# Introduction to Greek Meter

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The study of Greek meter exercises a great power of seduction over some scholars. You can find recently published books on this topic which will devote an entire page to a schematic rendering of some tricky bit of Pindar. The study of Greek meter *is* in itself fairly interesting, but someone first looking into the matter will be confronted with hefty load of specialized vocabulary.

There is a clear danger of becoming so focused on the meter that other considerations get left behind. When I was first trying to read Homer in something like the correct meter I often found myself reciting nonsense: in my obsession with the meter I had stopped paying attention to the meaning of the words.

With that warning in mind, though, I'd like to present a quick introduction to Greek meter so that you'll have one more way to appreciate the art of the Greek poets. This discussion will be divided into sections after a quick overview. You probably don't want to read the whole thing in one sitting. Unless the subject really grabs you, I wouldn't bother to memorize all the specialized vocabulary, or even all the meters, but try instead to get a basic feel for general principles so you know what to look for when reading a poem in a meter you've never seen before.

#### Prosody

Unlike the poetry of English and many other modern European languages, which is based on patterns of stress accent, Greek meter is based on patterns of long and short syllables. We use a macron, "–" to indicate a long syllable, " $\cup$ " to indicate a short syllable and " $\subseteq$ " to indicate a syllable which may be long or short (we'll get to these in a moment).

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Determining the length of a syllable is easiest in Epic verse, but can get a little trickier in some other verse systems. Keeping in mind that an *open syllable* is one that is followed by a single consonant or no consonant at all and that a *closed syllable* is one followed by more than one consonant, the basic rules are:

- Short vowels in open syllables are scanned short.
- Short vowels in closed syllables are scanned long.
- Long vowels and diphthongs are long, but...
- In Epic and elegiacs, a long vowel or diphthong at the end of a word *may* become shortened if the following word starts with a vowel. This is called *epic correption*.
- Synaphaea: syllable length in meter is determined by the line, not the word. So, δ is short, but in the phrase δ πτόλεμος it is scanned long because the following word starts with two consonants, -----.

Let me emphasize that this syllable terminology should not be confused with actual vowel length. The first alpha of  $\dot{\alpha}v\delta\dot{\alpha}v\omega$  is *not* long; the first syllable, however, is. To avoid this confusion some people speak of *heavy* – and *light*  $\sim$  *positions*. In this introduction, when I put long or short marks above vowels in words, I'm indicating the length of syllable positions, not vowels, as in, for example,  $\dot{\alpha}v\delta\dot{\alpha}v\bar{\omega}$ .

Here are a few examples scanned:

τὰ δῶρα	$\cup - \cup$
μηνιν ἄειδε θεά	
ἀγλαά	
<b>ρήμά τε φαύλον</b>	

In certain kinds of verse (elegy and iambics, mostly) the scanning rules can become a bit trickier for short vowels in closed syllables. If a plosive ( $\pi \beta \varphi$ ,  $\tau \delta \theta$ ,  $\kappa \gamma \chi$ ) is followed by a liquid ( $\lambda \rho$ ) or a nasal ( $\mu \nu$ ) **in the same word**, then a preceding short vowel *may* be short or long. For example, both of these word may be scanned  $\sim \circ$  or  $-\circ$  as the meter requires:  $\tau \epsilon \kappa \nu \alpha$ ,  $\pi \alpha \tau \rho \delta \varsigma$ . However — there are always exceptions — the combinations  $\gamma \mu$ ,  $\gamma \nu$ ,  $\delta \mu$ ,  $\delta \nu$  always make a long syllable.

# **Morae and Feet**

When talking about Greek verse, the basic unit of time is the *mora* (plural *morae*). A short syllable is a single mora and a long two. Once you get to three or four morae you have various ways to divide the time up. For three, you could have  $\circ -$  or  $-\circ$  or even  $\circ \circ \circ$ . The metricians have cataloged many time division patterns, called feet, up to six or even seven morae:

3 morae		
iamb	$\cup -$	
trochee	$- \cup$	
tribrach	000	
4 morae		
spondee		
dactyl		
anapest		
5 morae		
cretic	$-\cup-$	
bacchius	U——	
6 morae		
choriamb		
ionic (a minore)		

These patterns are the fundamental building blocks of Greek verse. I've left out several other patterns which don't seem to get talked about as much, such as the ionic a maiore  $(--\cdots)$ , which always seems to be listed in references but are never heard from again. When reading other works discussing Greek meter be aware that some of these feet have several names. Most annoyingly, some have different names depending on what sort of verse you're talking about.

