φοινικοέανος, ον "Purple-robed". Add this word to *LSJ*; see Pindar, *Fr.* 75.14 Snell φοινικοεάνων . . . Ὥρᾶν. The epithet here is Koch's restoration; it is generally accepted by the editors.

φριμάσσομαι Add Pindar, *Fr.* 332 Snell.

χάρις, ἡ *LSJ* do not recognize adequately that this word may bear the meaning "song", "poem". See Gow on Theocritus 16.6, Rumpel, *Lexicon Pindaricum s.v.* χάρις (p. 483). In Pindar see, for example, *Olympian* 13.19, *Isthmian* 3.8.

χειρόδεικτος, ον "*manifest*, S. *OT* 901 (lyr.)." A cross-reference to δακτυλοδεικτέω and δακτυλόδεικτος would be apposite.

Rules of Accentuation in Classical and Modern Greek*

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In the introduction to *The Sound Pattern of English*[1]) (1968) Chomsky and Halle state that "we have two concepts of surface structure: input to the phonological component and output of the syntactic component. It is an empirical question whether these two concepts coincide. In fact, they do coincide to a very significant degree, but there are also certain discrepancies. These discrepancies . . . indicate that the grammar must contain certain rules converting the surface structures generated by the syntactic component into a form appropriate for use by the phonological component."

The purpose of this paper is: to present and compare two phonological rules of classical greek (CG) and modern greek (MG), involving accentuation and boundaries; and, to furnish a case of syntactically motivated environment for phonological rules, as well as a case where the environment of the phonological rules is not syntactically motivated and must be defined by some readjustment rule.

An important rule of accentuation of CG is the so-called "antepenult rule," or "rule of limitation."[2]) According to this rule a Greek

*) I want to express my gratitude to Professor F. W. Householder for reading this paper, and for his valuable comments and suggestions. However, I am alone responsible for the views expressed here.

[1]) N. Chomsky and M. Halle, *The Sound Pattern of English* pp. 9—10 and for a more detailed discussion pp. 364—372.

[2]) About this rule see among others, C. Bally (1945), R. Jakobson (1937), A. N. Jannaris (1897), J. Kurylowicz (1958), and J. Vendryes (1938).

word may not be accented further to the left than the antepenult. Furthermore, the antepenult may receive the accent[3]) only if the ultima is short. Thus, according to the position of the accent, the words are classified as either accented on the ultima (oxytones and perispomena), the penult (paroxytones and properispomena) or the antepenult (proparoxytones)[4]).

The difference in accentuation cannot be attributed to phonological features of the stems; sometimes it can be attributed to the suffix as for example in the case of the verbal adjectives ending in *-tos*, such as *ἀγαπητός* 'loveable', *διαβατός* 'crossable', etc., where the suffix is always accented. In this case, the reason for the verbal adjectives being oxytones is morphological. However, there is a large number of cases (especially among nominals) where the accentuation pattern cannot be attributed to the suffix; compare *ὁδός* 'street', *φίλος* 'friend', *πόλεμος* 'war'; all three forms are nouns of the second declension nominative singular but their accentuation is different. Therefore, the stem of oxytones such as *ὁδός* will have to be marked in the lexicon with a feature such as [+ultima accented][5]) whereas paroxytones, with a short ultima such as *σωτῆρος* 'of the saviour' will be listed in the dictionary as [+stem−final accent]. However, a large number of nouns and adjectives and all the finite verb forms are either proparoxytones, *ἄνθρωπος*, *πόλεμος*, *θάλασσα*, *λέγομεν*, *ἔλεγον*, or paroxytones with a long ultima *ἀνθρώπου*, *πολέμου*, *θαλάσσης*, *ὁρίζω*, *ὁρίζεις*, etc. These words can be left completely unmarked in the lexicon with respect to the accent which will be automatically assigned to them by the "antepenult rule" (as will be formulated below). Even among these stems there will be cases of specific irregularities[5]).

