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MODERN GREEK CLITICS: PLACEMENT, ORDER, AND FUNCTION
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0. I intend to present in this paper data pertinent to a
description of the clitic elements in Modern Greek, and to interpret
them in the light of some standard notion of 'cliticness' (cf. Browne
1967, Perlmutter 1971, Zwicky 1977). This will lead me to propose
some necessary modifications regarding the definitional clitic pro-
properties of placement and stresslessness. The data presented in this
paper originate from extensive consultant work with one speaker1,
and they have been brought in line with some important publications
on Greek clitics (in particular Thumb 1912:84-91, Moser-Philtsou
1958:394-401). In addition a recent article (Warburton 1977) dealing
extensively with clitic ordering and cooccurrence restrictions on
pronominal clitic combinations was consulted. After a short clarifi-
cation on what the term clitic shall mean in this paper (section 1)
I will first investigate the differential placement properties of
three otherwise identical sets of clitic elements (possessive markers,
comparative pronouns, and object pronouns; cf. section 2); in the
second part the focus will be on further ordering and cooccurrence
restrictions for pronominal clitic clusters, and on the role of such
clitics as carriers of focused information (section 3).

1. For purposes of the present discussion the term special
clitic will refer to an element which is (A) stressless, (B) attached
to some (more highly) stressed form, and (C) placed into a restricted
position in the surface string. (For some principled discussion
about the relevance of these criteria, cf. Tegey 1977:251-73; also
Zwicky 1977, Wanner 1977.) Taking the illustrations for these cri-
teria from the Greek pronominal clitics, 1 vs. the ungrammatical 2
shows stresslessness to be essential given that absence of stress
implies impossibility of contrastiveness. The phonological attach-
ment can be demonstrated by the fact that nothing (except for another
clitic of the same class) may intervene between the clitic and its
host (neither pause nor actual linguistic material; 3, 4). Nor can
the clitic appear alone; only a full (i.e. stressable) pronoun can
do so (5, 6). The functionally motivated position for the constituent
represented by the clitic, as seen with a full NP or strong pronoun
(7), leads to ungrammaticality with a clitic (8): The clitic must be
contiguous to the verb, located in a restricted position which is not
available to the strong forms (9, 10).

(1) ἀντίρησιν to krasí
not/me/plicate/the/wine 'I don't like wine'

(2) *tis-aréśi to krasí, alá ἀντίρησι

(3) pés-to-mu tell/it/to/me 'Tell me!'
b. *pés // to-mu
c. *pés-to // mu
d. pés-to-mu // eména 'Tell me!'

(4) *pés tin aligia-mu tell/the/truth/me 'Tell me the truth!'
(5) pión įdan?  -- *tin  'Who did they see?  -- Her.'
(6) pión įdan?  -- artín  'id.' (strong pronoun)
(7) fisiká įpe tis adelfís-tu to místiko  
   'Naturally he told his sister the secret.'
(8) *fisiká įpe tis adelfís-tu to
(9) fisiká to įpe tis adelfís-tu
(10) *fisiká to místiko įpe tis adelfís-tu

The type of clitic described by properties A,B, and C (so-called special clitics) must be distinguished from the so-called simple ones which exhibit surface effects only corresponding to the parameters A and B (stresslessness and attachment), but not C (place-

ment). Such pronominal reduction clitics are e.g. known for English (cf. 11), and similar pronominal or non-pronominal reduction pheno-

mena seem to be typical for language in general (frequently so with articles, prepositions etc.). Such forms shall be of no further con-

cern here.

(11) They gave her a wrong address
    [geyv hē']
    [geyv e']
    [geyv t]

2.1. The Greek referential clitics can be grouped into the two following sets of forms: The first one in 12 comprises all clitic elements which function as (a) possessive markers in con-

junction with a NP, (b) comparative terms in conjunction with an AdjP or AdvP, and (c) IO pronouns in conjunction with a verb. The second set in 13 consists of clitics which are DO forms in conjunc-

tion with a verb, representing thus a complementary set to the third function (IO on a verb) of set 12.

