

# Enclisis of Finite Verbs in Archaic Greek Inscriptions

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## 1 Introduction

Jacob Wackernagel discovered that the recessive accent of finite verbs in Greek was derived from Proto-Indo-European sentence accentuation, that is, the finite verb in principal clauses was treated as an enclitic.<sup>1</sup> He argued as follows: in Vedic, the finite verb in a principal clause or the vocative loses its accent unless beginning the sentence or Pāda (metrical foot), that is, the finite verb, is treated as an enclitic. In Greek, on the other hand, although the finite verb or the vocative retains it, it has a recessive one. This agreement is not coincidental, he argued. In this agreement, the ‘Law of Limitation’ is relevant. In Proto-Indo-European, as in Vedic, there was no absolute restriction on the position of the accent, that is, the accent could fall on the final syllable, initial syllable, or middle syllable of the word. In Greek, however, the position of the accent was restricted to within three syllables from the end of the word (the ‘Law of Limitation’). In other words, having more than three unaccented syllables from the end of a word was no longer permitted. For example, although the finite verb originally did not have the accent and the preceding word bore it, like O-Ó-O-O-\*φερομεν, once the ‘Law of Limitation’ was applied, the finite verb could not stand without accent, and the original accent moved toward the end of the word until it no longer violated the law, like O-Ó-O-O-φερομεν (although the accent mark

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<sup>1</sup> The title of my first paper on the enclisis of the finite verb of Greek (Matsuura, -vς) was supposed to be ‘On the Prosody of the Gortynian’ (§2.1.2 of this paper) because I expected that the phonological evidence preserved in the Gortyn Code (*ICret.* IV.72), namely, the example of the dropping of the final consonant of the preceding word because the finite verb is treated as an enclitic, would be the strongest evidence for the enclisis of the finite verb. However, the title was rejected by an anonymous referee of *Philologica* because this example alone was insufficient. To increase the clarity regarding the enclisis of the finite verb, I have therefore examined other evidence in archaic Greek inscriptions as extensively as possible and have presented it in a second (Matsuura, οὔτος; §2.2 of this paper), third (Matsuura, Cypriot; §3 of this paper), and fourth paper (Matsuura, v; part of §4 of this paper). Furthermore, by employing examples from Attic inscriptions (the major part of §4 of this paper) as further evidence, I convincingly argued regarding the enclisis of the finite verb in my doctoral dissertation (Matsuura, Enclisis). In the end, as I had initially anticipated, the evidence in the first paper (Matsuura, -vς) proved to be the strongest. Unfortunately, the conference presentation based on my doctoral dissertation was rejected by the *JCS* committee for publication due to duplicate submissions. However, I am pleased to be able to publish it in *JASCA*. I would like to thank two anonymous referees for their helpful suggestions. If errors still remain, they are—of course—my responsibility. The author would like to thank MARUZEN-YUSHODO Co., Ltd. (<https://kw.maruzen.co.jp/kousei-honyaku/>) for the English language editing.

in O-Ó-O-O- is retained).<sup>2</sup> Through this process, the accent in finite verbs became recessive, he argued.<sup>3</sup>

Wackernagel discussed the enclisis of the finite verbs in Greek through traditional grammar and comparative grammar, but we can discuss with more confidence using epigraphical evidence. However, because the marks of accent are not used in inscriptions, showing the enclisis of the finite verbs on the basis of accent marks is not possible. Nevertheless, because the absence of an accent means that the word is pronounced together with the preceding or the following word, finding epigraphic features that indicate such pronunciation is sufficient.

Of such features, the obvious features have been observed. For example, in ' *o-ra-ma-ne-u-se-e-ke* ' [= ὁ Ἀρμάνευς ἦχε] (*ICS* 217.21), a symbol (a vertical bar) used to separate words (hereafter, a 'word divider') is not used before the finite verb. Assimilation<sup>4</sup> may occur between a word and the following finite verb: ὁ ἀνεδ δοι (*ICret.* IV.72.iii.20, 29) [< ἀνήρ], ὁ πατεδ δοει (vi.2) [< πατήρ].<sup>5</sup> The purpose of this study is, therefore, to add to these features those that are not obvious, that is, (1) external sandhi, (2) the detailed usage of the empty vowel in the syllabic script, and (3) the detailed usage of word dividers.

Most inscriptions have only one of these features, and some have more than one; thus, discussing these features in combination is sometimes possible. For example, if an empty vowel is used before a finite verb, but no word divider is used, the enclisis of finite verbs is weaker than that of prepositions and definite articles because an empty vowel is usually not used in such cases.

## 2 The Gortyn Code

### 2.1 ὀμνυς

#### 2.1.1 Introduction

The form ὀμνυς in ὁ δ[ικ]αστας ὀμνυς κρινετο (*ICret.* IV.72.ix.21) is an enigma (Fig. 1).<sup>6</sup> There is no explanation for it.<sup>7</sup> Because the second compensatory<sup>8</sup> lengthening did not occur in Gortynian, it should be \*ὀμνυς. However, if the

<sup>2</sup> Bloomfield, *Recessive*, 1.