The antepenult rule may be formulated as follows:

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[3]) About the nature of the CG accent the general agreement is that it was a pitch accent. This view is shared by Vendryes, Bally, Allen and others. In MG the accent is stress. In this paper, I will be using the term *accent* to refer to both the CG and the MG variety.

[4]) About all the different accentual possibilities of a word see especially Jakobson (1937), republished in English in Jakobson's Selected Writings, V. 1. pp. 262—271. An accented long ultima or penult counts as two morae and if the first mora of the syllable is accented the accent mark is a circumflex (perispomene) hence the term perispomenon e.g. *φῶς* and properispomenon e.g. *δῶρον*. If the accent of a long penult or ultima is on the second mora then the accent is an acute, *δώρου*, *λιμήν*.

[5]) See P. Kiparsky (1967).

If a word is still unaccented, an acute is placed on the penult if the vowel of the ultima is "long", otherwise on the antepenult.

$$\text{Rule A.}\quad V \rightarrow [+\text{accent}] \,/ \begin{cases} XC\text{—}C \begin{bmatrix} V \\ -\text{accent} \\ +\text{long} \end{bmatrix} (C) \# \\ X\text{—}C \begin{bmatrix} V \\ -\text{accent} \end{bmatrix} C \begin{bmatrix} V \\ -\text{accent} \\ -\text{long} \end{bmatrix} (C) \# \end{cases}$$

V = any vowel, C any consonant or consonant cluster, (C) optional consonant, # word boundary.

This rule is a low level rule; it applies after all other accentuation rules have been applied and when the level of word has been reached. By "word" here we mean a sequence bounded by #...# which contains no other #, but may contain any number of + (morpheme boundaries). Furthermore, no stem is marked in respect to this rule, i.e., all of them will be allowed to undergo it but the rule will be applicable only if the phonological conditions of its environment are fulfilled. For example the stem of *δδός* is marked in the lexicon as oxytone. Therefore when the suffix of the nominative singular is added to it the result will be *#δδό + ς#* and Rule A will not be applicable, since the last vowel of the word is [+accented]; *φίλος* is listed as *φίλο-* and with the suffix of nominative singular, for example, it becomes *#φίλο + ς#* before it reaches Rule A. In the case of *θάλασσα* the stem *θαλασσα* has no marking for any rule of accentuation, thus in the nominative, it is *#θαλασσα + ø#* and when it reaches Rule A the rule is applicable and will accent the first syllable yielding *#θάλασσα#*. The same noun in the genitive plural will be *#θαλασσα + ων#* and after Rule A, *#θαλασσά + ων#* because the last vowel is [+long]. Then by contraction of the last two vowels, *θαλασσῶν*. Thus the accentuation of this paradigm is completely predictable and so are, among others, all the finite verb forms.

This formulation of the antepenult rule implies that 1) it is a rule of words rather than stems; 2) all words undergo it (since there is no entry in the Lexicon marked as [—Rule A]) in the sense that the rule makes sure that there is an accent on one of the last tree syllables of the word and, if there is not, it assigns it, and 3) a large

number of words have a phonologically predictable accentuation pattern[6]).

In MG the situation is very similar[7]), in the sense that the stems must also be distinguished in the lexicon for differences in accentuation. In fact, the same words given as examples for CG can also serve as examples here. Of course not all classes of stems have the same lexical items in the two languages, but we still have to separate oxytones, paroxytones and irregular stems, as well as completely unmarked ones, whose accent is predictable by means of the antepenult rule. However there is a difference between CG antepenult rule and the one that we have to formulate for MG.