(12) sg.  mu I su II tu (m,n) tis (f)  III
    pl.  mas I sas II tus  III

(13) sg.  me I se II to(n) (m), ti(n) (f), to (n) III
    pl.  mas I sas II tus (m), tis/tes (f), ta (n) III

The functional differentiation of the first set of forms into three types is directly correlated with the syntactic frame in which a clitic occurs in a given instance. With regard to the first function of possessive marker, the clitic is attached enclitically to any nominal element of the NP (an adjective or the noun); but an article or other determiner (as a non-lexical element) may not be the host. Thus in 14 the noun patéras or any of its inflected forms is the host of the clitic su; but the articles o, tu in 15 cannot act in this way since they do not provide a stressed support base required according to property B. If the NP contains an adjective the possessive may encliticize alternatively to this element; cf. the various collocations in 16-21 which all convey the same logical con-

tent of 'a brown dress belonging to me'.

(14) a.  o patéras-su (nom.)  'your father'
    b.  tu patéra-su (gen.)

(15) a.  *o-su patéras
    b.  *tu-su patéra

(16) to fórema-mu to kafé  the/dress-my/the/brown  'my brown dress'
(17) to fórema to kafé-mu
(18) to kafé-mu fórema
to kafé-mu to fórema
(20) to kafé fóremá-mu
(21) to kafé to fóremá-mu

The difference between the various versions lies in the focus arrangement, first with regard to the N–A vs. A–N opposition, and second with regard to the possessive itself: The 'normal' linearization is A–N where either the A or the N may be the focus depending on the specific context (and to a minor degree on the stress/intonation rendition, A–N vs. A–N). For heavier emphasis on the adjective the extraposition to N–A takes place where the article repetition before the adjective is obligatory; article repetition in the basic A–N pattern is judged as overprecise and strange. A structural differentiation between the two arrangements may be assumed so that the basic order in 22 is related to the more complex 23 by extraposition (or adjective extraction) plus article copying.

(22) [art [Adj – N] _NP ] NP
(23) [ [art – N] _NP [art – Adj] _A(P) ] NP

Within this pattern the enclitic possessive will be attached to the first stressed element of the NP, i.e. the Adj in 22; in this position the focus of the possessive is 'neutral', i.e. encompassing the whole NP. The attachment to a second element in 22 allows for a double interpretation either as a modifier specifically of this second element, or again as a phrase modifier; in 23 the possessive attached to the second extraposed element can only have word focus (i.e. on the Adj) while its positioning with the N in 23 remains ambiguous. Finally the overprecise and insistent versions 19, 21 arise through a further inversion of the internal NP and AP for the purpose of shifting the AP to the first position of even stronger emphasis. The focus on the possessive remains restricted to the adjective in 19 while it is ambiguous in enclisis to the noun. Cf. the contrasts in 24 vs. 25.

(24) o trágos fóbáte to kafé fóremá-mu, óxi to kafé(-mu) kapélo
'The goat is afraid of my brown dress, not my brown hat.'
(25) o trágos fóbáte to kafé fóremá-mu, óxi to kókinó(-mu) (fórema)
'The goat is afraid of my brown dress, not the red one.'

It is the position of the major elements of the NP, and not the place of the possessive clitic, which determines the emphasis structure. While the phonetic attachment in each case is a phenomenon of amalgamation of two contiguous items (i.e. the host word plus the enclitic), the placement of the clitic (i.e. the syntactic aspect of attachment) may be determined with respect to the smaller unit on the word level, or with respect to the higher level unit of the constituent: In 20 the clitic mu may be placed with respect to the N or the whole NP (resulting in N focus for N–mu vs. NP focus NP–mu), but in both cases the phonetic surface form is [fóremá–mu]. The possessive clitic cannot be placed to any element or structure which stands outside its NP of origin: Whatever the correct derivation of a possessive expression, its corresponding subtree necessarily is a portion of the configuration yielding the possessed surface NP. The variable placement within this structure is fully predetermined by
the possessor- (and thus clitic) independent conditions of relative
prominence. The available free variation between word scope vs.
phrase scope is the consequence of the potential discrepancy between
syntactic collocation and phonological amalgamation. Although the
movement of the clitic is not necessarily from its place of origin
to its place of occurrence (given that the place of origin is undeter-
rmined; cf. above discussion of property C), the movement from
place to place as a function of informational organization and
surface structure provides the justification for the diagnosis of
special clitic status. The impossibility of a double occurrence
of the clitic furthermore shows that it is not a mere agreement
marker originating from an iterative copying process (26).
(26) *to kafé-mu fôremâ-mu