<sup>3</sup> Wackernagel, *Verbalakzent*, 458–459; Schwyzer, *Grammatik*, 389–391; Barrett (ed.), *Hippolytos*, 425–427; Probert, *Ancient Greek Accentuation*, 86–87.

<sup>4</sup> Buck, *Dialects*, §98.

<sup>5</sup> Devine and Stephens, *Prosody*, 398.

<sup>6</sup> Those unfamiliar with Greek dialects should refer to Buck, *Dialects*, §§223–4, §§270–3.

<sup>7</sup> Schwyzer, *Grammatik*, 566 lists various forms but no explanation.

<sup>8</sup> Those unfamiliar with intermediate grammar should refer to Smyth, *Grammar*, §37, Buck, *Dialects*, §78, Lejeune, *Phonétique*, §125.



Fig. 1: *ICret. IV.72.ix.20–22* (© 2015 Jebulon, Wikimedia Commons, Licensing: CC0 1.0)

following finite verb κρινέτο is treated as an enclitic, *v* may be dropped in external sandhi.<sup>9</sup> Together with ὀμν[υ]ς κριν[ε]το (*ICret. IV.101.2*; Fig. 2), this case is the unique case of the allomorph (a variant phonetic form of a morpheme) that emerged from external sandhi in Greek inscriptions.<sup>10</sup>



Fig. 2: My drawing based on *ICret. IV, p. 202*<sup>11</sup>

### 2.1.2 External sandhi in Gortynian

As aforementioned, because the second compensatory lengthening does not occur, the final *-vς* is retained in Gortynian. The present participle of ὄμνυμι, therefore, should be \*ὄμνυvς (< \*ὄμνυvτς) in Gortynian, whereas in Attic, it is ὄμνύς (ῠ) with the second compensatory lengthening. The retention of the final *-vς* is illustrated in the following examples: (1) ἐ καταθενς ἐ (*ICret. IV.72.vi.19*), (2) ἐ καταθενς τοι πριαμενοι (ix.11–12), and (3) ὁ καταθενς, μεδ' (x.27). Schwyzer explains that the *v* in \*ὄμνυvς is lost before a word beginning with a consonant, but not before a word beginning with a vowel.<sup>12</sup> In the aforementioned examples, his explanation is insufficient.

What is missing from his explanation is external sandhi. For showing that the form ὄμνυς is the result of external sandhi caused by a finite verb being treated as an enclitic, finding an example of a finite verb being treated as enclitic and then examining why the *v* in the final *-vς* has been dropped is sufficient.

<sup>9</sup> For external sandhi, see Buck, *Dialects*, §§90, 96–100.

<sup>10</sup> First discussed in Matsuura, *-vς*; see also Matsuura, *Enclisis*, 41–45.

<sup>11</sup> This figure was included at the request of an anonymous referee. I regret that I did not have sufficient time to obtain permission to include the figure in an open access journal.

<sup>12</sup> Schwyzer, *Grammatik*, 566.

First, the following are examples of assimilation occurring between a finite verb and the preceding word due to external sandhi:<sup>13</sup> (1) ἄτι κ' ὁ ἀνεδ δοι (*ICret.* IV.72.iii.20) [ἀνήρ], (2) αἰ τι κ' ὁ ἀνεδ δοι (iii.29) [ἀνήρ], (3) ἄς κ' ὁ πατεδ δοει (vi.2) [πατήρ], (4) ἄς κ' ὁ πατε(δ) δοει (ix.41) [πατήρ], (5) αἰ δε ... μετι(λ) λειοι (viii.13–14) [μήτις], (6) ὄπο κα τιλ λει (x.33–34) [τις], and (7) το μειονος ἐν(δ), δικαδδετο (ix.50) [ἐνς = Att. εἶς]. These examples could indicate that the finite verb is treated as enclitic.

Second, as aforementioned, because the second compensatory lengthening does not occur, the final -νς is retained in Gortynian, for example, τονς ἐλευθερονς [= Att. τοὺς ἐλευθέρους] (*ICret.* IV.72.vii.7–8). However, if, for example, τονς is followed by a consonant, ν is dropped to avoid a succession of three consonants, for example, (\*τονς-καδεστανς >) τος καδεστανς [= Att. τοὺς κηδεστᾶς] (iii.50–51). In Gortynian, therefore, the masculine accusative plural of the definite article has two forms, τονς / τος, depending on the phoneme following it.