Rule A makes use of vowel length which was distinctive in CG. This feature, however, is not phonetic in MG and, unless there are good grounds other than this particular rule, we should not postulate it. However, MG has accentual changes within the nominal paradigm such as *ἄνθρωπος — ἀνθρώπου — ἀνθρώπων*, etc., and within the verb paradigm such as *χορεύω — χόρεψα*, *μιλῶ(μιλάω) — μιλοῦσα — μίλησα*, etc., which must be accounted for and which seem to be attributed to the suffixes. Thus one way of accounting for this would be to mark only the vowels of the suffixes as $\begin{bmatrix} +\text{marked} \\ \text{length} \end{bmatrix}$ which will be interpreted as [+long]. All other vowels are not distinct for length and therefore are unmarked for it. Then, Rule A will be the same for both CG and MG. Consider that even in CG it was only the length of the ultima of a word which determined accentuation, a long ultima counting as two morae; the length of the penult was irrelevant (unless it was to receive the accent).

However, the length of the ultima in CG was either originally there (historically before the antepenult rule was introduced into greek), or it was a result of other rules independent of the antepenult rule, such as loss of intervocalic consonants and subsequent diph-

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[6]) The difference between this rule and the recessive accent rule of Kiparsky is that the former applies to all words which fulfill the phonological condition of three unaccented final vowels. Kiparsky's rule, on the other hand will apply only to the lexical items that are marked as [+ Rule F] irrespective of any accent that may have been assigned to one of the vowels of the ending by previous rules. Thus, here, it is seen as a general limitation on all words, whereas he sees it as a rule which applies to a large number of words. If it is shown that Kiparsky's interpretation is better motivated, then the rule will have to be adjusted but this adjustment will not affect the main points of this paper.

[7]) See A. Mirambel (1959) pp. 25—38.

thongization (*γένεσος* → *γένεος* → *γένους*) or compensatory lengthening because of some consonant loss (*λέοντς* → *λέων*) and so on. In MG, however, the vowels /u/ (*ου*) and /o/ (*ω*) which will have to be marked as [+long] in the second declension noun genitive suffix and first person singular active indicative respectively, are not long anywhere else and are not distinct from any other vowel in terms of length. Therefore their being long in the suffixes is not really a feature of the vowels but of the morpheme itself and consequently it is the morphemes that must be marked.

Rule A then in MG should read

Rule A

$$V \rightarrow [+\text{accent}] \;/\; \left\{ \begin{array}{r} \text{—}C\begin{bmatrix} V \\ -\text{accent} \end{bmatrix}(C)\# \\ +\text{LONG} \\ \text{—}C\begin{bmatrix} V \\ -\text{accent}\end{bmatrix} \;\; C \begin{bmatrix} V \\ -\text{accent}\end{bmatrix}(C)\# \end{array}\right\}$$

If a word is still unaccented, an acute (high stress, in this case) is placed on the penult if the vowel of the ultima belongs to a morpheme marked "long", otherwise on the penult.

Or since the word LONG here does not really have anything to do with length we could call this feature [+Accent Shift] or something to that effect.

Notice that the new MG suffixes are never long. Compare

nominative singular	*θάλασσα*
genitive singular CG	*θαλάσσης*
genitive singular MG	*θάλασσας*,

where the *-ης* of CG has been replaced by MG *-ας* which does not cause any accentual change.

Also notice that in some of the nouns even the suffix *-ου* which in most cases must be marked [+LONG] is considered short, e.g. *τοῦ δάσκαλου* 'of the teacher' along with *τοῦ δασκάλου*. Furthermore, the genitive plural of proparoxytone first declension nouns, such as *μέλισσα*, genitive plural CG *μελισσῶν* is going out of use[8]) in MG and is replaced by a prepositional phrase; in part, probably, because of the distance that the accent will have to move[9]).

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[8]) See note 7.

[9]) A deeper study in the area of MG accentuation may reveal that there are other reasons to support reconstruction of vowel length or the use of a sequence of two vowels in the relevant endings. In that case, the rule will be simpler i.e.

$$V \rightarrow [+\text{accent}] \;/\; \text{—}CVCV\#$$

and this change will not affect the main points of this paper.

The second line of the environment of Rule A is the same in both versions of this rule.