2.2. In other situations the same set of clitics (cf. 12) is
attached enclitically to an adjectival or adverbial expression of
comparison; the clitic designates here the term with respect to
which the comparison is made, 'more adj/adv. than x'. The compara-
tive may be a synthetic (monolectal) modification of the positive
degree (27), or an analytical expression consisting of degree ad-
verb plus positive adjective/adverb (28). In a 'flat' context there
is no logical or connotational difference between the clitic version
of this constituent (28, 30).
(27) o yánis ine megalíteros-mu 'Yannis is older than I am'
(28) o yánis ine megalíteros apo ména 'id.'
(29) o yánis ine pyo megálos-mu 'id.'
(30) o yánis ine pyo megálos apo ména 'id.'
The clitic expression is only available if the second portion of the
comparison has been reduced to a surface NP; if the second part re-
tains its clause structure (with a verb) only the regular non-clitic
expressions are admitted; cf. 31a vs. b.
(31) {pyo megálos-mu íme
  a. *o yánis ine megalíteros-mu íme 'more than I am'
  b. o yánis ine pyo megálos apo o íme egó 'id.'
   {megalíteros

The placement of such clitics does not appear to be problematic
since they attach enclitically to the only surface element left in
their structure of origin. In contrast to the situation with the
possessives there is no surface variation in string collocation
possible with the adjectival/adverbial phrase of comparison: The
clitic cannot be placed to the N of a relevant NP (cf. 32); at
best it can occur attached to the NP final adjective (33a). In each
of these cases the possessive function of the clitic is prevalent;
but only the periphrastic version in 33b will be fully acceptable.
(32) a. *i maría ine kalíteri pêxtra-mu 'Maria is a better player
   than I'
   b. *i maría ine kalíteri-mu pêxtra
(33) a. ?i maría ine pêxtra kalíteri-mu
   b. *i maría ine kalíteri pêxtra apo ména
(34) *o yánis mu-ine megalíteros
   {pyo megálos ' (27)'}
2.3. In their most prominent placement the still same elements of set 12, complemented by set 13, represent weak anaphoric pronouns of IO and DO function respectively. These clitics appear normally in proclitic position on the finite verb (35, 36), but they are enclitic to an affirmative imperative (2nd person) and to a gerund (37, 38); the negated imperative acts however like a regular finite verb form by demanding proclitization of the pronoun(s) (39).

(35) ḏen mu-sēōsan singekrīmeni apāndisi 'They did not give me a definite answer'

(36) ḏen θa tus-aō prin tin tetārti not/fut./them/I see/before/the/Wednesday 'I will not see them before Wednesday'

(37) pēs-mu tin alfoil 'Tell me the truth!'

(38) tus dōsame xarā dīdondās-tus-to them/we gave/happiness/giving-them-it 'We made them happy when we gave it to them'

(39) mī me-kānis na kleō not/me/make/that/I cry 'Don't make me cry!'

In view of the fact that Greek does not have a non-finite verb form to express a complement clause verb under Equi-NP conditions the problem of 'clitic climbing', i.e. leftward movement of clitics from the embedded verb to the higher verb, does not exist. Cf. the Spanish contrast of 40 vs. 41; the comparison with Spanish is a relevant parallel here since the clitic pronouns of the two languages are otherwise identical with respect to their placement properties (cf. Perlmutter 1971; Aissen and Perlmutter 1976). Similar variations in Greek always result in ungrammaticality of the shifted version (42b, 43b).

(40) a. queremos hablarle ahora mismo. 'We wish to talk to her right now'

b. le-queremos hablar ahora mismo 'id.'

(41) a. No me convencerán a retirarlo not me will convince to withdraw it

b. *no me lo-convencerán a retirar

(42) a. tēlume na tu-milīsume amēsus 'We want/that/to him-we talk/immediately '(40)'

b. *tu-tēlume na milīsume amēsus

(43) a. ḏen θa me-pīsun na to-aposiro not/fut./me-persuade/that/it-I withdrew '(41)'

b. *ḥen θa me-to-pīsun na aposiro

In compound tense forms consisting of auxiliary + past participle/'fixed form' placement is determined with respect to the whole verbal expression: Verb peripheral proclisis on the auxiliary is the norm except for the compound gerund which as such demands verb peripheral enclisis on the participial element (44, 45 vs. 46). Any verb–internal positioning results in ungrammatical expressions (48). The place of occurrence of a pronominal clitic is therefore given by the surface syntactic structure (it is placed to its verb of semantic pertinence and it is peripheral to the verb constituent), and by morphological identity of forms (enclitic with affirmative imperatives and gerunds vs. proclitic elsewhere); cf. 49 vs. 50 as
schematic characterizations.