However, the conditions under which the ν in the final -νς may be dropped are not clearly stated. In Gortynian, a final consonant may be assimilated to the following initial consonant: (1) -ς δ- > -δ δ- (15 × in *ICret.* IV.72), (2) -ρ δ- > -δ δ- (5 ×), (3) -ς θ- > -θ θ- (1 ×), (4) -ς λ- > -λ λ- (3 ×), (5) -ν π- > -μ π- (3 ×), and (6) -ν μ- > -μ μ- (5 ×). These final consonants have not always undergone assimilation but are often in the following combinations: (i) article + noun, (ii) preposition + noun, (iii) any word + μέν, and (iv) any word + δέ.<sup>14</sup> In other words, final consonants may be assimilated in a ‘proclitic + noun’ combination (i–ii) or in ‘any word + (quasi-) enclitic’ combination (iii–iv). With these conditions, the following examples can be easily illustrated: (a) δυο μοιρανς φεκαστον (*ICret.* IV.72.iv.41) and (b) τος καδεστανς τος ... (vii.43–44). In (a), ν is not dropped despite μοιρανς being followed by a word beginning with the consonant φ, because the order is ‘noun + adjective’ (moreover, φεκαστον is not an attribute of μοιρανς). In (b), ν in \*τονς is dropped because \*τονς is followed by a word beginning with the consonant κ-, but ν in καδεστανς is not dropped despite being followed by a word beginning with the consonant τ-. This occurs because the order is ‘noun + article’. To these conditions, therefore, the following combination can be added: (v) any word + finite verb.

## 2.2 τουτονς / τουτος

<sup>13</sup> Some have been noted in Devine and Stephens, *Prosody*, 398.

<sup>14</sup> Baunack und Baunack, *Gortyn*, 17–18.

In the Gortyn Code, the demonstrative pronoun οὔτος has two forms in the masculine accusative plural, τουτονς and τουτος, and two forms in the feminine accusative plural, ταυτανς and ταυτας, for example, (1) τουτος ἐ|κεν τα κρεματα (*ICret.* IV.72.v.12–13, 21–22), (2) τουτονς ἐ|κεν τα κρεματα (v.27–28), (3) τουτος ἀναιλεθθα|ι (v.24–25), and (4) ταυτ|ας μεν ἀπολανκανεν (v.6–7). If οὔτος underwent external sandhi like nouns do, the *v* in the final -*vs* would be retained before a non-clitic. However, if οὔτος underwent external sandhi like the definite article, the *v* in the final -*vs* would be retained before a vowel and dropped before a consonant. This irregularity has not yet been explained.<sup>15</sup>

(4) presents the regular form followed by an enclitic; (2) presents the regular form followed by a non-clitic or an enclitic beginning with a vowel; and in (1) and (3) present irregular forms. The main condition for the dropping of *v* in τουτονς is that it is followed by an enclitic beginning with a consonant. If a generalization of this condition would have occurred, these irregular forms could be explained by that generalization. No such generalization, however, has occurred in Gortynian. For example, if ταυτας in ταυτας μεν (< ταυτανς μεν) was generalized, it should be possible for ἐλευθερονς in ἐλευθερος μεν (< ἐλευθερονς μεν) to be generalized. Such a generalization, however, has not occurred. The reason why such a generalization only occurs in οὔτος may be that the demonstrative pronoun οὔτος may be treated like a clitic. That is, for example, if τουτονς has proclisis and is followed by a word beginning with a consonant, τουτος resulting from the dropping of the *v* could be generalized. This generalization, however, occurs at random (compare [1] and [2]).

### 2.3 Infinitive Used for the Imperative

If an infinitive is used for the imperative, the preceding vowel may be elided.<sup>16</sup> This elision is another example of the enclisis of the finite verb that may be observed. Examples of the elisions before the infinitives used for imperatives are as follows: (1) ἐλευθερ' ἐμεν τα τεκνα (*ICret.* IV.72.vii.2) [= Att. εἶναι], (2) δολ' ἐμ|εν τα τεκνα (vii.3–4), (3) τα κρεμα|τ' ἀναιλ(ε)θαι (xi.3–4, cf. iv.54–v.1). [= Att. ἀναιρεῖσθαι], and (4) ταυτ' ἐκεν (iv.53) [= Att. ἔχειν]. However, (4) may be an example of a demonstrative pronoun (ταῦτα) being treated like a proclitic.

Because the infinitive is a verbal noun and the participle is a verbal adjective, the infinitive has no enclisis. In traditional Greek grammar, in fact, a finite verb may

<sup>15</sup> First discussed in Matsuura, οὔτος, see also Enclisis, 47–48. Bile, *dialecte*, 128–129, lists the various forms but no explanation.

<sup>16</sup> First discussed in Matsuura, οὔτος; see also Matsuura, Enclisis, 46.

be an enclitic (e.g. εἰμί, φημί), but its infinitive (εἶναι, φάναι) or participle (ὄν, φάς) is not. The reason for these infinitives having enclisis may be due to the fact that these infinitives are used for the imperatives.

## 2.4 Elision of Modal Particle κα

The modal particle κα (= Att. ἄν) always suffers elision if it is followed by a word beginning with a vowel. This elision corresponds to Kaiser’s statement that no word dividers are used after ἄν.<sup>17</sup>

This elision occurs 84 times in the Gortyn Code,<sup>18</sup> of which the most significant examples are (1) αἰ δε κ’ ἐλευθερος (*ICret.* IV.72.ii.7–8), (2) αἰ δε κ’ ἀγει (i.2–3), (3) οἰς κ’ ἐπιβαλλει (v.23), and (4) αἰ δε κα ἀτεκνον (iii.24).

