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**LATIN VERSE-***ICTUS* **AND MULTIMODAL ENTRAINMENT** Robert P. Sonkowsky (Classical and Near Eastern Studies) and Franz Halberg (Lab Medicine/Pathology, Halberg Center for Chronobiology), U. of Minnesota.

What is ictus in Classical Latin verse? 1) Philological analysis of several references in Classical Latin literature denies the authenticity of the wide-spread practice of orally stressing (making louder) the syllable on which the *ictus* falls in Classical Latin verse. These references suggest instead that ictus was indicated by bodily movement or appreciated mentally. 2) Modern neurophysiological studies, in which we are guided by Franz Halberg, shed light on these aspects of ictus. Do members of audiences respond aesthetically to ictus by sharing brain waves measurable by electroencephalography (EEG) and magnetoencephalography (MEG)? 3) The most important approach, still often forgotten since the rise of silent reading, is that of the oral performance of Classical verse. But writing about oral performance is not oral performance. Thus still another field, Oral Interpretation, seems useful both for appreciating ictus and for understanding the performance context in which ictus has its effects. 4) This electronic paper attempts to integrate these transdisciplinary approaches by providing practical exercises, and it also offers to its readers whose computers have audiocapability the attempt by one of us (Sonkowsky) to perform one or two lines each of Horace, Vergil, and Lucretius, and 8 lines of Catullus. These are intended to illustrate the arguments and written observations.

#### 1. Philological

Verse *ictus* and word-accent are two of the technical components of the rhythm of Classical Latin verse. The word "rhythm" in English can have many meanings, but Latin rhythmus, we are told by Quintilian (9.4.50-51), differs from *metrum* ('meter') in that *rhythmus* includes corporis motus ('movements of the body'). W. S. Allen's research and explications<sup>1</sup> tell us that the normal coincidence of ictus and accent in the final two feet of the Latin hexameter, unlike the case in Greek hexameter, indicates a relationship between Latin ictus and accent. This suggests to me too that Classical Latin verse-ictus does have something in common with word-accent. But, contrary to the assumption of Allen<sup>2</sup> and of many, there does not seem to be any evidence that this commonality was a vocal stress. None of our Classical references to ictus or to its sometime synonym percussio mentions a vocal stress or increase of loudness. Instead, the only references to a physically perceptible *ictus* mention keeping time with the feet, as in Pliny the Elder (modulantium pedum, Nat. Hist. 2.95, 96, 209); or the thump of the thumb, or movement of the plectrum, as Horace imagines himself as chorodidaskalos conducting the boys and girls in producing his Carmen Saeculare (Odes, 4.6.36) in Sapphic stanzas:



Lesbium servāte pedem meīque Pollicis ictum...

Keep the Lesbian meter and the beat of my thumb

or measuring time with the beat of the fingers and the feet in Quintilian (9.4.51). In discussing faults of oratorical gesture Quintilian (11. 9.108) also observes that in ordinary speech (*sermo*) there are certain hidden beats (*latentes...percussiones*) and virtual metrical feet (*quasi aliqui pedes*), according to which many people gesture, though orators should

<sup>&</sup>lt;sup>1</sup> W. S. Allen, Accent and Rhythm, Prosodic Features of Latin and Greek: a Study in Theory and Reconstruction, Cambridge University Press 1973, pp. 336-344.

<sup>&</sup>lt;sup>2</sup> W. S. Allen, *Vox Latina*, Cambridge University Press, 2<sup>nd</sup> Edition, 1978, pp. 92-94.