Lines can be defined by how many of a certain kind of foot there are. So, an ionic dimeter is a meter of two ionic feet: --- ---. However, for the shorter feet the tradition is that a metron is composed of two feet, so that that simplest iambic dimeter would be two groups of ---. The meters that do this often have particular patterns of resolution and contraction within the double-footed metron, so the identity of the metron as having two feet makes technical sense. We'll talk about those more when we get to them. In any case, monometer (1), dimeter (2), trimeter (3), tetrameter (4), pentameter (5), hexameter (6) and occasionally heptameter (7) are the meters most likely to be found.

#### **Resolution and Contraction**

Some meters string together feet in interesting ways, then stick to them perfectly. Other meters take advantage of the the time equivalence of  $\cdots$  and -, both two morae long, and allow various substitutions. For example, in the Epic dactylic hexameter, for most of the feet you can replace the two short syllables of the dactyl  $-\cdots$  with a long, giving you a spondee --. This is called *contraction*. When two short syllables are allowed to contract we indicate this flexibility with the combined sign  $\underline{\cdots}$ .

Similarly, in the iambic trimeter, especially as used in Athenian drama, a long syllable may *resolve* into two shorts, turning an iamb  $\sim$ - into a tribrach  $\sim$  $\sim$  $\sim$ .

The last syllable of a line of verse or of a system is usually free: it may be long or short. The idea is that a short final syllable is lengthened by the pause between lines. In the metrical argot, a free syllable is known as *syllaba anceps* or just anceps (in Greek, "common,"  $\kappa o v \eta$ ). Note though that some meters, especially those commonly called "aeolic," may have anceps syllables at the beginning or middle of the verse, such as the fourth syllable of the line in the Sapphic strophe.

At line- or system-end I will indicate anceps with a long syllable. Elsewhere I will use  $\supseteq$ . Following M.L. West, many now use  $\times$  to indicate anceps positions.

# **Caesurae and Bridges**

When a word ends in the middle of a foot, the break is called a *caesura* (Gk.  $\tau \circ \mu \eta$ ). For example, in the dactylic phrase  $\mu \eta \nu \nu \nu$  det  $\delta \epsilon - \nu \nu - \nu$  the word  $\mu \eta \nu \nu \nu$  ends so that the last syllable of the dactyl is in the next word.

Many meters have a particular place in the line where a slight pause — often corresponding to punctuation or grammatical phrasing — naturally falls. This pause is known as the *caesura of the line*. It will usually occur near the center of the verse, though not usually exactly in the middle. In metrical schemata the caesura may be indicated by a bar, |. In meters which may allow caesura in several places a secondary location will be indicated with a dotted bar,  $\vdots$ . Most often the term *caesura* alone means *caesura of the line*.

A *diaeresis* is where a word end matches the end of a foot.

This probably isn't terribly important unless you plan to construct — or reconstruct — Greek poetry yourself, but a *bridge* is a place where a diaeresis or caesura is not allowed. For example, nearly all of Homer's hexameters avoid a word break in the 4th foot like this:  $-\psi|\psi|$  (Hermann's Bridge).

#### The Hexameter

The dactylic, or heroic, hexameter is the meter of Epic. It is also the meter of a didactic poet like Hesiod. If we take Homer and Hesiod to have written around 700 BCE (give or take 100 years), it is pretty astonishing that Nonnus wrote his deranged *Dionysiaca* in the same meter some 1200 years later, in the 5th century CE.

As the name implies, a "pure" dactylic hexameter line would be made up of six (hexa-) dactyls:

Note the last foot: the last syllable is anceps. There will never be a full dactyl in the last foot, only a spondee -- or a trochee  $-\vee$ .

The final two short syllables of the dactyls may contract, leaving a spondee:

-<u>w</u> -<u>w</u> -<u>w</u> -vv --

In Homer only about 1 in 20 lines will have a spondee in the fifth foot, and in later poets this may occur even less frequently.

The caesura of the line in the hexameter will occur after the first long  $(-|\omega)$  or after the first short  $(-|\omega)$  of the third foot, as I indicate below. Less frequent but allowed is a caesura after the first long syllable of the fourth foot, usually if a long word fills the entire third foot:

 $-\underline{w} - \underline{w} - \underline{|\psi} - \underline{|\psi}$ 

But a word break between the two short syllables of the fourth foot are avoided (Hermann's bridge).