In (1), the adjective ἐλευθερος has no enclisis, but κα suffers elision; so we can conclude that κα is an enclitic but also has proclisis. Therefore, even if κα suffers elision before the finite verb as in (2), this evidence does not show that the finite verb has enclisis. The same applies to compound verbs, as in (3).

In the Gortyn Code, there is only one instance in (4) where κα does not suffer elision, despite the following word beginning with a vowel: Baunack und Baunack corrects this to κ’ ἀτεκνον, and Willetts states that the absence of elision is more likely to avoid ambiguity because it could be read as κα τέκνον.<sup>19</sup>

However, in αἰ δε κ’ | ἄ ἐλευθερα (*ICret.* IV.72.vii.2–3), and in ὄπε δε κ’ ἄ | πατρ[οι]οκος (xii.9–10), the definite article ἄ is necessary, but the preceding κα suffers elision. Therefore, originally, some word was probably between κα and ἀτεκνον. For example, although the draft was αἰ δε κα <γυναικα> ἀτεκνον, the stone-cutter skipped γυναικα and inscribed αἰ δε κα ἀτεκνον. This skipping can easily be explained if it is due to *homoioteleuton* (the repetition of endings in words). Cf. αἰ δε γυνα ἀτεκ|νος (*ICret.* IV.72.iii.31–32).

## 3 Cypriot Syllabic Inscription

### 3.1 Introduction

Word dividers are often used in Cypriot syllabic inscriptions, and their usage has been observed.<sup>20</sup> If empty vowels are not used in syllabic scripts where they

<sup>17</sup> Kaiser, *interpunctione*, 18.

<sup>18</sup> Baunack und Baunack, *Gortyn*, 19.

<sup>19</sup> Baunack und Baunack, *Gortyn*, 19, 100; Willetts ad loc.

<sup>20</sup> Those unfamiliar with Greek dialects should refer to Buck, *Dialects*, §§189–91, §§196–9.

	-a	-e	-i	-o	-u		-a	-e	-i	-o	-u
	✱	✱	✱	≒	Υ		✱	✱ 𐤀	✱	≒	𐤀
<b>j-</b>	∅			≈		<b>j-</b>	∅				
<b>w-</b>	𐤀	𐤁	𐤂	𐤃		<b>w-</b>	𐤀	𐤁	𐤂	𐤃	
<b>r-</b>	𐤄	𐤅	𐤆	𐤇	𐤈	<b>r-</b>	𐤄	𐤅	𐤆	𐤇	𐤈
<b>l-</b>	𐤉	𐤊	𐤋	𐤌	𐤍	<b>l-</b>	𐤉	𐤊	𐤋	𐤌	𐤍
<b>m-</b>	𐤎	𐤏	𐤐	𐤑	𐤒	<b>m-</b>	𐤎	𐤏	𐤐		
<b>n-</b>	𐤓	𐤔	𐤕	𐤖	𐤗	<b>n-</b>	𐤓	𐤔	𐤕	𐤖	𐤗
<b>p-</b>	𐤘	𐤙	𐤚	𐤛	𐤜	<b>p-</b>	𐤘	𐤙	𐤚	𐤛	𐤜
<b>t-</b>	𐤝	𐤞	𐤟	𐤠	𐤡	<b>t-</b>	𐤝	𐤞	𐤟	𐤠	𐤡
<b>k-</b>	𐤢	𐤣	𐤤	𐤥	𐤦	<b>k-</b>	𐤢	𐤣	𐤤	𐤥 𐤦	𐤦
<b>s-</b>	𐤧	𐤨	𐤩	𐤪	𐤫	<b>s-</b>	𐤧	𐤨	𐤩 𐤪	𐤪	𐤫
<b>z-</b>	𐤬?			𐤭		<b>z-</b>	𐤬?			𐤭	
<b>x-</b>	𐤮	𐤯				<b>x-</b>		𐤯			

Fig. 3: Common Cypriot syllabary (left) and Cypriot syllabary of Idalium (right)

	-a	-e	-i	-o	-u
	✱	𐤁	✱	𐤃	𐤅
<b>j-</b>	○?			𐤛?	
<b>w-</b>	✱	𐤁		𐤃	
<b>r-</b>	𐤄	𐤅 𐤆?	𐤇	𐤈	
<b>l-</b>	𐤉	𐤊 𐤋		𐤌	
<b>m-</b>	𐤎	𐤏	𐤐 𐤑	𐤒 𐤓 𐤔	
<b>n-</b>	𐤓		𐤕		𐤗 𐤘
<b>p-</b>	𐤘 𐤙	𐤚	𐤛	𐤜	
<b>t-</b>	𐤝 𐤞	𐤟	𐤠	𐤡 𐤢	𐤣?
<b>k-</b>	𐤢	𐤣 𐤤	𐤥	𐤦	𐤦
<b>s-</b>	𐤧	𐤨 𐤩 𐤪	𐤫		?
<b>z-</b>				𐤭??	
<b>x-</b>		𐤯			