Another rule of accentuation which operates in both CG and MG is the "enclisis of accent". According to this some unemphatic particles and pronouns (possessive and personal for MG, also indefinite for CG and others) lose their accent and become phonetically attached to the preceding word. If the word they become attached to is a proparoxytone (or a properispomenon e.g. *δῶρον* in CG) then a new high accent is assigned to its ultima. Thus:

CG	*ἄνθρωπός τις*	'a certain man'
	δῶρόν τι	'a certain gift'
MG	*τὸ αὐτοκίνητό μου*	'my car'
	μίλησέ μου	'speak to me'

The rule of enclisis is different in the two languages so we will examine each separately.

A necessary condition for the enclisis of accent in MG[10]) is that the enclitic immediately follows the word it modifies. Thus we have the contrasting sentences.

1. *ὁ γείτονάς μας το πούλησε* 'our neighbor sold it'
2. *ὁ γείτονας μας το πούλησε* 'the neighbor sold it to us'

In 1. the enclitic *μας* is a possessive pronoun modifying *γείτονας* and therefore the enclisis will occur giving, *ὁ γείτονάς μας*. In 2. the unemphatic pronoun *μας* (which is potentially an enclitic) did not condition the phenomenon of enclisis on its preceding word *ἄνθρωπος*, because it belongs syntactically to the following verb phrase. In this case, i.e. sentence 2., the pronouns *μας* and *το* have become proclitics (words such as prepositions, etc., attaching themselves phonetically to the following word) but proclitics never cause any change in accentuation and the reason is the fact that greek accentuation is limited only to the last three syllables of the word. When we say that proclitics and enclitics attach themselves phonetically to the following and preceding word respectively, we mean that the resulting clusters on their boundaries are subject to the phonological rules of morpheme medial clusters. Compare the sequence */sm/* in the following examples.

3. /písma/ — [pízma] 'spite'

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[10]) A preliminary version of the MG enclisis has been presented in I. Warburton, *On the Verb in Modern Greek* to appear in Language Science Monograph V. 6.

4. (mas mílise) [mazmílise] 'he spoke to us'
VP

5. (o fílos mas) (mílise) [o fílozmas # mílise] 'our friend
NP VP spoke to us'

The word boundary in 4. and the one within the NP of 5. is eliminated, but the one between the NP of 5. and the VP is retained.

To return to the enclisis itself, it has been pointed out above, that the syntactic relationship of the enclitic to the preceding word is an important factor. According to the two principles that define the notion word, given in Chomsky and Halle (1968), sentence 1. will be analyzed as follows:

(((*ὁ*) (*γείτονας*) (*μας*)) ((*τὸ*) (*πούλησε*)))
S NP D D N N P P NP VP P P V V VP S

thus it consists of two words which we may call phonological words in order to distinguish them from the environment of Rule A. These are:

6. (#*ὁ*#*γείτονας*#*μας*#) and
7. (#*τὸ*#*πούλησε*#)

Sentence 2. will be:

(((*ὁ*) (*γείτονας*)) ((*μας*) (*τὸ*) (*πούλησε*)))
S NP D D N N NP VP P P P P V V VP S

and it will be analyzed into:

8. (#*ὁ*#*γείτονας*#)
9. (#*μας*#*το*#*πούλησε*#)

The enclisis rule will have to state that within the context of phonological word if the last three vowels are unaccented then the second from the end must receive the accent; thus tentatively:

Rule B.

$$V \rightarrow [+\text{accent}] / \begin{bmatrix} -\text{accent} \\ V \end{bmatrix} \text{—C} \begin{bmatrix} -\text{accent} \\ V \end{bmatrix} (C)\ \#1$$

#1 = Phonological word

Notice however that every time there is an enclisis taking place the fourth vowel from the end is accented: e.g.,

10. *ὁ ἄνθρωπος μας* [o ánθropóz mas]
11. *τὸ αὐτοκίνητο μου* [to aftokínitó mu]
12. *φέρε μου το* [fére mú to]
13. *δός μου τον* [δóz mu ton]
14. *δός μου τονε* [δóz mu tóne]
15. *φέρε τονε* [fére tóne]