Hexameter verses follow the syllable length rules mentioned above. *Epic correption*, where a long vowel or diphthong at the end of a word is scanned short when it is followed by another word starting with a vowel, is quite frequent. For example, from Iliad 1.14,  $\epsilon \kappa \eta \beta \delta \lambda \delta \nu \delta \gamma$ .

Synizesis is when two (sometimes more) vowels coalesce into a single long vowel. Very frequently the first vowel in the group will be epsilon, such as in the genitive ending  $-\varepsilon\omega$  in, for example, Πηληιάδεω in the first line of the Iliad. Every once in a while the single long vowel resulting from synizesis may undergo correption, such as in Iliad 1.15, χρῦσέῷ ἀνὰ σκήπτρῷ. Some editors will point out synizesis with a tie under the vowels involved, Πηληιάδεω.

Other Epic Curiosities. Homer will sometimes double certain consonants  $(\mu, \nu, \lambda, \rho, \sigma)$  when he needs a long syllable. Also, in some words a vowel may be stretched to accomodate the meter, too, such as in line Iliad 1.2 où $\lambda o\mu \epsilon \nu \eta \nu$  for  $\partial \lambda o\mu \epsilon \nu \eta \nu$ . There are even a few rare cases where a word like  $\epsilon \pi \epsilon i$  may be scanned --, which no one has yet really explained.

Finally, some cases of mysteriously long syllables are accounted for by historical linguistics. Ionic Greek used to have the digamma (*F*), pronounced like a *w*. This is no longer active in the written versions of the Epics as we have them, so a lengthened syllable may occasionally reflect a syllable that was closed when the *F* was still in effect, such as in the aorist  $\tilde{\epsilon}\delta_F\bar{\epsilon}i\sigma\sigma$ , "I was afraid."

### **Elegy and the Five-of-Nothing Pentameter**

The elegiac distich is made up of a line of hexameter followed by a line of the so-called pentameter, which is actually a line composed of a pattern called the *hemiepes* (think "half [hemi-] an epic [-epes] line"),  $-\cdots-\cdots-$ , repeated with a caesura separating the two. In the first half of the line the dactyls may contract into spondees, so the pentameter line is this:



To emphasize the symmetry of the pentamer line, Archaic poets may rhyme the final syllable of each hemiepes. Mimnermus — what we have of him, anyway — doesn't seem to do this very often, but about one in 7 pentameter lines of Theognis has this rhyme.

The elegiac distich enjoyed a long history as the meter of all sorts of occasional verse well into the Byzantine period.

### Foot Surgery, and Abbreviation

Before we move on to the Ionic and aeolic meters I need to talk a bit more about verse construction.

It is quite common in longer meters for the last foot of the verse to have the final position removed; this is called *catalexis* (adjective "catalectic"). The new final position becomes anceps regardless of its length before, and since these catalectic forms generally come at the end of a line, they're usually written out as long. For example, the catalectic version of the iambic metron  $\leq -\sqrt{-}$  is generally written  $\leq --$ . For another example, if you look back at the hexameter you will see that the line is technically a catalectic dactylic hexameter.

Catalexis plays an important organizational role in larger verse forms, and may be used to indicate the end of not just a line, but an entire strophe. For example, in Greek drama, sections of anapestic, trochaic or iambic dimeters will usually end with a catalectic line. We'll see further examples of this in the aeolic meters.

Anaclasis is when the positions of a verse are rearranged. For example, if we were to swap the two middle posisitions of an ionic dimeter  $\bigcirc -\bigcirc -\bigcirc -$  we end up with  $\bigcirc -\bigcirc -\bigcirc -$ . The most important thing to note is that the two forms have the same number of morae. Finally, while we may speak of an "anaclastic ionic dimeter" it's probably best not to think of the anaclastic forms as secondary. In the case of this dimeter the anaclastic variety is more common by far.