not. These are bodily movements, or in the case of Horace, at least imaginary movements. They indicate ictus visually and muscularly, or so imagined. Indeed, the sentence containing the reference to *ictus* in Ouintilian 9.4.50, if read as in the earliest manuscripts, rather than with the word *animo* bracketed (by Christ<sup>3</sup>), suggests that *ictus* is measured in the animus, the internal seat of thought and feelings. Even if bodily movements and invisible psychological timing are used to indicate or acknowledge ictus, they are not the word accent. They may sometimes coincide with it. One must agree, I think, with Allen, that there was a relationship between *ictus* and accent, or rather with Jackson Knight<sup>4</sup> that especially in artistically controlled instances there was, but not the relationship Allen apparently sees. I agree with Allen that there is evidence that the *teaching* of the oral reading of Latin, and especially, almost exclusively, of the Latin hexameter eventually meant encouraging the students to emphasize the ictus orally and to repress the word accent for scansion purposes, as many teachers do today, but not, as he says, "from early times"<sup>5</sup>; Allen's evidence for which is a passage from Ausonius of the 4<sup>th</sup> century CE; and it pertains to Greek, not Latin. The grammarians Sacerdos and Priscian do teach oral-ictus reading of Vergil, but both of them as teachers had to contend with the fact that quantitative Latin poetry and prose were starting to be perceived and performed, spuriously, as less and less quantitative and more and more accentual. These 3<sup>rd</sup>-6<sup>th</sup> century grammarians do provide documentation of the beginning of the practice of the "scansion reading" of Classical verse. A scansion reading of, say, the first line of the Aeneid can still today do just that, help the young student, weak on quantities, to scan the line:

<sup>&</sup>lt;sup>3</sup> M. Winterbottom's Oxford Classical Text obelizes *etiam animo*, but suggests "fortasse *et animo* (nisi delendum est)." Nor could Radermacher make sense of *etiam animo*. He suggests these words are a corruption of *etiam manu mota*!

<sup>&</sup>lt;sup>4</sup> W. F. J. Knight, *Accentual Symmetry in Vergil*, Oxford University Press 1973.

<sup>&</sup>lt;sup>5</sup> W. S. Allen, *Vox Latina*, Cambridge University Press, 2<sup>nd</sup> Edition, 1978, p. 127. Also see Dionysius of Halicarnassus *De Comp.* 15, quoted below p. 16.



ARma viRUMque caNO, TroiAE qui PRImus ab Oris

I sing of arms and the man who first from the shores of Troy

It does not, however, help the student "*read*" it as a mature reader observing the rhythmic complexity that requires the coordination of several technical elements, such as the staccato or syncopated stress called for by the word accent falling on the short syllable ca-, or by the word accent on the first syllable of *Troiae*, an accent heavily contrapuntal to the *ictus* as felt on the second syllable:



### Arma virumque canō, Troiae quī prīmus ab ōrīs

Another example would be to compare a puerile scansion reading to a rhythmic reading of line 105 of book 1 describing the ship caught by the mountainous wave in the storm:



DAT latus, INsequiTUR cumuLO praeRUPtus aQUAE mons

the ship turns broadside, and a mountain of water heaps up, bursts forth and attacks it

The *aquae mons*, when read in the scansion reading indicated, is not a "mountainous wave," but a "monotonous" wave. Such a reading does not merely miss the churning word accents on *la-*, *se-*, *cu-*, and *a-*, but especially the oral effect of the word *mons*, comprising that rare monosyllabic adonic *ultima syllaba*, here a hypercharacterized ('extralong,' or with 'hidden quantity'<sup>6</sup>) syllable, which in this line lends itself to the sense with such culminant force:

<sup>&</sup>lt;sup>6</sup> W. S. Allen, *Vox Latina*, Cambridge University Press, 2<sup>nd</sup> Edition, 1978, pp. 91-2.