(44) i efimerídae to-ixan grápsi stin prōti sélída

the/newspapers/it/had/written/on the/first/page

(45) kanēnās ēn su-ixe dōsi ādia na fīvis apo to domátyo

nobody/not/to you/had/given/permission/that/you leave/from/ the/room

(46) éxondas dōsi-tus to cēk, perímena oti Θa to eksaryírosun

having/given-them/the/check/I expected/that/fut./it/they cash

(47) *éxondas-tus dōsi to cēk ...

(48) *éxondas tūs dōsi to cēk ...

(49) \[ X \left[ \text{clitic}_o \right]_V \ldots \] \[ Y \right]_V \]

S \( (X, Y \) may not contain \[ \left[ \text{\ldots} \right]_V \]

S \[ S \]

The class of encliticizing contexts does however not correspond to any manifest syntactic, semantic, or morphological generalization: If the motivation for the enclitization in the affirmative imperative and gerund possibly is the same, the renewed proclitization in the negative imperative vs. the persistent enclitization with a negative gerund (cf. 52) shows that the two cases respond to different conditioning factors. As in the comparable Romance systems of predominant proclisis and marked enclisis (cf. Wanner 1978 for Italian, Spanish, and French) the class of encliticizing verb forms is morphologically enumerable, but it does not contain any further common aspects.

(50) \[ X \left[ \ldots \right]_V \left[ \text{clitic}_o \right]_V \right]_S \]

The placement principles for the three situations considered in the preceding section are clearly distinct: Each one selects a different host structure (N(P) vs. A(P) vs. V(P)), and each one operates in connection with different linearization principles of enclisis vs. proclisis. But the elements affected in these different manners are the same with respect to their morphological shape and general referential function; even the fact that the various functions comprise the possessive, the comparative and the IO is not accidental: Formally the IO pronouns are genitive pronouns, i.e. they represent oblique complement functions otherwise expressed by a small number of prepositional paraphrases with se 'to (IO)', va 'for (benefactive)', apo 'from (separative)' variably found in the strong counterparts of the oblique clitic functions. Nevertheless the discrepancy between the morphological and the syntactic categorizations makes it necessary to recognize three different classes of clitics. While the correlation between expressed function and host selection in the placement process seems to be natural, the particular circumstances of attachment cannot be predicted automatically and they require a statement to this effect.
The differentiation between the three classes is based on a strict observance of the syntactically distinct domains of movement and the direction of attachment so that 53 and 54 are not ambiguous in phonetic rendition.

(53) i áskála-mu ípe ston stínómo oti ...
      the/teacher-my/told/to the/policeman/that ...

(54) i áskála mu-ípe oti ... the/teacher/me-told/that...

The independence of the placement processes from each other can be made explicit by showing that pronominal clitic cooccurrence restrictions (in particular the prohibition of contiguous clitic morpheme repetition; cf. below) do not hold across the syntactically non-identical clitic classes; thus in 55 the first mu is placed by the NP clitic placement principle (it is enclitic to the N/NP) whereas the second one of the contiguous mu morphemes is proclitically attached to the following verb, with a major constituent boundary separating the two clitics. The uninterpreted surface string does not count as a determining dimension; only the surface syntactic structure as reflected in phonetic attachment is relevant.

(55) i áskála-mu \[ \bar{\text{mu}}-ípe oti... 'My teacher told me that...' \]
     \[ \text{NP} \bar{\text{V}} \]

3.1. The conditions on ordering and cooccurrence within clitic clusters deserve some more attention. Such a situation will only arise with the pronominal clitics due to the possible clause internal cooccurrence of a DO with an IO constituent cf. the typical derivation in 56-61. In their non-clitic manifestations the DO and IO may occur in both possible orders (56 vs. 57); a single cliticization does not require any ordering (58, 59), but two clitic substitutions at the same time require the clitics to appear in the order given in 60, while 61 is ungrammatical.

(56) édosa tu \[ \text{fílu-mu} ] to \[ \text{ček} ] _2 'I gave my friend the check'
     \[ \text{NP} \bar{\text{V}} \]

(57) édosa to \[ \text{ček} ] _2 to \[ \text{fílu-mu} ] _1 'id.'