**Abbreviation.** When we enter into a discussion of the aeolic meters, a matter where lush terminology flourishes, several dozens of names will appear. To avoid having to say things like "the line is a catalectic iambic metron prefixed to a hagesichorean" metricians have abbreviations for both the names of the most common metra as well as symbolism for processes like catalexis and anaclasis. Here are the notations, often called *sigla*, for what we've seen so far (using M.L. West's notation):

ionic	io	U
dactyl	da	
hemiepes	D	

Catalexis is indicated with a caret after or before the siglum it applies to:  $ia_{\wedge}$  is  $\neg$ --, and  $_{\wedge}ia$  is  $\neg$ --. The iambic dimeter is 2ia, and  $2ia_{\wedge}$  indicates an iambic dimeter with catalexis in the last foot of the line, not each metron.

Anaclasis is indicated by raised double-dots. When the anaclasis occurs exactly at the join between feet a small division sign is used. So the anaclastic ionic dimeter is indicated  $2io^{\div}$ . When shifts occur elsewhere the two dots appear on the side of the siglum where the shift occurs. So  $gl^{"}$  is an anaclastic glyconic with the choriamb shifted to the end.

# **Attack of the Two Foot Metron**

The trochaic and iambic meters work on very similar principles, so much so that ancient commentators sometimes called trochaics iambic. For both of these the fundamental building block is a four syllable unit, that is, two feet of the appropriate type. This is called a *dipody* in some older books. Those familiar with Latin

poetry will find this especially confusing, since the Romans count feet for these meters.

But there is a very good reason to count iambic meters in dipodies. In each dipody one particular syllable is anceps, and this gives the pairing a distinct identity.

iambic metron ia = -trochaic metron tr = ---

Entire books can be written on the subtleties of the ionic meters, but I'll give a few general principles.

First, the last metron — and most especially the last foot — of a verse line is most highly regulated, and depending on the meter and poet might not admit any substitutions at all.

A tribrach  $\cdots$  may replace any foot but the last in the verse.

The foot which contains the anceps (the first in iambics, the second in trochaics) may be replaced by an anapest  $\neg \neg \neg$  or, usually to accomodate proper names, a dactyl  $\neg \neg \neg$ . Anapestic substitution is most common in the Attic comedians, and usually restricted to the first foot of iambic meters in both the tragedians and the archaic poets.

By far the most popular iambic meter is the **iambic trimeter**. The caesura is most often after the first syllable of the third foot, or about a quarter of the time after the first syllable of the fourth foot:

as in

χθονὸς μὲν εἰς τηλουρὸν | ἥκομεν πέδον, Σκύθην ἐς οἴμον, | ἄβατον ἐρημίαν. *Prometheus Bound, 1-2.* 

If you add three positions to the front of the iambic trimeter, -- (longs resolvable), you have the trochaic tetrameter catalectic. Here the primary caesura is fixed:

\_\_\_\_\_

Note how the portion after the caesura is identical in both the trochaic tetrameter catalectic and the ionic trimeter.

The *skazon* (lame) or *choliamb* is the iambic trimeter, or the trochaic tetrameter catalectic, except that the last iamb is a spondee; it ends in three long syllables. The invention of this is attributed to Hipponax, so it's sometimes called the Hipponactean. The trimeter version was also used by Herodas in his Mimes, and in the verse rendering of Aesop's fables by Babrius:

κόραξ νοσήσας | ἕλεγε μητρὶ κλαιούσῃ<sup>.</sup> μὴ κλαῖε, μῆτερ, | ἀλλὰ τοῖς θεοῖς εὕχου.' *Babrius 78.1-2.* 

### **Aeolic Meters**

The name "aeolic" should not be taken to mean only Aeolians used the meters we're about to look at, though they use them most often and most strictly. Many Attic drinking songs are in aeolic meters, as are large chunks of the choral poets (Pindar, Bacchylides, Simonides) and some choral parts of Attic drama.

The building blocks of aeolic meters are usually thought of as larger units called *cola* (singular *colon*) rather than as combinations of feet. This is partly because each of them can be sensibly broken into feet in several ways, and partly because they retain their identity when incorporated into larger meters by resisting resolution and contraction.

Here is the aeolic family of cola. I've used alignment formatting to help you distinguish the different meters. The choriamb  $-\cdots$  is central to most of the aeolic meters, but it's best not to think of these cola as constructed from feet.

glyconic	gl	$\underline{\vee}\underline{\vee}$	
pherecratean	ph	$\underline{\lor}\underline{\lor}$	
telesillean	tl	$\underline{\lor}$	
reizianum	r	$\underline{\smile}$	
hipponactean	hi	$\underline{\vee \vee}$	
hagesichorean	hag	$\underline{\lor}$	
aristophanean	ar		
dodrans	dod		
adonean	ad		
penthemimer	pe		<u> </u>

There are other cola, but these are the fundamental building blocks. The vocabulary gets a little out of control when discussing these meters, and has accumulated over two millennia. Unfortunately, some of these cola will have different names in different sources.

