

Greek Apocope

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Greek Apocope  
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Apocope of disyllabic prepositions and verbal prefixes is a complex process which occurs under different conditions and affects different items from dialect to dialect in Ancient Greece. Moreover, in certain dialects this process expanded its scope of application through time so that for example in the Thessalian texts of the late 3rd century apocope is more widespread than in those from the 5th century. On the other hand, many dialects gave up or restricted apocope because of the spread of the Attic-Ionic based koiné. In Attic-Ionic apocope is virtually non-existent, but in the other dialects it is found both as a productive process and as an irregular feature which seems to be restricted to formulas and to compounds. After a brief survey of the principal environments in which apocope is found in the dialects and a listing of the items affected, I will turn to a discussion of the theories that have been proposed to account for this phenomenon. In conclusion I will discuss the role of accent and proclisis and will present parallels from certain other Indo-European languages.

Apart from accent, three factors are involved in the operation of apocope: the shape of the medial consonant of the (C)VGV prepositions and verbal prefixes affected, the point of articulation of the following word initial consonant, and the assimilation of the medial consonant of the preposition/preverb to the initial consonant of the following lexical item. Such complex conditioning for a vowel deletion rule appears strange at first sight (1). It is merely through historical accident that the medial consonants of the apocopated preposition/preverbs are dentals or labials, since there are no inherited preposition/preverbs with medial velars. The restrictions on the word initial consonants of the following lexical items are as much a feature of word class as of phonetic conditioning. Apocope is most widespread after n and r, more restricted after t and d, and least productive after p. Thus, aná 'up, along' and pará 'alongside, by' are found in apocopated form in virtually all of the dialects except Attic-Ionic:

Lesbian: onsteíkhei	par toutōn
onkaléontes	parkálei
ompétason	par phílōn
Thessalian: aggrápsai	par tån eikóna
antetheĩ	parbaĩnoi
Boeotian: aggrápsē	parkékleike

	antítheiti	par dotheísan
	appasámenos	par Fiphiádan
Arcadian:	agkarussóntō	par gegenémínos
	anthēnai	par tanu
	ampeplegménas	par mésan
Phocian:	aggrápsai	par ksoās
	andeksámēnoi	par tōn prutaníōn
	ammónion	parbálloito
W. Locrian:	ankhōreīn	
	andikházōnti	
	ampráksantes	
Elean:	sunallúoito	par tò grámma
		parbaínoian
Laconian:	an gār tàn pólin	
	anthēnta	par th'hiaròn skópelon
	amptámenos	párhaine
Heraclēan:	ankotharíonti	
	ántomos	pardōnti
	ampōlēma	par pénte Fētē
Argolic:	agkátharsin	parkhrēma
	antíthēmen	partamónti
	anpaistēra	par Pandárou
Cretan:	angrápsai	par Knōsíōn
	andéksetai	parthúmata
	am potamón	párbolon
(Except for the Lesbian, all the preceding examples are from Bechtel 1921, 1923, 1924).		

In the case of the preposition/preverbs with medial d or t, apocope is much less widespread:

Lesbian:	kak kephálas	
	kas(s)poléō	
	kábballe	
Thessalian:	kát te tās epistolàs	pokgrápsaménois
	katthēmen	pot tàn pólin
	kap pantòs khrónoi	
Boeotian:	kat tò psáphisma	pok katóptas
	kata gān kē kat thálattan	
	kag gān (?)	pottaksántōn
Arcadian:	kakeiménau	petoís Foikiátai(s)
	kathésthai	
	kamēna	
Phocian:	katàn aksían	pot tòn theón
	kat tò pélethron	potthétou
W. Locrian:	katās sunbolās	potòus dikastēras
Elean:	katógráphos	potòn theón
	kathúsas	
	kadaleménoi	
Laconian:	kat tó +	pot tón +
	katthēratórin	potthéntes

kákkē (<katákee) · kátheude (Hesych.)  
kabbalóntes

Heracleian: kat tá + pot tón +  
                  prokaddedikásthō           potthéntes  
Argolic: katá (= kat + tà) FeFrēmēna  
          katthénti                   potò (= pot+tò) thúrōma  
          kabolá  
Cretan: katò arkhaïon (katà is apocoped only before the  
          article, Bechtel 1923:720)  
(Again, all these examples are from Bechtel 1921, 1923,  
1924).

And finally, apocope after a labial is found in only  
two dialects:

Lesbian: ap patérōn máthos Alc. 104  
Thessalian: at tās presbeías et toī pareóntos  
            at tãn koinãn pothódoun  
            appeísai  
            hupprò tās  
(Bechtel 1921).