(58) tu-édosa to \[ \text{ček} ]

(59) to-édosa tu \[ \text{fílu-mu} ]

(60) tu-to-édosa

(61) *to-tu-édosa

The early approach to such problems was to invoke a single linear positive SSC to account for the apparently unpredictable surface orderings of clitic clusters (cf. Perlmutter 1971). But the shortcomings of this approach are many: (a) It is insufficient as a sole device for regulating the order of all and only the combinations found in a language (cf. Dinnensen 1972 for Spanish, Wanner 1977 for Italian); (b) it does not allow for the necessary connections between clitic behavior and the general syntactic principles of a grammar (cf. Wanner 1974 for the evolution of Romance, Wanner 1977 for Modern Italian); (c) it cannot explain ordering beyond simple observational adequacy (cf. partial explanations in Tegey 1977, Wanner 1977, 1978). In the particular case of Modern Greek, a surface structure constraint has been discussed, and rejected as a whole in Warburton (1977); this constraint might have the form of 62 which contains the potential clitic clusters listed in 63.
(62) \{III\} - [III, gen.] - [III, acc.]

(63) mu\{\ti\ \si\} - \ton \su\{\ti \ts\} - \ton \tu\{\ti \ts\} - \ton

mus\{\ti\ \si\} - \to\{\ti\ \ta\} - \tu\{\ti\ \ta\} - \tu

(64) me\{\ti\ \si\} - \tu \se\{\ti\ \ta\} - \tu

mas\{\ti\ \si\} - \ti\{\ti\ \ta\} - \tis

(65) mu\{\ti\ \si\} - \tu \se\{\ti\ \ta\} - \tu

mas\{\ti\ \si\} - \tis \sas\{\ti\ \ta\} - \tis

The cooccurrence of two genitives (clitic in 66, 67 or non-clitic in 68) in the same clause is always ungrammatical so that one of the genitive constituents must appear in an alternative prep + acc. paraphrase; cf. 69.

(66) *mu-tu-égrapse 'He wrote to him for me'

(67) *tu-mu-égrapse 'Id.'

(68) a. *égrapse to gráma eména eséna 'He wrote the letter for mé to yóu'

b. *su-égrapse to gráma eména 'He wrote the letter to you for mé'

(69) a. égrapse eséna to gráma ya ména '(68a)'

b. su-égrapse to gráma ya ména ' '(68b)'

Given the clitic independent restriction on double genitives the exclusion of the clusters in 65 must not be repeated in the clitic ordering statements. The alternation between case-marked genitive forms (representing an oblique object of various specific instantiations) and prep + acc. versions expressing the same functions leads Warburton to eliminate the SSC 62 altogether: Only a DO or an IO can find a clitic representation; no clitics exist for prep + acc. expressions, and only the IO (but not the DO) alternates with prep + acc. versions. Thus the DO is claimed to be most closely connected to the verb, somewhat less the IO, and least the PP. As a consequence the syntactic configurations for the three types of objects (direct, indirect, prepositional) are differentiated structurally according to the schematic representation 71 for 70. An iterative clitic placement rule (cf. 72) operating from the innermost pair of brackets to the outside can thus provide for the only correct order IO > DO of clitic clusters, and eliminate all the ungrammatical possibilities listed in 64.

(70) égrapsa afótó to gráma tu afendikú-tu ya ton fílo-mu

'DO IO PP

'I wrote this letter to her boss on behalf of my friend'

(71)\[
\begin{array}{c}
V \quad IO \quad PP
\end{array}
\]

(72)\[
\begin{array}{c}
V \quad DO, +clit \quad [IO, + clit]
\end{array}
\] →

\[
\begin{array}{c}
IO, + clit \quad [DO, + clit]
\end{array}
\]

\[
\begin{array}{c}
IO + clit \quad [DO, + clit]
\end{array}
\]
(73) [± person] [− person]
In this way both the wrong clusters of 64, the opposite orderings of 63, and the more-than-two clitic clusters are eliminated without a SSC; the only aspect which requires such a device according to Warburton 1977 is the exclusion of a [±person]−[±person] clitic sequence (i.e. the combinations of I and II, and any of the combinations in 65). This filter 73 will accommodate the existing clitic sequences while the incorrect ones are eliminated. In conclusion, this account allows us to describe the ordering restrictions on clitic clusters as a consequence of structural properties of the represented constituent functions, but the cooccurrence restrictions still need to refer to a surface structure constraint.2

3.2. Even with all the corrections and implications presented in Warburton 1977 the Greek ordering and cooccurrence restrictions are not fully described since they hold at best only for proclitic position. In enclisis (in particular with the imperative, but to the extent that the semantic/pragmatic conditions can be provided also with the gerund) not only the syntactically motivated IO − DO cluster is found, but also its inverse, DO − IO which in proclisis is unacceptable; cf. 74, 75 vs. 76.