Notice the anceps syllables at the beginning of many of these cola. The double anceps is known as the *aeolic base*. When used by Aeolian poets, none of the aeolic meters allow contraction or resolution. When these cola appear in Attic drama, or in Pindar,  $\sim$  is not used in the base *except* as a resolved long.

Some of these cola were used in meters by the line, or were combined in various ways. For example, Sappho 94 is simply hagesichoreans by the line:

δέδυκε μὲν ἀ σελάννα καὶ Πληίαδες· μέσαι δέ νύκτες, παρὰ δ΄ ἔρχετ΄ ὥρα· ἔγω δὲ μόνα κατεύδω.

Often, however, the cola are extended to produce new lines. There are three ways to do this:

- 1. suffix  $\leq \leq -ia$  or  $\leq --ia_{\wedge}$
- 2. prefix  $\leq -\sqrt{-ia}$  or  $-\sqrt{-ia}$  (caesura is delayed until after the first syllable of these prefixes if possible)
- 3. internal expansion by dactyls or choriambs

Take a *gl* and suffix  $ia_{\wedge}$ , and you get the *phalaecian*, a common meter used by the line in the imperial period:

<u>uu</u>\_uu\_u\_u\_

Prefix *ia* to *hag* and you get the Sapphic hendecasyllabic line:

\_\_\_\_\_

And if you take two of those, and one more with a following adonean, you get the Sapphic stanza:

 In most editions the Sapphic stanza is written out as four lines, with the adonean acting as the shorter fourth line.

The Alacaic stanza is more complex, a penthemimer and a dodrans making up the hendecasyllabic, and a final line which clearly echoes the Alcaic hendecasyllabic line, but not analyzable into the standard cola:

Internal expansion takes place in the choriamb of the cola. Here is the pherecratean with one dactylic expansion in braces:

And here's one with choriambic expansion:

There is often a caesura between choriambs when choriambic expansion takes place. For sigla, expansion is indicated by a superscript d or c with a number indicating how many expansion take place. For example, a pherecratean with two dactylic expansions is  $ph^{2d}$ .

**Other Strophic Forms.** In addition to the Sapphic and Alcaic strophes mentioned above, quite a wide variety of two, three or more line strophes were used. A very popular structure is to base all the lines on a particular colon, but to vary the last line by making it shorter or longer than the rest. Some examples, using || to indicate line end:  $gl || gl || gl^d ||, gl || gl ||_{\wedge} ia gl ||;$  going from longer lines to shorter,  $gl^c || gl^c || gl^c || gl ||$ .

Another variation for ending with a shorter line is to use a catalectic version of the preceding line, such as a telesillean followed by a reizianum (apparently common in popular songs). Anacreon (the real Anacreon, not the Anacreontea) uses glyconic and pherecratic in alternation, as well as a quatrain of three glyconics followed by a pherecratic.

Finally, the Lesbian poets may string together several cola, with or without additions, without any obvious line break except the end of the strophe. For example, this form based on glyconics



is the meter of Sappho 96. Of the 10 lines we have which correspond to the ends of the first and second line of the strophe above, six have a word crossing the colon end into the next line.

# **Ionic Meters and the Anacreontic**

Except for the meters we're about to look at, ionic meters aren't much found in classical and archaic poetry, and don't seem to mix well with other feet. Their use in Attic drama is mostly in situations where barbarism is implied, such as in the *Bacchai* by Euripides.

The ionic dimeter used by the line is the most common representation of ionic meters. If you swap the two central syllables of the ionic dimeter you get the so-called *anacreontic*. Finally, this anacreontic may have its head syllable chopped off (called *acephaly*), and the new first syllable made anceps, giving a 7-syllable line called a *hemiamb* which is quite commonly mixed with anacreontics.

ionic dimeter	
anacreontic	
hemiamb	<u> </u>

There are other lines based on the hemiamb and anacreontic — swapping of durations or contraction and resolution — among the Anacreontic poems. For example, in Anacreontic 18 all lines are anacreontics except 15, in which the first two short syllables have contracted.