In addition to these, the apocoped forms in Homer  
are generally agreed to be an Aeolic feature:

kàk kephalēs      kàr phóon  
kaddūsai          kàn nómon      appémpsei  
káppese          kàm méson      ábbalen      hubbáallein  
(Schwyzer 1953.1:407).

These examples may be summarized in tabular form:

	ana	para	kata	poti	peda	apo	epi	hupo	(peri)
Lesbian	+	+	+	o	x	P	P	P	+
Thessalian	+	+	+	+	+	P/ar	P/ar	P/ar	+
Boeotian	+	+	+?	T?	x	-	-	-	+
Arcadian	+	+	+	+	T	-	-	-	+
Phocian	+	+	T	T	o	-	-	-	+
W. Locrian	+	+	T	T	o	-	-	-	+
Elean	+	+	T	T	o	-	-	-	+
Laconian	+	+	+	T	o	-	-	-	+
Heracleian	+	+	T	T	o	-	-	-	-
Argolic	+	+	T?	T	x	-	-	-	-
Cretan	+	+	T/ar	T	x	-	-	-	-
Attic	-	-	-	o	o	-	-	-	-
Ionic	-	-	-	o	o	-	-	-	-

o = item does not occur in the dialect

- = apocope does not occur

+ = apocope occurs before labials, dentals and velars

T = apocope occurs before dentals

P= apocope occurs before labials  
 ?= evidence limited, possibly one or two counterexamples  
 x= item occurs, but not in an environment for apocope  
 ar= apocope before the article only

With the exception of Laconian, the Doric and NW Greek dialects show very much the same conditions for apocope. In this respect, it is noteworthy that Heraclaeon, a Laconian colony, goes along with the other Doric dialects rather than with its mother city. The traditional explanation for this discrepancy is that Laconian shows a strong Arcadian admixture (Bechtel 1923:331). The rule for the appearance of pot and kat in Doric and NW Greek was first discovered by Ahrens in the middle of the last century: it states that the apocopated forms occur only before dentals. Ahrens' rule is undoubtedly correct and has been accepted for more than 100 years. Yet this simple formulation obscures the fact that there are two main environments where apocope occurs in these dialects: in compounds of preverb and verb, and before the definite article. Apocopated kat and pot do not seem to occur before nouns beginning with dentals (2), so that for example in Cretan katò (< kat + to) arkhaïon 'according to the principal' contrasts with katà thusian 'according to the sacrifice'. The limitation of productive apocope to the position before the article has a parallel in the late Thessalian apocope of epì apò and hupò in the same environment.

Various explanations of Greek apocope have been proposed. Perhaps the most trivial of these is that which assumes that the elided prevocalic forms of the preposition/preverbs were generalized to preconsonantal position (3). This theory immediately founders on the fact that only the preposition/preverbs listed above undergo apocope, whereas all of the disyllabic preposition/preverbs have elided forms, e.g. met'anemoïsi 'with the winds' but metà toïsin 'among them'. Hugo Ehrlich proposed a rule to account for apocope which states that the medial vowel in a tribrach sequence is deleted if it is word final (1902:20). Ehrlich based his rule on Homeric examples and seems not to have noted that it has no explanatory value whatsoever since tribrach sequences are not found in dactyls. Paul Kretschmer worked out a similar rule for Hellenistic Greek, but here the emphasis was on the avoidance of successive CV syllables containing the same vowel, cf. the development of Berenikē to Bernikē (1912). This rule can be projected back to an earlier stage of Greek to account for the suppression of the medial vowel in such sequences as katà tás (1912:35), and for apocope before

the article in Doric and NW Greek in general, but it is of little help in dealing with Aeolic apocope, since the latter process feeds an assimilation rule. Szemerényi (1964) maintains that syncope of unaccented high or mid vowels is a well attested phenomenon in Greek. Although he specifically excludes apocopated preposition/preverbs from consideration (1964:289), it is of interest for our purposes that in the majority of the cases of syncope that he discusses the accent is on the syllable immediately following the syncopated vowel (1964:264-265). Of course, the majority of the preposition/preverbs that undergo apocope have final low vowels. A tentative hypothesis to account for apocope by the use of vocalized and non-vocalized reflexes of laryngeals has been offered by R.S.P. Beekes (1969:255-256). Taking aná pará kata as the original nucleus of forms from which apocope spread, he suggests that the final -a is a reflex of the second laryngeal in vocalic function, while the 'apocopated' forms continue the consonantal (i.e. zero) values of the laryngeal (4). However, Beekes cannot set up natural environments for the different reflexes of the laryngeal. Finally, J. Schmidt (1902:17) attributed apocope to the development of proclisis in the preposition/preverbs. In non-proclitic forms there is no apocope, so that 'Jeder dialekt hatte also früher je eine volle und eine verkürzte form jeder zweisilbiger praeposition, welche auf vocal + cons. + kurzem vocale endete, zur verfügung' (1902:17). In the remainder of this paper I would like to amplify and motivate Schmidt's explanation.