# <<u>AUDIO 5</u>> ())

# Dat latus, însequitur cumulo praeruptus aquae mons.

We philologists are interested in what the ancients perceived, thought, and did about *ictus* and accent; but in the field of Oral Interpretation oral readers can focus on communication between performer and audience both then and now. What then is verse-ictus? Our Latin lexicographers agree that it is the "beat" of Latin poetry. What is not immediately articulate, however, is this: How is this beat communicated in performance? Is it to be communicated at all? If *ictus* is not communicated by increased vocal intensity, what indications are there of any communication at all? As oral interpreters, or "oral readers of Greek and Latin literature" (which is what the members of the society SORGLL call themselves<sup>7</sup>), we take the risk of the fictional rhapsode Ion, as condescendingly portrayed by Plato in his dialogue of that title, of not having a science (a techne) by which to explain our successes and failures. Perhaps, however, under the perspective of today's science, Socrates' metaphor about the lodestone, or magnet, and the chain of magnetized iron rings connecting Ion and his audience with Homer and the Muse can be read as no longer so ironic. Is it possible that we can today spin Plato anew and identify a certain counter-irony, if we see the chain of magnets in modern scientific hindsight as Plato's unconscious intuition that rather than a disordered separation from the logos expressed by voice and gesture, perhaps some magnetoreception in our brains and elsewhere may be involved? Did he with mere intuition - and not with techne -- recognize that electromagnetics in and around us, even if we are far away from the Heraclean lodestones of Ionian Magnesia, can play a role in performers' endeavors to "enthrall" audiences by means of psychophysiological synchronization, or entrainment, of the performer's physiology with that of an audience?

<sup>&</sup>lt;sup>7</sup> I wish to thank the Society for the Oral Reading of Greek and Latin Literature (affiliated with the American Philological Association), and its primary founder Stephen Daitz for the opportunity to perform texts before perfect audiences at national meetings and to reflect on the experience of doing so. SORGLL's website www.rhapsodoioralgreekandlatin.org maintains several audio examples of performances by its members and others.

Before the Enlightenment we had already made some progress on related concepts. The great 4<sup>th-</sup> and 3<sup>rd</sup>- century Greek physician Herophilus of Cos compared the dilatation, or diastolic movement, of the pulse to the arsis, or upbeat, of a musical foot, and the contraction, or systolic movement, to the thesis, or downbeat. Perhaps we oral performers can start to think about the Herophilean physiologic analogy, as much as about the Socratic magnetic one. According to George Leonard: "In 1665 the Dutch scientist Christian Huygens noticed that two pendulum clocks, mounted side by side on a wall, would swing together in precise rhythm."8 Scientists would call this phenomenon "mutual phase locking of two oscillators," or "entrainment," or "synchronization." A simpler and clearer demonstration in physics classes today, not mentioned by Leonard, is to hang two pendulums from the ceiling and swing them at different rates: the faster pendulum will slow down and the slower one will speed up. Leonard asserts that the enchanting effects of music can be explained as entrainment.

### 2. Physiological

The notion of multimodal empathy, or entrainment, or synchronization, is a partial suggestion, toward, one day, a more scientific answer to this complex question. What *is* going on between someone who is actually reading Classical literature aloud, and those who are 1) *hearing* it read *and*, 2) if they ever look up from the page of the text, *seeing* it read? Of a typical audience some members may be inattentive, or somnolent, or preoccupied, but others are not, and may even be tuned in, to a performance, conjointly with each other as audience members. There are additional modes, including what might be called "electromagnetic" ones, which I hope may help us understand *ictus* beyond hearing the voice and seeing gestures. In doing so I have the guidance of my colleague Franz Halberg, identified with the field of Chronobiology. I will venture, with suggestions from him (that permeate what I have already said thus far), even further into science than a philologist should.

<sup>&</sup>lt;sup>8</sup> George Leonard, *The Silent Pulse*, E. P. Dutton, 1978.