Fig. 4: Cypriot syllabary of Palaipaphos

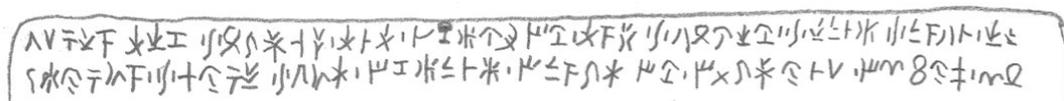


Fig. 5: My drawing based on *ICS* pl. XXXVI (*ICS* 217.1–2)

should be, the word (or the preceding / following word) may have enclisis there.<sup>21</sup> For example, because *to-no-ro-ko-ne* [= τὸν ὄρκον] (*ICS* 8.6) is not represented by *to-ne o-ro-ko-ne* in syllabic scripts, the empty vowel is not used at the end of the definite article.

Combining the use of the word divider with the use of the empty vowel, we can examine whether there is a difference in the degree of enclisis.<sup>22</sup>

### 3.2 The Bronze Tablet of Idalium

Because the Bronze Tablet of Idalium (*ICS* 217) is the longest of the Cypriot syllabic inscriptions (Fig. 5, cf. Fig. 3), and the use of word dividers is consistent within this inscription, enclisis and proclisis are well observed. For example, (1) ' *ka-te-wo-ro-ko-ne-ma-to-i* ' [= ' κατέφορον Μᾶδοι ' ] (l. 1) and (2) ' *a-no-ko-ne-o-na-si-lo-ne* ' [= ' ἄνωγον Ὀνάσιλον ' ] (l. 2). Because in these examples, no word divider is used between the finite verb and noun, but the empty vowel is used, the finite verb has a weaker proclisis than the definite article.

### 3.3 Other Examples

In the following inscription, the use of spaces (represented by //) and the midpoint (·) is clearly distinguished (Fig. 6). The word dividers are omitted at the end of lines, which means that they are all substitutes for spaces (//).

*to-na-ti-ri-a-ta-ne // to-nu · e-to-ke-ne*  
*ka-se · o-ne-te-ke-ne // ma-na-se-se*  
*o-no-me-ni-o-ne // to-i-ti-o-i*  
*to-i-a-pe-i-lo-ni // to-i-e-le-i*  
*ta-i // i-tu-ka-i*

τὸν ἀ(ν)δριά(ν)ταν τόν(ν)υ · ἔδωκεν  
 κὰς · ὀνέθηκεν Μνάσης

<sup>21</sup> Devine and Stephens, *Prosody*, 392–393.

<sup>22</sup> First discussed in Matsuura, *Cypriot*; see also Matsuura, *Enclisis*, 55–80. But the ‘difference in the degree of enclisis’ is newly discussed in this article.

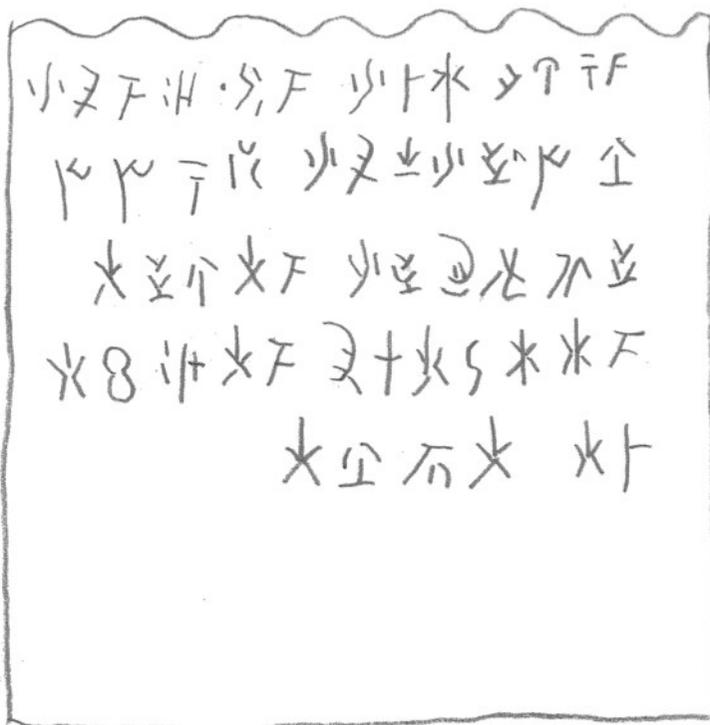


Fig. 6: My drawing based on *ICS* pl. XXXIII (*ICS* 215b)

ὁ Νωμηνίων τῶι θιῶι  
 τῶι Ἀπειλῶνι τῶι Ἐλεί-  
 ται ἰ(v) τύχαι.