(74) pēs - mu - to
(75) pēs - to - mu
(76) *mi to-mu-pís but mí mu-to-pís
   *o yánis to-mu-ípe but o yánis mu-to-ípe
The variable order in enclitic clusters does not imply that all restrictions are eliminated and that everything is acceptable. The double person constraint 73 remains in effect in 77 (in so far as it has validity for the proclitic position (cf. note 2); in the same way two genitive clitics cannot be combined into one cluster (78), nor is it possible to find any I − II clusters (as in 79) (only relevant for the gerund since the imperative rejects any clitics of II due to the reflexivity which requires the passive form).

(77) *proskálesè-mu-tin!  }
   *proskálesè-tin-mu!  }
   'Invite her for me!'
(78) *grápse-mu-tu   }
   *grápse-tu-mu   }
   'Write to him for me!'
(79) *proskálondás-mu-se  }
   o fílos-mu ékane ena megálo láthos
   *proskálondás-se-mu  }
   'By inviting you for me, my friend made a grave error'
Besides these macroscopic constraints, also in effect remains the prohibition against the contiguous repetition of a clitic shape regardless of its potential functional ambiguity (contrary to the discussion above in 55 the present concern refers exclusively to homogeneous clitics). The functionally ambiguous pronominal clitics are mas, sas, tus, and tis (cf. 12, 13). mas, sas cannot stand in sequence since their cooccurrence is already prevented by the double person constraint 73; only tus tus and tis tis might qualify as representations of the functions tus [IO 3 pl] − tus [DO, 3 pl m] (cf. 80, 81), and tis [IO 3 sg f] − tis [DO, 3 pl f] (cf. 82, 83). But both are ungrammatical (or at least highly questionable) in proclisis (80, 82) as well as in enclisis (81, 83).
(80) *tus-tus-prósfera 'I offered them to them'
(81) prósfera-tus-tus! 'Offer them to them!' 
(82) *tis-tis-prósfera 'I offered them to her'
(83) *prósfera-tis-tis! 'Offer them to her!'  
(84) prósfera-tis-tes! 'Offer them to her!'

The ungrammatical 83 finds a minimally different correct surface expression given that an enclitic tis representing 'DO, 3 pl. f' becomes phonologically differentiated to tes; the resulting non-identity in the morphological expression of the clitic sequence is sufficient to make this cluster fully acceptable (84).

The situation of the enclitic sequences is strange since enclisis does not obey the one ordering property which (according to Warburton 1977) depends not on arbitrary determination but on a structural difference, namely the more intimate connection of the DO than of the IO. Instead of an expected mirror image situation (cf. 85a) between proclisis and enclisis, enclisis shows both orders (one typical for enclisis and the other for proclisis (85b)).

(85) a. [IO [DO - V]] vs. [[V - DO] IO]  
b. V - DO - IO vs. V - IO - DO

The structural account for clitic order in proclisis cannot be maintained as essential since it can not only not explain, but actually prohibits, the duality of orderings found in enclisis. Thus the proclitic ordering constraints are rather due to a variety of superficial constraints (double person prohibition, genitive > accusative ordering) and more deeply embedded properties (only one case-marked genitive constituent/clitic per clause, thus impossibility of three-clitic sequences which would necessarily include a genitive and a genitive of interest). The enclitic position is subject to the same constraints minus the gen > acc. ordering principle.

3.3. The situation of the enclitic occurrences of clitic pronouns becomes even less clear when examples such as 86 are considered with three enclitics of which two are identical (to); this cluster seems to be heavily restricted since it can not only not appear in proclisis (87), but it may not follow a plural imperative (88), nor can it be attached to an imperative form which is not shortened (89). In turn, the shortening of the imperative is only acceptable with a phonologically defined class of forms which must begin with t (cf. 90a vs. b); the elision of e between s and t in imperative forms extends also from the inter-word context of host plus clitic to the internal string in the plural imperative form (91) which produces a surface variant to the regular uncontracted form (92).

(86) dóso-to-mu-to! 'Give it to me!'  
(87) *o yánis to-mu-to-ésose 'Yannis gave it to me'  
(88) a. *dósete-to-mu-to!  
    b. *dóste-tó-mu-to!  
(89) *dóso-tó-mu-to!  
(90) a. dyábas-tó-mu!' 'Read it to me!'  
    b. *dyábas-mu-to!' 'id.' (cf. dyábasé-mu-to! 'id.' )  
(91) a. dyabásté-tó-mu!  
    b. *dyabásté-mu-to!  
(92) a. dyabásté-to-mu!  
    b. dyabásté-mu-to!
The three-clitic sequences are marginal in all their occurrences; what they convey is an (afterthought) insistence on the DO along the lines of a non-pronominal version 93 (if it is at all different from a simple occurrence of the DO clitic in 94).