A rigorous study by Hellmuth Petsche and Susan Etlinger<sup>9</sup> employs electroencephalography (the recording of various electric waves of the brain through electrodes placed on the scalp) to show how the brains of numerous persons process music, speech, and still pictures. These EEG recordings trace the synchronizations that occur between and among different regions of individual brains. Johnjoe McFadden<sup>10</sup> of the University of Sussex, a molecular biologist, defines the brain as a distributed conscious electromagnetic field communicating. Vladimir Pravdich-Neminski<sup>11</sup> after recording action potentials from the brains of his experimental animals, studied communications between and among human brains. Petsche and Etlinger's analyses reveal different degrees of synchronization among different brain locales cooperating with one another through strategies of coordination. We do not so much "respond" to music as we participate in it. We oscillate in complex sympathy with it. The study does not include analysis of the brain's processing of poetry, but it does compare EEG's of subjects' processing of music and prose. The conclusion here was that generally the processing of speech was different from that of music, perhaps because

<sup>&</sup>lt;sup>9</sup> Hellmuth Petsche and Susan C. Etlinger, *EEG Thinking: Power and Coherence Analysis of Cognitive Processes, with a chapter on technical aspects by P. Rappelsberger.* Verlag der Oesterriechischen Akad. der Wissenschaften, Wien, 1998.

<sup>&</sup>lt;sup>10</sup> Johnjoe McFadden, "Synchronous firing and its influence on the brain's electro-magnetic field: evidence for an electromagnetic field theory of consciousness," *Journal of Consciousness Studies*. 2002; 9: 23-50.

<sup>&</sup>lt;sup>11</sup> W.W. Prawdicz-Neminski: 1) "Ein Versuch der Registrierung der elektrischen Gehirnerscheinungen." Zentralblatt für Physiologie, 27 (1913) 951-960 (und Berechtigungen zu der Mitteilung 24 [1913] 1267); 2) "Zur Kenntnis der elektrischen und der Innervationsvorgänge in der funktionellen Elementen und Geweben des tierischen Organismus. Das Elektromyogramm der Destruktion." *Pflüger's Archiv für die gesamte Physiologie des Menschen und der Tiere* 207 (1925) 671-690; 3) "Sur la connaissance du rythme d'innervation." *Journal de Medecine d'Ekaterinoslaw* 13-14 (1923) 1; 4) "Zur Kenntnis der elektrischen und der Innervationsvorgänge in den funktionellen Elementen und Geweben des tierischen Organismus Elektrocerebrogramm der Säugertiere." *Pflüger's Archiv für die gesamte Physiologie des Menschen und der Tiere* 209 (1925) 362-382.

the burden of discursive meaning in speech required different brain strategies, with some similarities.

Would further scientific study probing the performance of, and listening to, poetry find even more similarities? To many of us who study literature it is both intuitive and traditional that poetry, even spoken poetry, somehow aspires to the condition not only of music but also of dance. Yet the Petsche and Etlinger EEG study described above was necessarily selective and limited in the amount of data it could handle; for this reason the subjects were required to suppress their own bodily movement, and no study was attempted of their processing of *moving* visual images with their eyes open. One of us (Halberg), however, has suggested that a study could be made of verbal, scenic, and movingvisual synchronizations of performers with audience members. Heartrate and blood pressure, important and pertinent variables, could be monitored on many members of the audience contemporaneously, and the software is available to seek frequencies at which synchronizations occur.

### 3. Oral Interpretation

How do these synchronized rhythms fit into the context of an oral performance? Both the ancients and we are aware that in performance our bodies and voices are replete with rhythms. Voices are not only subject to poetic and musical metrics, but they have minute rhythmic oscillations involving pitch, timbre, overtones, vibrato et cetera. These vibratory rhythms, unlike those representable in metrical scansion, cannot be quantified by the naked ear, nor their ratios represented, without laboratory instrumentation. The brain waves behind the performers' production and audience's participation in vocal, visual, and kinetic rhythms are probably even more complex and hidden, howsoever they may or may not participate in *ictus*. The body moves rhythmically both at the easily observed kinetic level and also at the microkinetic level, where communication can be not only subtle and cutaneous, but subliminal and subcortical. We philologists are not trained as EEG technicians and may not ever as philologists be able to get beyond lodestones to describe electric communication between performers and audiences. We are not trained to be experts in non-verbal communication (kinesics) either; but, as only slightly overextended philologists, we can read the commentary of Charles Darwin,<sup>12</sup> Ray Birdwhistell,<sup>13</sup> *et al.*, not to mention art-historical writers such as Karl Sittl<sup>14</sup> and Richard Brilliant,<sup>15</sup> as well as the broadly anthropological Anthony Corbeill;<sup>16</sup> and we can see in their scholarly background Cicero and Quintilian, who commented on the importance of orators' and actors' gait, gesture, face, and eyes; and we can conceive of these visible *motus corporis*, along with invisible synchronized brain waves, as possible means of communicating *ictus*.