# **Choral Meters**

So far I have only introduced verse forms that involve either a single metrical line repeated as often as needed (heroic hexameter, iambic trimeter, anacreontics, etc.) or a few cola joined into a small strophic structure (the elegiac distich, Sapphic stanzas). The Doric tradition of choral song made verses on a much grander scale. The structure is generally a triad — strophe, antistrophe with the same meter as the strophe, epode — which may occur once or be repeated several times. One can easily find strophic structures composed of *dozens* of cola knit together. And there

is nothing like the elegiac distich or the Sapphic stanza. The meter is uniquely tailored for each poem.

Most choral poems fall into one of two metrical categories, aeolic and dactyloepitrite. The choral poets' use of the aeolic meters can be very puzzling, but dactylo-epitrites, despite the forbidding name, are generally fairly easy to understand.

**Dactylo-epitrite** (D/e). The *epitrite* part of the name ("four-thirds") comes from the idea that -- - forms the mora ratio 4:3. No one thinks of D/e this way any longer, but the name remains. Dactylic cola are the workhorses of D/e so at least that part of the name still makes sense.

These days nearly everyone follows Mass' notation for representing D/e meters:

D		$D^2$	
$d^1$			
$d^2$	UU		
Е		$E^2$	<u>_</u>
e			

These units are joined together, often with a (usually long) anceps position, to form lines. For example, the first line of Pindar's Olympian 11:

can be described simply as "e - D –." This notation is only descriptive. While we can say some interesting things about how elements are joined near the end of a strophe, we should not think that the choral poets thought in terms of these metrical units. E, D, – D –, etc. are independent cola and all have lives of their own outside choral song.

In Pindar, elements joined without the linking anceps are often a sign that the strophe is near the end, as is the increased use of E. For example, the last line of the epode in Olympian 11 scans E E -.

Contraction in dactyls and the weight of an anceps position are usually fixed in the first strophe. That is, if an E element scans as ----- in the first strophe, each following strophe will also scan this way. Pindar does sometimes have free variation in anceps or contraction, but only in a fixed position in a line, and this appears to be for some particular effect. Choral dactyls do not have the freedom to contract that they do in epic and elegy. The e element sometimes has resolution, notated  $\sim$  e for  $\sim \sim -$  and  $e^{\sim}$  for  $- \sim \sim$  (which last is quite rare).

**Aeolic**. The aeolic poems are so called because of the frequency of aeolic cola in them. These are not, however, quite the same aeolic cola we find in Sappho and Alcaeus. In particular, the treatment of the two free positions of the aeolic base is particular – both positions may not be short and resolution is allowed in the first position. The symbol for this altered base is  $\circ\circ$ , which may be realized as  $--, -\circ$ ,  $\omega$ -,  $\omega$ - or  $\circ$ -. A single initial anceps may also resolve, indicated with the sign  $\times$ . Anaclastic aeolic cola are also popular:

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gl \quad 00-00-0 gl" \quad 00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-00-\underline{\vee}-0
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The first line of Pindar's aeolic strophes is usually easily analyzed in terms of these cola. Linked, related cola are common:  $tl^{"} dod^{"} \parallel$ ,  $tl^{"} gl^{"} \parallel$ . Mixed in among these iambic elements may be found,  $ia = --, ia = -, ia_{\wedge} = -, -$ . Resolution is possible in *ia* and *ia*.

It is usually much more difficult to analyze later lines of the strophe (or epode) exactly in terms of the standard cola. Once a metrical theme has been stated in the opening line a process of metrical elaboration takes place:

- simple repetition
- repetition of equivalent (e.g., by changing anceps positions)
- addition of a single position to the front or end; from *dod*<sup>"</sup> to *ph* is common
- subtraction of a single position
- internal expansion in the aeolic style (usually dactylic, not choriambic)
- addition of iambic elements:  $tl^{"} \parallel tl^{"} ia -$ .
- compression,  $tl^{"c} {}_{\wedge}ia ||tl^{"} {}_{\wedge}ia$
- inversion (anaclasis), *gl ph* ||*gl*<sup>"</sup> *ph*

It will usually be possible to relate an internal line to the line that came just before it but sometimes you need to look further back, and sometimes the initial theme persists.

# Bibliography

*Greek Metre*, D.S. Raven, 1962. This is a very practical introduction of the most commonly seen meters.

*Greek Metre*, M.L. West, 1982. This is an exhaustive study. I have followed West very closely.