In 13. there are not enough unaccented vowels for the enclisis of accent to take place. The pronouns *μου τον* are still enclitics in the sense that they are phonetically attached to the verb and constitute one word with it, but for the enclisis of accent there must be three unaccented vowels. We should note that the accent of the enclisis may fall on the ultima of the preceding word or on one of two enclitics (12) or on the first syllable of the enclitic itself (15). As mentioned above, in the cases where enclisis occurs, the fourth vowel from the end is always accented, therefore if we make use of the restriction that no two consecutive vowels are allowed to have a high accent[11]) we can formulate the rule of enclisis as follows:

$$\text{Rule B}\quad \begin{matrix} \text{a)}\ \text{V} \rightarrow [+\text{accent}] \,/\, \text{X—C} \begin{bmatrix} -\text{accent} \\ \text{V} \end{bmatrix} \text{C} \begin{bmatrix} -\text{accent} \\ \text{V} \end{bmatrix} (\text{C})\ \#1 \\ \text{b)}\ \acute{\text{V}}\text{C}\acute{\text{V}}\text{CV} \rightarrow \acute{\text{V}}\text{CVC}\acute{\text{V}} \end{matrix}$$

Notice that part a) of Rule B is the same as the second part of Rule A, "antepenult rule" and that vowel length is not a factor here. It may be of interest to note that vowel length was also irrelevant in enclisis for CG since of the vowels taking part in it counted as short[12]).

In view of what has been presented so far we may now formulate the steps of MG accentuation.

a) Stems are separated into oxytones, paroxytones and pro-paroxytones in the dictionary by marking the oxytones and the paroxytones as such.

b) Some of the suffixes will have to be marked with a morpheme feature which we may call [+LONG] or something to the same effect.

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[11]) Kiparsky (1967) introduces the convention that the posttonic mora is also accented with a high accent, thus the noun *λόγος* is actually *λόγός*. This convention among other things, will account for the lack of enclisis in *λόγος τις* on the grounds that the ultima of *λόγός* carries a predictable high accent. It will also explain why the enclisis accent is not placed on the antepenult of the complex Word + Enclitic, but on the penult; because the antepenult is a posttonic mora. Allen (1968) suggests that the posttonic mora has a predictable falling accent and the high accent plus the falling accent constitute the contonation. This falling accent is essential to the contonation and this is why we cannot place a high accent (the enclisis accent for example) on the posttonic syllable. These two views, may be compatible i.e. the high accent on the posttonic mora which Kipardy postulates may be turned into a falling accent by later rules.

[12]) See treatment of Enclisis in the studies cited in Note 2.

c) Rule A, part a), applies within word boundaries that do not contain another word boundary.

d) Rule A, part b), applies within word boundaries that do not contain another word boundary.

e) If the word that has just been accented is followed by one or two enclitics and they are in the same phrase then the word boundaries between them are eliminated and Rule A, part b) applies again.

f) Rule B, part b) is now applied.

Thus we actually have:

1, Rule A a) $\mathrm{V} \rightarrow [+\text{accent}] \,/\, -\!-\mathrm{C}\begin{bmatrix} -\text{accent} \\ \mathrm{V} \\ +\text{Long} \end{bmatrix} (\mathrm{C})\ \#$

2. Rule A b) $\mathrm{V} \rightarrow [+\text{accent}] \,/\, -\!-\mathrm{C}\begin{bmatrix} -\text{accent} \\ \mathrm{V} \end{bmatrix} \mathrm{C}\begin{bmatrix} -\text{accent} \\ \mathrm{V} \\ -\text{long} \end{bmatrix} (\mathrm{C})\#$

3. Elimination of # between word and enclitic if they are in the same phrase.

4. Reapplication of Rule A b)

5. Rule B b) ΫCΫCV → CΫCVCΫ

The main conclusions for MG are, that the antepenult rule operates cyclically and that the phonological word is a syntactically motivated environment, since it is a particular kind of a phrase (not all phrases but the ones that end with enclitics).