The ancients tell us of the importance of the mind's eye in performance. Quintilian (6.2.29-33), who followed Cicero in turning to actors regarding delivery, directs us to use mental images (*imagines*, *phantasiai*) in order to stimulate appropriate emotional response in expression. The treatise, attributed to Longinus, "On the Sublime" has relevant words:

"In the general sense, any thought present in the mind and producing speech is called imagination (*eidolopoiias*), but in its now prevailing sense the word applies when ecstasy or passion makes you appear to see what you are describing and enables you to make your audience see it. You will be aware that imagination has a different aim in oratory than in poetry. The poet seeks to enthrall (*ekplexis*). The orator aims at vividness (*enargeia*). Both, however, attempt to excite their audience."<sup>17</sup>

<sup>&</sup>lt;sup>12</sup> Darwin, Charles, the *Expression of Emotions in Man and Animals*, Introduced by Professor S. J. Rachman, Julian Friedman Publishers, London, 1979.

<sup>&</sup>lt;sup>13</sup> Birdwhistell, Ray L. *Kinesics and Context: Essays on Body Motion Communication* University of Pennsylvania Press, 1970.

<sup>&</sup>lt;sup>14</sup> Sittl, Karl, *Die Gebärden der Griechen und Roemer*, Hildesheim, New York, G. Olms, 1970.

<sup>&</sup>lt;sup>15</sup> Brilliant, Richard. *Gesture and Rank in Roman Art*, New Haven, Memoirs of the Connecticut Academy of Arts & Sciences, v. 14, 1963.

<sup>&</sup>lt;sup>16</sup> Corbeill, Anthony, "Thumbs in Ancient Rome: pollex as Index," Memoirs of the American Academy in Rome 42 (1997) 61-81.

<sup>&</sup>lt;sup>17</sup> Longinus, *On Great Writing (On the Sublime)*, Translated, with an introduction, by G.M.A. Grube. Bobbs-Merrill, 1957. p. 15.

Thus the mind's eye has been taken to be as reliable a resource as literally felt emotional experience and as divine inspiration in the best tradition of theater and oral interpretation from Ion and Thespis to Stanislavsky and Lee Strassberg. Professors of oral interpretation today have analyzed the element of imaginary distance in oral presentation. David Thompson and Virginia Fredericks<sup>18</sup> see the imagined action of an oral reading in terms of the oral interpreter's degrees of 'camera distance' depending on whether it is a long shot, middle shot, or close-up. The ancient ancestry of this approach can perhaps be found in Plato's description, re-routed by Aristotle, of 'skiagraphic' painting (painting in outline, rough sketch), which makes its effect from a greater distance, versus 'zographic' (true-to life, realistic) painting, which can be viewed more minutely.<sup>19</sup>

4. Exercises

In the tradition of these scholars and teachers I would, in the final section of this essay, like to suggest some experimental exercises: First, recall or recite the lines from the *Aeneid* with which we began, the well-known, but often not well-delivered, first line



Arma virumque canō, Troiae quī prīmus ab ōrīs

and the also famous line (1.105) on the storm:



dat latus, însequitur cumulo praeruptus aquae mons

<sup>&</sup>lt;sup>18</sup> Thompson, David W., and Fredricks, Virginia. *Oral Interpretation of Fiction: A Dramatistic Approach.* 2d ed. Minneapolis, Burgess Pub. Co., 1967, pp. 14-16.