(*ICS* 215b)

In this inscription, the word divider is not always used after the definite article. The midpoint (·) is always used before the finite verb. The use of the midpoint after the demonstrative pronoun *to-nu* [= τόν(v)υ (= Att. τόνδε)] (l. 1) is probably due to the following finite verb *e-to-ke-ne* [= ἔδωκεν] having enclisis. In this inscription, no word dividers are used after the definite article; thus, although the finite verb has enclisis, its connection with the preceding word is weaker than the connection between the definite article and the noun that follows.

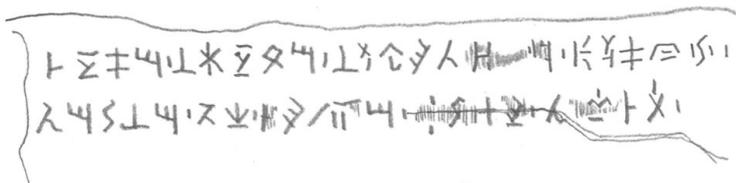


Fig. 7: My drawing based on *ICS* p. 97, fig. 8 (*ICS* 3)



Fig. 8: My drawing based on *ICS* pl. XVIII.3–4 (*ICS* 144)

The following dedicatory inscription for Apollo also does not have a word divider before the finite verb (Fig. 7, cf. Fig. 3).

*ta-ra-pa-se ' o-a-ra-ko-se ' o-me-ka-ke-u-e-?-se ' e-pi-pa-si-ne ' to-se-pe-o-se ' to-te-e-ke-re-se ' a-po-lo-ni ' u-la-ta-i '*

Ταρβας (?) ' ὁ ἀρχὸς ' ὁ μεγα(?)...ς ' ἐπίβασιν ' τῶ σπῆρος ' τῶδε ἔκερσε ' Ἀπόλλ(λ)ωνι ' Ὑλάται. ' (*ICS* 3)

In the following (Fig. 8), it is observed that no word divider is used before ἡμί (= Att. εἰμί).

*ti-mo-wa-na-sa-se · ta-se · o-na-sa-ko-ra-u · ku-na-i-ko-se-e-mi | Τιμοφανάσ(σ)ας · τᾶς · Ὀνασαγόραυ · γυναικός ἡμι. |* (*ICS* 144)

Although εἰμί is generally considered an enclitic, this inscription shows that it differs from other clitics, such as articles, prepositions, and particles. If the final consonant of the preceding word is represented without an empty vowel, as in *ku-na-i-ko-se-mi*, we can conclude that there is a strong link (e.g. ‘any word + enclitic’) between *e-mi* [= ἡμί] and the preceding word, but this case is not observed. Moreover, because the use of the empty vowel to denote the final consonant of the word before *e-mi* [= ἡμί] is the same as for other finite verbs that are not enclitics, the rule in traditional Greek grammar that only some forms of εἰμί and φημί have enclisis does not represent the actual pronunciation.

## 4 Word Dividers in Archaic Inscriptions

### 4.1 Introduction

If no word divider is used before (or after) the finite verb, it may have enclisis (or proclisis) there. However, a word divider is not always used to indicate pronunciation; thus, its usage should be investigated.<sup>23</sup>

Word dividers are also used after proper nouns. In dedicatory inscriptions, formulaic phrases such as ὁ δεῖνα (μ') ἀνέθηκεν, ὁ δεῖνα (μ') ἐποίησεν, and ὁ δεῖνα (μ') ἔγραψεν are often used; and if such phrases have word dividers, they are usually written as ὁ δεῖνα : (μ') ἀνέθηκεν and so forth, for example, (1) [Σοφ]ίλος : μεποεσεν (CAVI 834), (2) Σοφ[ι]λος : μ(ε)γραφσεν | Πατρογλυς : ατλα (CAVI 907), (3) Χσενοκλεες : εποιεσεν : (CAVI 2113), and (4) Αριστοφανες : εγραφε (CAVI 2387).<sup>24</sup> Because με is a (true) enclitic, and the finite verb may be treated as an enclitic, word dividers should not be used in such cases. However, these word dividers before enclitics can be easily explained by assuming that word dividers are placed after proper nouns. Word dividers between words or word groups are generally considered to have been used to increase the ease of reading them if they were written in *scriptio continua* (writing without spaces between the words). For such short inscriptions and formulaic phrases, there is no need to make them easy to read, and therefore no need to use word dividers. Nevertheless, word dividers are used, presumably for visual purposes. If the purpose is to increase the ease of reading the sentence, an expectation would be that no word divider would be used before an enclitic με. In practice, however, the word divider is almost invariably used before με. Therefore, we can conclude that the word dividers used before με are not used for separating words from words, but to separate proper nouns from other parts of the sentence. Such word dividers are likely to be ornamental—used to make proper nouns stand out.<sup>25</sup>

Hence, even if a word divider is used before a finite verb or an enclitic, their enclisis is not negated if it is used after a proper noun.<sup>26</sup> The following is a clear case in which whether a word divider is used depends on whether it is after a proper noun (Fig. 9).