In an earlier period in the history of Greek these elements were independent lexical items with their own accents: the prepositions were postpositions, and the preverbs were not inseparably joined to their verbs:

theōn ápo Od. 6.12 'from the gods'  
 pónton épi Il. 7.63 'on the sea'  
 Hēphaístoio pára Il. 20.10 'from Hephaistos'  
 hélos káta Il. 19.221 'over the meadow'  
 katà píona mēri' ékea Il. 1.40 'I, burned fat thigh pieces'  
 àn d'ára Tēlémakhos perikalléa bēseto díphron Od. 3.481  
 'Telemakhos got on the beautiful chariot'

The shift in position of these elements was responsible for their loss of accent when used adnominally (Vendryes 1938:69-71, 243-244). That the accent of the forms in anastrophe is inherited is shown by such Sanskrit cognates as ápa pári and by the isolated Greek adverbs kátō 'down' ánō 'up'. The development of proclisis in these items is not sufficient to explain their apocope; presumably all Greek dialects had proclitic prepositions. When

these items are used as postpositions they never undergo apocope. As verbal prefixes separated from their verbs (in 'tmesis') they may be apocopated, but this occurs only in such Homeric examples as án d'ára ... bēseto (cited above), where the preverb is followed by an enclitic connective with an initial dental. This then is for preverbs virtually the same environment as that before the definite article for the prepositions in the Doric and NW dialects, although the latter development must be later than the former, since the anaphoric pronouns ho hē to had not yet become articles in the Homeric corpus. In Indo-European the position and accentuation of preverbs varied. Preverbs could either stand in sentence initial position, or they could stand immediately before the verb. In either case, they were accented in main clauses, but proclitic in subordinate clauses (cf. Watkins 1964:1037). The principal Common Greek innovation in accent vis-à-vis Indo-European was the limitation of accent placement to the final three syllables of a word. Since most inflected verbs have either a total of three syllables or a two mora ending, this innovation effectively deprived most preverbs of accent, so that they became proclitic (for the most part). Presumably the development of proclisis of most preverbs contributed to the spread of obligatory univertation of preverb and verb (5).

In Attic-Ionic, nouns and verbs are subject to different rules of accentuation. The three syllable limitation holds for both word classes, but verbs have recessive accent, while many classes of nouns retain 'free' accent placement. Very little is known about the accentual practices of the other dialects, but the available information is conveniently summarized in Vendryes 1938. The information derives from ancient grammarians and is for the most part restricted to observations about literary texts, but there must have been some resemblance between the accentuation of the literary documents and the accentual practices of the dialects. Of course, there is no guarantee that the Doric dialects all had the same accentual patterns, but on the other hand, they all behave in much the same way as far as apocope is concerned. As far as is known, Doric differs greatly from the other dialects in that it seems not to have favored recessive accent in verbs or in some of the noun classes that have recessive accent in Attic-Ionic, so that it has éphéron 'I carried' elábon 'I seized' elúsan 'I released' as against Attic-Ionic épheron élabon élusan, and ampélos 'vine' násos 'island' skōr 'excrement' as against Attic-Ionic ámpelos nēsos skōr (Vendryes 1938:259-260). Furthermore, Doric did not contrast acute and circumflex intonations on long penul-

timates: paída 'child' gunaíkes 'women' kheíres 'hands' amúnai 'ward off'. Only one fact about Aeolic accentuation is known, but it is of signal importance, for this dialect had recessive accent in all word classes except prepositions (Vendryes 1938:61, 265). Unfortunately, nothing at all is known about Arcadian accentuation (6).