In CG situation is different in several ways.

In the first place, it is argued[13]) that the enclitics are oxytones which lose their accent in the context of enclisis. The main argument in favor of this view is the fact that in places where enclisis does not occur, such as sentence initial position, for example, the enclitic

[13]) Jannaris, for example among others supports this view. Vendryes, (1938), however, offers a different interpretation of the cases where an enclitic appears as an oxytone. He claims that the high accent on the ultima of an enclitic *πόδες τινός* is the result of the application of the rule of enclisis and not the accent of the enclitic itself. Allen (1968) also claims that the enclitic lacked any accent of its own. If it is proved that Allen's view is correct then the CG enclisis rule will be simpler in that it will lack the rule which eliminates the accent of the enclitic. However, another rule will be needed to place the high accent on the ultima of the dissyllabic enclitics after a paroxytone.

I have followed here the more common interpretation of the enclitics being oxytones which lose their accent under certain conditions.

appears with a grave accent mark on the ultima. The phonetic value of the grave accent is probably the same as the lack of the acute accent but the argument is that in the case where the final vowel of a word is marked with a grave it shows that the underlying accent was an acute which has been weakened because of the rule of barytonisis (see below). Therefore, if we assume this to be the case, we will have to mark the enclitics as oxytones. This was not necessary for MG since the enclitics never appear with an accent (unless followed by an enclitic). In fact, by leaving them as unaccented words we were able to explain the enclisis by the fact that after the boundary erasure between the preceding form and the enclitic (because of their syntactic relation) the word was extended by one or two more vowels and if the total number of unaccented vowels was up to three the antipenult rule had to apply again. To come back to CG enclisis, we will have to state that the enclitic loses its accent in the case that the rule of enclisis applies.

Another major difference between the MG and CG enclisis is that in the latter, the enclitic need not be in close syntactic relation with the preceding form in order to condition enclisis. Thus we have not only constructions such as:

16. (*ἔλεγον τί*) → *ἔλεγόν τι* 'I was saying something'
VP

but also:

17. (*ἔλεγον*) (*τινές τῶν ἀνθρώπων*) →
VP NP
→ *ἔλεγόν τινες τῶν ἀνθρώπων* 'Some of the men were saying'

In the definition of the enclitics it is implied[14]) that the enclitic (if it conditions enclisis) not only loses its own accent but it also becomes part of the preceding word. Therefore, the boundaries between the VP of sentence 17. and the following NP will be eliminated, and consequently the surface structure which was the output of the syntactic component will have to be corrected in order to furnish the input to the phonological rule of enclisis. Thus the notion phonological word is not a syntactically motivaded environment as was the case with MG. It would seem sufficient to formulate the rule of word boundary erasure before every enclitic within a sentence and then apply the same rule that we used for MG. The derivation for 16. would be:

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[14]) See for example Bally (1945), Jannaris (1897), Vendryes (1938).

(ἔλεγον # τί)
VP

a) boundary erasure, ἔλεγον τί
automatic loss of the accent of the enclitic, ἔλεγον τι
antipenult rule, ἔλεγόν τι, which is correct.

The derivation for 17. would be:

(ἔλεγον) # (τινές # τῶν # ἀνθρώπων)
VP NP

boundary erasure,	ἔλεγον τινές # τῶν # ἀνθρώπων
accent loss,	ἔλεγον τινες # τῶν # ἀνθρώπων
antipenult rule,	ἔλεγόν τινες # τῶν # ἀνθρώπων

which is also correct.

This procedure, however, will yield the wrong results in the case where a paroxytone is followed by a dissyllabic enclitic such as.

18. ἄνδρα τινά 'a certain man (accusative)'

where the enclisis does not take place. If we apply the same rules to this construction the derivation will be as follows:

ἄνδρα # τινά

boundary erasure,	ἄνδρα τινά
accent loss,	ἄνδρα τινα
antipenult rule,	ἄνδρα τίνα which is wrong for CG.