Εὐθυμης ' ἐμι κύλιξ.

[- -]εω κύλιξ ἐ(μι).

(LSAG 373.63 [pl. 72])

<sup>23</sup> Matsuura, *v*; see also Matsuura, *Enclisis*, 31–39.

<sup>24</sup> Similar cases were found in about 130 cases in *CAVI*, *IG I<sup>3</sup>*, *IGASM*G, and *NAVI*.

<sup>25</sup> Meisterhans, *Grammatik*<sup>3</sup>, 11–13; Larfeld, *Handbuch*, 429; Raubitschek, *Dedications*, 441–444; Threatte, *Grammar*, 79–80; Lougovaya-Ast, *Punctuation*, 28–29, n. 6.

<sup>26</sup> First discussed in Matsuura, *Enclisis*, 21–24.

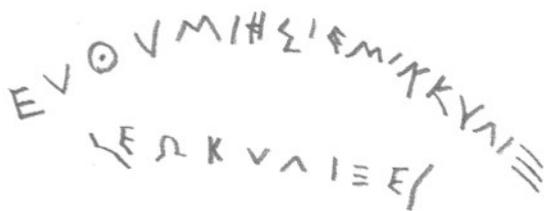


Fig. 9: My drawing based on *LSAG* pl. 72.63

In the first line, a word divider is used before εἰμί because it is after a proper noun, and in the second line, a word divider is used before εἰμί because it is after a common noun. Hence, in this inscription, the use of the word divider does not necessarily negate the enclisis of the finite verb.

Because the word divider after a proper noun is likely to have an ornamental meaning, the following example is easily illustrated.

Φρυγία : ἀνέθεκέ με τάθεναίαι  
 ἠε ἀρτόπολις.

(*IG* P.546)

In this inscription, the word divider is used exclusively to separate a proper noun from other parts of the inscription and not between words or word groups.

Considering the aforementioned conditions, we present clear cases illustrating the enclisis of the finite verb below.<sup>27</sup>

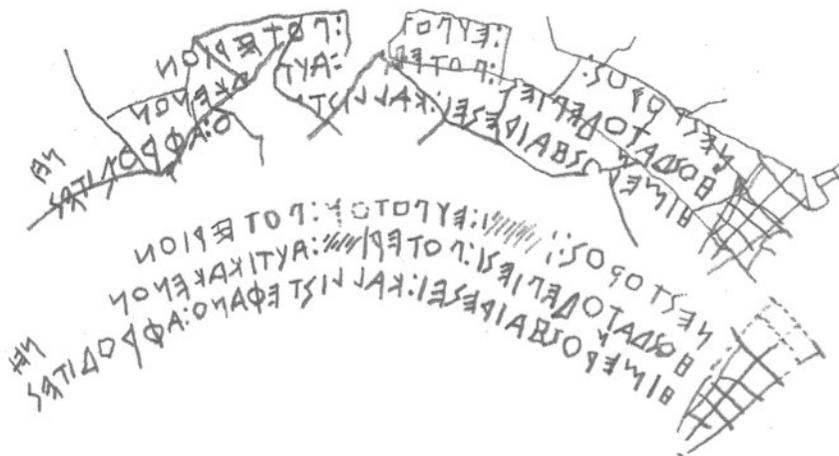
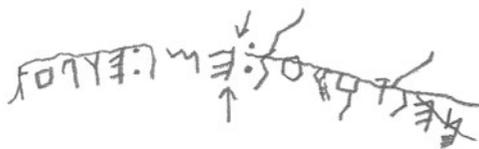


Fig. 10: Transcription (above) and restoration (below) of *CEG* 454  
 (My drawing based on Bartoněk und Buchner, *Pithekoussai*, p. 212, fig. 1a)

<sup>27</sup> First discussed in Matsuura, *Enclisis*, 25–30.



**Fig. 11: Restoration of EMI in CEG 454.1 (My drawing based on Bartoněk und Buchner, Pithekoussai, p. 230)**

## 4.2 Nestor’s Cup

The literature<sup>28</sup> has demonstrated that the finite verbs (πίεσι, χαιρέσει) have enclisis in the Nestor’s Cup (Figs 10 and 11).<sup>29</sup>

Νέστορος : ἐ[μ]ι : εὔποτ[ον] : ποτέριον. |  
 ἠὸς δ’ ἄ(ν) τῷδε πίεσι : ποτερί[ο] : αὐτίκα κῆνον |  
 ἡμέρος χαιρέσει : καλλιστε[φά]γο : Ἀφροδίτες. (CEG 454)

The word divider preceding ἐμί (v. 1) is placed after a proper noun. The word divider is missing after ἄν because ἄν also has proclisis, as we have discussed above (§2.4); it is also missing before κῆνον, because the demonstrative may be treated as a clitic, as we have discussed above (§2.2).