It is noteworthy that each of the major dialect groups has somewhat different accentual practices and different conditions for apocope. In Aeolic, where apocope is most widespread, the inherited accentuation has been given up in all word classes. This change is quite early and is found in the oldest strata of the Homeric poems (Wackernagel 1914). In Doric, the verb forms cited above show that the augment and hence other verbal prefixes did not bear the accent. It seems likely that the same restriction would hold for verbal nouns compounded with preverbs. Thus both verbs and definite articles were preceded by proclitic preposition/preverbs in all environments, and the apocopated vowel was immediately pretonic in the majority of cases. Since the use of articles with nouns is a more recent feature in the history of Greek than is the compounding of preverb and verb, the original locus of apocope in these dialects must have been in preverbs, and apocope before the article must have been a later development. In Attic-Ionic, preverbs were freely accented (within certain limits) if the verb was short enough. There is no convincing explanation for why Attic-Ionic does not show apocope (7). In any event, the dialects that do have apocope have altered the inherited accent rules rather more than Attic-Ionic has: Aeolic by generalizing recessive accent in all environments, thus giving up contrastive accent as part of its phonological system, and Doric by generalizing processive accent, especially when it leads to the avoidance of accent on the augment or on preverbs, since this accentual pattern was a feature of Indo-European under certain conditions (8). Even though there is no direct evidence for this point, I would like to suggest that apocope originated in compound verbs in subordinate clauses, where the preverbs were proclitic in Indo-European (Wackernagel 1877 Meillet 1937:368, Kuryłowicz 1958:151-152), and spread from there when the inherited accentuation of verbs in main clauses was given up. The three syllable limitation on accent placement, as stated above, effectively merged the accentuation of verbs in main and subordinate clauses in the great majority of cases. Such a theory would have the advantage of explaining why apocope is basically an optional rule in the dialects that have it: there will always have been a residue of verb forms which, because of their length, had the accent on the

final syllable of the preverb (9). Since deverbal nouns compounded with preverbs are accented in much the same manner as the verbs they are based on, apocope must be an early development in this category of words as well. Apocope of prepositions before nouns is somewhat less widespread in the dialects; this fact points to a later origin for this phenomenon (10). Latest of all is the development of apocope before the article. The accentual preconditions, and, on a different level, the shift from postposition/preverb to preposition/verbal prefix are as important for the operation of apocope as are the requirements that it operate only between dentals in Doric or that the resulting clusters be homorganic in Aeolic.

In fact, it is by noting the alternation between monosyllabic preposition/verbal prefix and disyllabic postposition/preverb that one may find parallels to the Greek development. In Latin, although there are no inherited IE disyllabic postpositions, there do exist monosyllabic prepositions and verbal prefixes which are related to the disyllabic IE forms. Thus to Old Indic ápa áva antár ápi abhí úpa pári correspond respectively Latin ab au- (cf. au-fugio) inter ob amb sub per (11). In the classical period Latin had a stress accent restricted to the final three syllables of the word, while prehistoric Latin is supposed to have had strong initial stress (12). In Gothic, monosyllabic prefixes are found as a rule in deverbal nouns, while disyllabic prepositions are found in composition with primary nouns. Thus all action nouns in -eins have only the short forms of the preposition/preverbs, cf. and-huleins 'uncovering' faur-domeins 'prejudging', and forms such as and-stald 'presentation' faur-häh (~ faura-häh) 'curtain' faur-stasseis 'supervisor' contrast with anda-hait 'knowledge' anda-waurdi 'answer' faura-dauri 'street' (forms from Krause 1964:70-71). The traditional explanation for this alternation is that the short forms are found in pretonic position, while the disyllabic forms bear the accent (Krause 1964:70-71). The forms which are most clearly marked as deverbal have proclitic prefixes. And in Old Norse, disyllabic postpositions and adverbs alternate with monosyllabic prepositions in the Edda and in early skaldic verse: fyrir/fyr (cf. Goth. faura/faur) yfir/of (OHG oba) under/und (Goth. undar). In classical Norse prose, this alternation has been completely eliminated in favor of the disyllabic forms (13). All of these languages have changed radically the inherited accentual patterns.

In summary, Greek apocope can be viewed as a part of a broader process which involves the shift from OV to VO order and consequently the shift from postposition

to preposition, the loss of IE free accent placement, the development of proclisis in preposition/preverbs, and then the loss of the final vowel of the disyllabic proclitics. Viewed in this manner Greek apocope has parallels in a number of IE languages, all of which have given up the inherited accentuation and have been subject to word order change. The ultimate motivating factor for apocope appears to have been syntactic change.

#### Notes

(1) metà is not apocopated in any dialect in which it occurs although it has the appropriate phonetic shape.

(2) I have not been able to find any examples among those listed by Bechtel (1921, 1923), nor in inscriptions 48-120 in Buck 1955.

(3) Brugmann (1913:165) was the principal supporter of this view. In general his position has merely been dismissed without argumentation (so Schwyzer 1953:404).

(4) Schwyzer (1959:259) too has doubts about the etymological justification of the final vowels in these words and hence about the reality of apocope in these words. However there can be no real question about this point. Otherwise, Schwyzer follows Kretschmer in assuming that a partial dissimilatory 'Silbenverlust' is responsible for the loss of the final vowels of the preposition/preverbs (1953:265).