(93) pēs-mu-tiś, tin istoría! 'Tell it to me, the story!'
(94) āōs-to-mu! or āōs-mu-to!
(95) āōste-mu-to ≡ āōs-to-mu-to (cf. āōste-tō-mu)

The phonetic conditions on this type of clitic sequence are prominent; first, they have the effect of avoiding contiguous repetitions of (near) identical syllables (te, to); and secondly, the tendency to reduce an unstressed syllable set to st leads to the incorporation of the first to in 86 into the verb form as if it were the verbal ending (cf. the plural form in 95). This isolated type of a three-clitic sequence is interesting since it does not seem to have any primary syntactic and/or semantic function; rather it is made possible through phonological means. The phonological nature of its existence explains the restriction to the enclitic position given that the crucial phonological string s(e)t can only appear here in word internal position. On the other hand, the semantically functional three-clitic sequences of the type IO + DO + genitive of interest (in whatever sequence in enclisis) is still not acceptable. It is likely that further investigation will produce a fuller picture of such deviations from the expected norm; at the moment it represents an indication of the relative anarchy in enclitic pronoun clusters.

The particular stress behavior of Greek enclitics is well known: In the appropriate configuration such clitics may acquire a phonetic stress (of secondary, rarely equal to primary strength) which contradicts on the surface the postulated characteristic stresslessness of clitics (cf. property A). The Greek conditions are as follows: Word level stress falls on one of the three last syllables; any enclitic will count as part of the syllable string of its host word; given that such enclitics add one or more syllables to the end of the word, the word level generalization of a restriction to two posttonic unstressed syllables may turn out to be violated. As a result secondary stress is added to the second syllable from the main stress location provided this secondary stress does not fall on the word-final syllable. It is easy to see how under these circumstances clitic elements can appear under stress: 96-98 show the situation with a single clitic attached to words illustrating the three different stress locations; this pattern is valid for the pronominal clitics as well as for the possessive and comparative instances (cf. 99, 100, parallel to 96). 101-103 repeat the same pattern for the addition of two clitic syllables (this holds only for the pronominal enclisis due to the impossibility of clusters with possessives and comparatives).

(96) prōsferē-tu ena komáti túrtα 'Offer him a piece of cake!'  x  x  x  ≠  x

(97) āōσ-mu ton kenūryo taxiērōmo! 'Give me the latest 'Tachidromos'  x  x  ≠  x

(98) pēs-mu tin álēgia!  x  ≠  x

(99) to aftékinitō-mu  'my car'
The one case of interest is 102: The stress on mú is due to an automatic assignment which does not take into account the internal composition or function of the element it might strike. (Cf. statements of this situation in Warburton 1970, 1977; Thurn 1912:29: Moser-Philtsou 1958:13.) The automatic character of this stress designates it as a surface principle; the contradiction of definitional clitic stresslessness should not weigh too much in view of the fact that the added stress is frequently only secondary while the clitic independent stress of the host item is preserved in its location and primacy. Nevertheless these enclitics exhibit in some cases expressive functions which are properly attributable to stressed/stressable elements only: They can express focusing or insistence through their respective ordering, cf. 104, 105; more rarely they are even found under emphatic stress with the appropriate semantic effect; cf. 106, 107. The necessary restriction is that the insistence focus coincide with a syllable that can actually be stressed through the posttonic stress assignment (cf. 96-103), with the addition that now even the final syllable is able to receive such a stress (still in alternation with the requisite unstressed ones).

(104) ἀποτε-μῦ-το! 'Give it to me! I want to have it.'
(105) ἀποτε-τῶ-μῦ! 'Give it to me! I need that thing.'
(106) ἀποτε-μῦ-το! 'Give it to me! (contrast)'
(107) ἀποτε-τῶ-μῦ! 'Give me that thing!' (angry insistence)'

These devices of exploiting stress and alternative positioning are not the only, nor even the regular methods of conveying insistence or contrast for pronominal or other cases. The normal marker of emphasis is a strong pronoun, used alone or in a redundant construction with the corresponding clitic; cf. 108, 109.

(108) ἔγραψε ἐνα γράμα σε μένα, ὅτι στιν κσα SND f-su 'She wrote a letter to me, not to your cousin.'