MG on the other hand allows this to occur as was the case of 15. (p. 9) i.e., φέρε τόνε 'bring him' though more often, φέρτονε or φέρε τον.

Thus the rule of the word boundary erasure will have a further restriction in CG.

Rule Ca)

$$\# \rightarrow \emptyset \; / \; \left\{ \begin{bmatrix} -\text{accent} \\ \text{V} \end{bmatrix} \atop \# \right\} \quad \begin{matrix} \text{CV} - \text{Enclitic} \\ \\ - \text{CV} \\ \text{Enclitic} \end{matrix}$$

Where V = any vowel accented or not.

This rule states that the word boundaries between a word and an enclitic are erased if the ultima of the first word is the only syllable or a non-postonic one and in all case if the enclitic is monosyllabic.

Thus the boundaries will be eliminated in:

19. ἀνήρ τίς
20. ἀνδρός τινός
21. ἄνθρωπος τίς

22. *ἄνθρωποι τινές*
23. *εἰ τίς*
24. *μή τίς* etc.

but not in:

18. *ἄνδρα τινά* and similar cases because the enclitic is dissyllabic and the ultima of the preceding word is a posttonic syllable.

After Rule Ca) has applied then the enclitic loses its accent automatically and the antipenult rule reapplies. Thus:

Rule Cb)

$$[+\text{accent}] \rightarrow [-\text{accent}] \;/\; (CV)CV \quad \text{Enclitic}$$

Rule Ba)

$$V \rightarrow [+\text{accent}] \;/\; -\!\!-\, C\ V\ C\ V \quad \#$$

b) V́CV́CV → CV́CVCV́

Thus *ἀνήρ#τίς*

Rule Ca) *ἀνήρ τίς*
Cb) *ἀνήρ τις*
Ba) inapplicable
ἄνθρωποι#τινές

Rule Ca) *ἄνθρωποι τινές*
Cb) *ἄνθρωποι τινες*
Ba) *ἄνθρωποί τινες*.

In *ἄνδρα#τινά*, Rule Ca) does not apply and consequently none of the other rules will apply either.

Notice that in the cases where an oxytone precedes the enclitic this oxytone will not undergo the rule of barytonisis[15]) according which an oxytone loses its word final high accent if followed by another word and no punctuation mark (i.e. sentence boundary) intervenes between them. The fact that barytonisis is blocked when the oxytone is followed by an enclitic is accounted for by the rules of enclisis proposed above. The barytonisis does not apply because the boundary after the accented syllable is erased and the oxytone *ἀνήρ* has become a paroxytone in *ἀνήρ τις* and *ἀνδρός* has become a proparoxytone in *ἀνδρός τινος*.

The phonomenon of synenclisis (i.e. a sequence of more than one enclitic) has been obscured by lack of agreement between the grammarians and the manuscript tradition. The grammarians, on one

[15]) An extensive treatment of this rule is presented in Vendryes (1938).

hand, claim that every enclitic will be accented except the last one, and they cite examples such as:

25. *πρίν γέ σέ το . . .*

where *πρίν* is a preposition and the rest are enclitics.

Some manuscripts, on the other hand, provide us with examples which do not obey the above rule. Thus, there are cases such as:

26. *οὐδέ τι μιν* two monosyllabic enclitis in sequence.
27. *ἤ νυ σέ που* three monosyllabic enclitics in sequence.
28. *εἴ περ τίς σε μοί φησι* five enclitics[16]).

In the last three cases if the total number of the syllables of the enclitics is more than two then there is an accent on every other enclitic.

Since there is no conclusive evidence in support of either side we will try to show what are the implications of each view in relation to the rules proposed here for enclisis.

