

[8]Cf. below (1.3., 1.4.) for order of enclitics and for the case of Imperative. It is to be supposed that certain idioms, such as fthina tin glitoses ("you came off lightly") probably owe their pronominal to the copy rule, with subsequent Object-deletion--here, from Fthina glitoses ti zoi su. Cf. "you'll get it!," "Stop it!"

[9]Note that not only are ston and apo ton replaced by the same morpheme tu, but each of these sentences is ambiguous with the corresponding sentence containing the possessive tu Mixali (Michael's).

[10]Some of my (Athenian) informants would marginally accept sentences of the type "Ston Petro tu edose to krasi."

[11]Again, the surface tu Mixali is ambiguous--so that 1.9. and 1.10 also mean "Peter gave him Michael's wine," "Peter took Michael's wine from him."

[12]Cf. Sandfeld (1930).

[13]11.b-c. and 12.c-f. show retention of both copy and original NPs, where the original is retained under contrastive stress. 11.d. and 12.g. show deletion of the original NP. Note that 12.g. is superficially equivalent to the corresponding English sentence with Dative shift, although this construction arises in Greek only through obligatory Copy for pronouns.

[14]While precisely these constraints apply to Negative, Question, and Prohibitive sentences with DO or IO, the case of the Imperative shows an ordering variant.

1.12.d. O Petros mu dini to krasi emena.
Peter gives me the wine.
1.13.a. Dose mu to krasi emena!
Give me the wine!
1.13.b. *Mu dose to krasi emena!
1.12.f. O Petros emena mu dini to krasi.
1.14.a. Dose mu emena to krasi!
1.14.b. *Mu dose emena to krasi!

Assuming that the copy rule operates for Imperative just as it

does for the other sentence types so far considered, it is clear
that enclitic attraction still obtains--but the enclitic is
postposed rather than preposed to the verb. Other constructions
showing this irregularity are:

      (1) the Exclamatory   Bravo su!   "well done!"
      (2) the Participial   Legontas tu tu Petru   "Saying
                              (it) to P"
      (3) the Question   Puntos o Petros?   "Where's Peter?"

[15]Compare contrastively-stressed:
    1.17.c. Tin lampa, pu tin evales?
    1.18.c. To spiti, pote to extises?
    1.19.c. Ton yo su, yati ton dernis?
    1.20.c. Tin lampa, den tin evala eki.
    1.21.c. Tin lampa, min tin valis eki.

[16]The enclitic-attraction rule is later, so that the surface
sequence will be (as in the a-sentences)

$$\text{den-} \begin{bmatrix} +Pro \\ +Encl \end{bmatrix} -V; \quad \text{min-} \begin{bmatrix} +Pro \\ +Encl \end{bmatrix} -V.$$

[17]I do not treat here the (optional) permutation rule which
captures the preference for "subject last" in embedded Sentences.

[18]Clearly, Greek does not allow deletion of the relative, cf.
English, "There's the well the neighbour dug!"

[19]Note that the Katharevousa (K) style of which opi-Relative
is an example never shows the debris of complement copying, even for
the simplest DO case such as O kinigos ton skotose ton liko.

[20]This identity-based process occurs within the embedded S, which
suggests that the NP-DO copy is Chomsky-adjoined to this S.
    Thus:
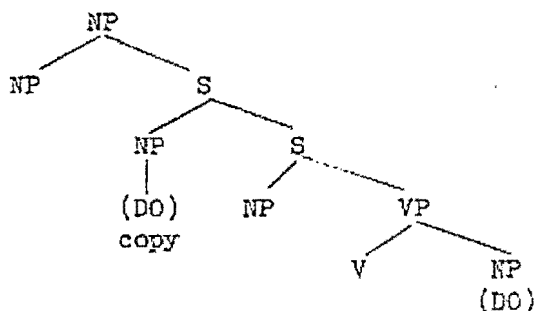
[21]*Na to pigadi o yitonas enikse to pigadi.

[22]Compare *Vrika to kalivi-mesa sto opio-mesa tu-meni o yiftos.

[23]Cf. sub-standard English "There's the hut where I found the
gypsy in it," "There's the hut which I found the gypsy in it," but
never "There's the hut in which I found the gypsy in it."

[24]   Na to pigadi-to pigadi-o yitonas-to pigadi-anikse to pigadi
would still give
        Na to pigadi-pu-to-anikse o yitonas
where the copy phrase is relativised, and the original is pronominalised.
But an adverbial phrase cannot be copied in a simple S: thus, in Vrika
ton yifto mesa sto kalivi, we may copy the DO complement, to give:
        Ton vrika ton yifto mesa sto kalivi
        Ton yifto ton vrika mesa sto kalivi

but not the adverb phrase, to give:

       *Mesa tu vrika ton yifto mesa sto kalivi, or

       *Mesa sto kalivi vrika ton yifto mesa tu.

[25]The generalised Subject/Object NP relative and the relative of Place fall together in the pu-relative. Ambiguous sentences can arise when the 'original' pronominal-replacement survives. Thus:

     2.11. Afto ine to kalivi pu to vrika-

can stand for either "This is the hut which I found" or "This is the hut where I found it", deriving respectively from

     2.12. Afto ine to kalivi-(ego) vrika to kalivi.

            I found the hut.

     2.13. Afto ine to kalivi-(ego) vrika X sto kalivi.

            I found X in the hut.

[26]Note that Greek embedded questions show Aux-attraction to the question-word, just as simple questions do.

[27]Cf. Lakoff. 1968.

[28]The alternative interpretation, in Lakoff-Peters terms, is of course that agreement occurs before or after conjunct-movement.

[29]Confirmed by the acceptability of the Personal Passive sentences:

       O Petros theorite vlakas: O Petros theorite oti ine vlakas.

       Peter is considered a fool.

[30]Recall that opi-replaced the Noun only: thus the article remains.

[31]Cf. O Petros ton kani ton Perikli orea.

       Peter plays (the part of) Pericles well.

[32]The verb is underlined in the examples of this section.

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