## 4.3 Epitaph of Chaeredemus

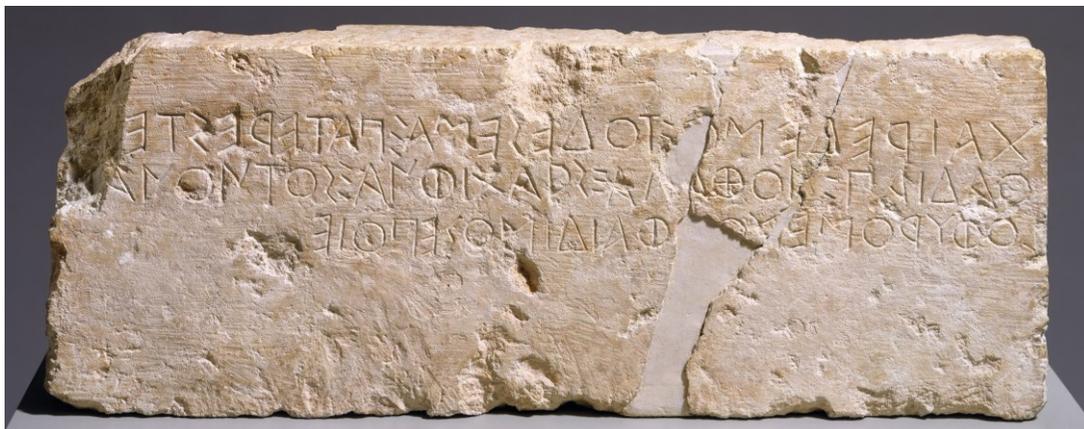
In the Epitaph of Chaeredemus, no word dividers are used before the finite verb (Fig. 12).

Χαιρεδέμο ≡ τόδε σῆμα ≡ πατέρ ἔστε[σε | θ]ανόντος ≡  
 Ἀνφιχάρ(ε)ς ≡ ἀγαθὸν ≡ παῖδα ὀλοφυρόμενο[ς. ≡]  
 Φαίδιμος ἐποίηε. (CEG 14)

A word divider is not used after παῖδα because παῖδα suffers elision. The third line is in prose, and the creator’s name is not emphasized.

<sup>28</sup> Wachter, Grammatik, 66–67.

<sup>29</sup> The text is based on CEG 454 (for the date, see Hansen, Date) and Bartoněk und Buchner, Pithekoussai, 146–154, 212, 226–228, 230. The first line is probably in prose.



**Fig. 12: The Metropolitan Museum of Art 16.174.6 (CEG 14),  
© The Metropolitan Museum of Art / Open Access**

## 5 Conclusions

Wackernagel argued that the recessive accent of the finite verbs in Greek was derived from Proto-Indo-European sentence accentuation, that is, the finite verb is treated as an enclitic. This enclisis is confirmed by epigraphical evidence.

First, in Gortynian, the dropping of *v* in ὀμνυς [< ὀμνυος] (*ICret.* IV.72.ix.21) is caused by the enclisis of the following finite verb κρινετο (§2.1). Enclisis of the verb is not restricted to finite verbs. If an infinitive is used as an imperative, the preceding word may suffer elision (§2.3).

Second, in Cypriot syllabic inscriptions, the usage of the word dividers and the empty vowel reveals the degree of the enclisis of the finite verb. Because in some examples, no word divider is used between the finite verb and noun, but the empty vowel is used, the finite verb has a weaker proclisis than the definite article (§3.2). In traditional Greek grammar, while only some forms of εἰμί and φημί are enclitics but others are not, their usage of the word dividers and the empty vowel is the same in some inscriptions; thus, all verbs may have the same enclisis (§3.3).

Third, in other archaic inscriptions, the absence of a word divider before a finite verb may indicate the enclisis of it. However, because the usage of word dividers is complicated, word dividers used in some inscriptions may seem to negate the enclisis of the finite verb. By excluding these usages, in some inscriptions, observing cases where the enclisis of the finite verb appears where the word divider is not used was possible (§§4.2, 4.3).

In conclusion, several different notational and phonological features in inscriptions in different dialects suggest that the finite verb has enclisis in ancient Greek.

### Abbreviations

<i>CAVI</i>	Immerwahr, <i>Corpus of Attic Vase Inscriptions</i> .
<i>CEG</i>	Hansen (ed.), <i>Carmina epigraphica graeca</i> .
<i>ICret.</i>	Guarducci (cur.), <i>Inscriptiones creticae</i> .
<i>ICS</i>	Masson (éd.), <i>inscriptions chypriotes syllabiques</i> <sup>2</sup> .
<i>IG</i>	<i>Inscriptiones graecae</i> .
<i>IGASMG</i>	Arena (cur.), <i>Iscrizioni greche arcaiche di Sicilia e Magna Grecia</i> .
<i>LSAG</i> <sup>2</sup>	Jeffery, <i>The Local Scripts of Archaic Greece</i> <sup>2</sup> .
<i>NAVI</i>	Wachter, <i>Non-Attic Greek Vase Inscriptions</i> .

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