In 26. we could assume that the word boundary before the first enclitic *τι* and also before the second enclitic *μιν* are eliminated simultaneously and then the antipenult rule applies, or that the boundary before the first anclitic is eliminated first, grouping the first two forms together and then the boundary between this first group and the second enclitic is eliminated. The result in either case will be the same and correct for 26. and 27. but not for 28. which suggests that a cyclic operation of the rules is necessary. Thus if we eliminated the word boundaries before every enclitic simultaneously in 28. the result would be a very long word and since the elimination of the boundaries causes the loss of the accent on the enclitic the word would only have an accent on the first form i.e.:

εἴ περ τις σε μοι φησι

and the antepenult rule would accent only the third vowel from the end

εἴ περ τις σε μοί φησι

which is not correct according to the manuscripts. If, on the other hand, we apply the rules of enclisis cyclically, first to the first two forms then to the result of the first grouping plus the second enclitic and so on, we will produce the accentuation pattern given in these manuscripts, e.g.:

εἰ#πέρ#τίς#σέ#μοί#φησί is analysed into:
(((εἰ#πέρ)#τίς)#σέ)#μοί)#φησί)

[16]) Vendryes (1938) discusses these two conflicting views on Synenclisis and he provides the examples that I have used here. He seems to support the manuscript tradition rather than the rule of the grammariens.

Step 1 (εἰ#πέρ)
Rule Ca) εἰ πέρ
Cb) εἰ περ
Rule Ba) εἴ περ
Step 2 εἴ περ#τίς
Rule Ca) εἴπερ τίς
Cb) εἴ περ τις
Rule Ba) } inapplicable
b) }
Step 3 εἴ περ τις#σέ
Rule Ca) εἴ περ τις σέ
Cb) εἴ περ τις σε
Rule Ba) εἴ πέρ τις σε
Bb) εἴ περ τίς σε
Step 4 εἴ περ τίς σε#μοί
Rule Ca) εἴ περ τίς σε μοί
Cb) εἴ περ τίς σε μοι
Rule B inapplicable
Step 5 εἴ περ τίς σε μοι#φησί
Rule Ca) εἴ περ τίς σε μοι φησί
Cb) εἴ περ τίς σε μοι φησι
Rule Ba) εἴ περ τίς σε μοί φησι

which is the pattern given in the manuscripts.

The grammarians' view that in synenclisis all enclitics are accented except the last one suggests a different enclisis rule which may be something like the following:

'Accent the final non-posttonic syllable before an enclitic. Erase the accent of the enclitic and eliminate the boundaries before an unaccented enclitic', i.e.

Rule Da) $V \rightarrow [+\text{accent}] \;/\; \left\{ \begin{bmatrix} -\text{accent} \\ V \end{bmatrix} \right\} C\text{—}\ \#\ \text{Enclitic}$

automatically following the application of Da.

b) $[+\text{accent}] \rightarrow [-\text{accent}] \;/\; (CV)CV$ — Enclitic

c) $\# \rightarrow \emptyset \;/\; \text{—}$ Unaccented enclitic

Furthermore apply this set of rules simultaneously. Thus the derivation of πρίν#γέ#σέ#τό will be

Rules Da) and b) *πρίν#γέ#σέ#το*
only the last one is unaccented since it is not followed by another enclitic.

Rule Dc) *πρίν#γέ#σέ το*
only *το* becomes phonetically attached to the preceding form.

Unfortunately there is not enough evidence in support of one view over the other. The advantage of the first solution (Rules Ca, b, Ba, b) is that it makes use of rules well established in other parts of CG grammar and it explains the phenomenon of enclisis in terms of the antepenult rule whereas the second solution proposes a new rule which has no other function in the grammar as far as we can see.

Conclusion

If we accept Rules Ca, b, Ba, b to be the appropriate ones for CG enclisis then the antepenult Rule operates cyclically in both MG and CG i.e. it operates within words that do not contain a word boundary and also within phonological words which consist of any word followed by an enclitic. The major difference between MG and CG is that in MG the notion Phonological word is syntactically motivated whereas the same notion in CG is defined by special rules which convert the syntactically derived surface structure into a phonologically appropriate one.

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