(5) In fact, all preverbs in Greek are proclitic, including those in 'tmesis'. Only those preverbs which follow their verbs in Homer are accented like the prepositions in 'anastrophe' (cf. Watkins 1964:1037).

(6) Arcadian shows the same general conditions for apocope as does Aeolic. Is it possible to infer from this fact that Arcadian too has recessive accentuation in all word classes?

(7) Kaisse 1975 tries to establish a correlation between the extent to which a dialect tolerates geminate clusters and the extent to which apocope operates. There are two problems here. The first is that double consonants are not consistently written in dialect inscriptions, so that it is unclear whether a sequence like Arcadian petois (< peda + tois) represents a phonetic single or double consonant. The latter interpretation is probably correct. Secondly, a dialect like Attic freely tolerates geminate clusters provided that there is either a word or a morpheme boundary between the two elements. And, of course, Ionic does not usually simplify inherited geminate clusters.

(8) Doric accentuation is in general more conservative than Attic-Ionic accentuation, but in IE a verb form corresponding to elábon would either have been accented on the final syllable or on the augment.

- (9) The final vowel of the prefix is the leftmost limit for accent placement, even in such forms as apódos where etymologically one would expect \*ápodos. Kuryłowicz (1958:153, 1968:100) views this accentuation as a morphological innovation in Greek, based on the merger of the accented verbal prefixes with the unaccented.
- (10) In the majority of the West Greek dialects kat and pot do not occur before nouns (see Note 2); only an and par (and per) may be found in this environment.
- (11) inter is disyllabic because of the regular Latin treatment of -CVR. The loss of final vowels in Latin seems to depend on word class.
- (12) The argument for prehistoric initial stress in Latin is based on three kinds of evidence: vowel reduction in non-initial syllables (facio/conficere), vowel syncope (undecim < uno-decim), and certain metrical practices in Plautus and Terrence, where words of the shape vvv had initial stress (Sommer 1902:96-99). Sturtevant distinguishes between prehistoric syncope and syncope that occurred in the Classical period (1940:177-179). Classical syncope is usually post-tonic. For the prehistoric process he maintains that vowels may be lost in original final, penult and antepenult syllables, as well as in monosyllabic enclitics, so that 'The only clear limitation upon the process is that it never occurs in initial syllables of full words' (1940:177). Yet Sturtevant's examples all show that it is actually the second syllable of the word (counting from the beginning) that shows vowel loss. In fact, the case for initial stress in prehistoric Latin has been overstated. The vowel reductions occur primarily in compound verbs, and if the Indic evidence is to be trusted, the largest class of these had the accent on the preverb to begin with. All that is necessary here is to assume that there was a generalization of the reflexes of the forms with accented preverbs. The syncope of vowels that otherwise would have had the accent in Classical Latin may in some respects continue inherited accentual patterns too. For example, in a compound like auceps (< \*auī-ceps), the accent would have been on the verbal element in Indo-European, and syncope could have occurred pre- rather than post-tonically. This consideration holds for most of the standard examples given in the handbooks. There is also an inherent implausibility in the assumption that between Indo-European and Latin there were two separate accent shifts, with the final one very similar to the innovation in Aeolic Greek. In this context it is interesting to note that the classical grammarians thought that Latin was a type of Aeolic Greek precisely because of the three syllable accent rule in all word classes. The regular apocope of pre-

positions in Latin is yet another point of similarity. Hirt (1929:72-79) has made similar criticisms of the standard view of the prehistory of the Latin accent. Pretonic vowel loss seems to be regular in Germanic preposition/preverbs too (see below).

(13) This alternation is described in Heusler (1964: 143-144). The use of the short forms was considered to be a feature of the poetic language by later writers, but the principle of repartition is usually observed in the Edda and in early skaldic verse. The subsequent replacement of the monosyllabic forms by the disyllabic forms is parallel to the development that Schmidt (1902: 17) posited to account for the absence of apocope in Attic. Schmidt too thought that there were Germanic parallels to Greek apocope: 'Ähnliche ausgleichungen haben sich wiederum im Germanischen vollzogen, wo zweisilbigen praepositionen durch das auslautsgesetz einsilbig wurden, in zusammensetzungen aber zweisilbig blieben, z.b. ist aná zu urgerm. an neben ana- in zusammensetzungen geworden, im Gotischen aber die volle form wieder auf die selbständige praeposition übertragen ...' (1902:17). Schmidt's notions about the behavior of these elements in compounds are erroneous, and he did not see the real parallels.

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