(109) μῦ-ἔγραψε ἐνα γράμα ἐμένα, ὅτι στιν κσα SND f-su 'id.'

The same optional contrastiveness as with the pronominal clitics appears also with the possessive markers. Already the differences in its NP internal positioning affect the focus structure without any special insistence on the clitic, as discussed above (cf. 20-25); this is the weakest form of emphasis on the possessor, repeated here in 110. A stronger emphasis on the possessor can be conveyed by actually stressing the clitic marker; notice that the stress alternation condition on the post-tonic syllables does not exist (111, 112). The central position of the possessive marker in 113 leads to ungrammaticality with the insistence stress on it while the twice shifted construction of 114 (indicated by the repeated article before the noun) is acceptable in this form since the superficially central position of the possessive is structurally peripheral (cf. above 22, 23). However, the regular means of expressing emphasis on the possessor is either parallel to the pronominal case with a preposed or postposed strong IO pronoun plus
the redundant enclitic marker (115), or with the empty noun díkós-(clitic) 'possessorship of x' which acts like another nominal element in the NP appearing in different positions (116, 117); again, for signaling a contrast it should not occupy the weak central position (118).

(110) to kafé-mu fórema increasing insistence on -mu
to fórema-mu to kafé
to fórema-mu to kafé
?to kafé to fórema-mu
(111) to fórema to kafé-mu
(112) to fórema-mu' to kafé
(113) *to kafé-mú' fórema
(114) to kafé-mú to fórema
(115) eména to kafé fórema-mu	eména to fórema to kafé-mu
(116) to kafé fórema to díkó-mu
to fóreira to kafé to díkó-mu
(117) to díkó-mu fórema to kafé
to díkó-mu kafé fórema
(118) ??to kafé díkó-mu fórema
(119) *o yánis den ine megalíteros-mú', ine megalíteros-sú'

In contrast to the possessive, which is very free in the insistence use of the clitics, the comparative does not seem to allow this kind of emphasis. While it might be speculated that the reason for this unavailability of contrastiveness in (119) must be pragmatic and/or semantic, I do not have any clear indication of what is causing this lack of parallelism.

3.5. The pronominal clitics show two markedly different complexes of behavior depending on whether they are proclitic to the verb or enclitic: In the former case they serve anaphorically predictable functions within the limits of occurrence and cooccurrence set by other grammatical principles and by some superficial constraints typical of clitics. In enclisis however these same elements become much more independent of typical clitic behavior by acquiring potential focus differentiations according to their relative order in a cluster; they even exhibit emphatic potential. Some otherwise typical clitic and general grammar constraints on cooccurrence can be violated on the basis of phonological conditions. The clue to this aberrant behavior of enclitics (in pronominal and possessive function, with the unexplained exception of the comparative) is the fact that they may receive stress which is independent of any signaling function in its origin. But the stress defined nature of clitics (their necessary lack of stress) brings it about that the independent assignment of stress to a syllable which happens to be a clitic changes the status of such an element in the direction of an item which can also express functions normally associated with stress. On the one hand the clitics in proclisis (unaffected by special stress rules) reflect the applicable grammatical principles directly, while the enclitics show crucial interaction between these principles and their potential stress. The variability in placement property C, demonstrated in the threefold function of pronouns, possessives, and comparatives, is paralleled by a variable gradated
distinction along the axis of property A, stresslessness (with the ensuing functional consequences.) Only property B, attachment, has not yet been investigated in any detail; there are indications that it offers similar complications (cf. the st cluster in Greek). Instead of a holistic concept of well-defined and narrowly constrained surface particles the picture of clitics emerging from Greek, and more broadly on a cross-linguistic basis, is an unpredictable variety of functions and manifestations dependent on language specific phonological and syntactic/semantic conditions. Clitics are united as surface shells with minimal content (e.g. referential properties as in Greek) which find their functional meaning within the limits of the applicable idiosyncratic conditions on placement, cooccurrence, and surface form.

Notes
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2 According to my own investigations this constraint 73 against double personal reference for clitic clusters is variable among different speakers; I found (i) - (iii) to be acceptable: (i) proskálesē-mu-ton! 'invite him for me' (ii) proskálesē-ton-mu! 'id.' (iii) mu ton proskálese 'She invited him for me'
Such idiolectal variation appears to be characteristic of clitic surface limitations which are not otherwise embedded in the grammar.

References
Thumb, A. 1912. Handbook of the Modern Greek Vernacular Edinburgh: Clark (2nd ed.)