<sup>&</sup>lt;sup>19</sup> Sonkowsky R.P. "An Aspect of Delivery in Ancient Rhetorical Theory," *Transactions and Proceedings of the American Philological Association*, 90 (1959), pp. 263-265.

Stand within the line like an actor, at first entirely in animo, practicing, when necessary, by all means the metrical features discussed above; but as you perform, do so animo or ex animo, noting not merely the metrics, but especially what impulses, such as those of the *ictus*, in your oral interpretation will fill out the relatively 'cold' technical/metrical features. The oral interpreter's mind's eye is like a director's eye. It observes images that differ from those in Petsche and Etlinger's studies only in being imagined rather than photographed. What imagined images, still or moving, can help you perform the lines? There can be feed-back as well as feed-forward between body and mind or expression and thought. At what distance are you? In the first line of the poem perhaps you see the poem's shining façade and its announced content from a considerably greater distance, whereas in line 105 you have "zoomed in" much closer so that you are quite involved in the storm and the horrendous rhythm of the rolling sea. The last word in the first line, oris ('shores/beaches'), grammatically plural, provides a clear lexicographical sign for distancing as does litora in the third, just as English "shores" views a coastline from far off and "shore" sees it close at hand.<sup>20</sup>



Clearly line 105 is just the opposite, involving performer and audience intimately; it is the opposite of the famous Lucretian pleasure in non-involvement:

Suāve, marī magnō turbantibus aequora ventīs ē terrā magnum alterius spectāre labōrem DRN 2.1-2.

What a joy it is, when out at sea the storm winds are lashing the waters, to gaze from the shore at the heavy stress some other man is enduring!<sup>21</sup>

<sup>&</sup>lt;sup>20</sup> Cunningham, Maurice P. "Some Poetic Uses of the Singular and Plural of Substantives in Latin," *Classical Philology* 44.1 (January 1949) pp. 4-7.

<sup>&</sup>lt;sup>21</sup> Lucretius, *De Rerum Natura (On the Nature of the Universe*, trans. by R. E. Latham, Penguin Books, 1951, p. 60.

Secondly, as a final experiment, having had the above lines of the familiar and relatively simple hexameter as an initial foray, let us plunge into possibly the technically most complex poem in Classical Latin, Catullus 63, the 'Attis' poem, and let us choose lines 19-26, which comprise a sub-unit of a sort. This exercise will suggest -- but not with thorough philological or scientific explication -- and ask you to explore interplay among complex coordination of technical prosodic elements with underlying coordination of brain areas and emotions in performer and audience. Since we are without scientific instrumentation, our brain functions, cardiovascular pulsations, blood pressure will only be sensed intuitively and not demonstrated graphically; we shall rely heavily on traditional observations of such features as metrical positions, patterns of sound et similia. Ictus or "beat" will be expressed by movement, imagined, or subtle, or overt, depending on individual performers and circumstances; bodily movement or muscular exertion can be heard in the voice. The main point of this exercise is to provide practice and examples of the art of discovering "cues for passion." Let us begin with a reminder of context and an English translation of lines 19-26; lines 1-18 contained a wild narration, including Attis' frenzied self-castration in mad, fanatic devotion to Cybele; in 19-26 Attis speaks in propria persona to his band of co-worshippers:



- 19 mora tarda mente cēdat: simul īte, sequiminī
- 20 Phrygiam ad domum Cybēbēs, Phrygia ad nemora deae,
- 21 ubi cymbalum sonat vōx, ubi tympana reboant,
- 22 tībīcen ubi canit Phryx curvō grave calamō,
- 23 ubi capita Maenades vī iaciunt hederigerae,
- 24 ubi sacra sancta acūtīs ululātibus agitant,
- 25 ubi suēvit illa dīvae volitāre vaga cohors,
- 26 quō nōs decet citātīs celerāre tripudiīs.

Let dull delay depart from your minds; go together, follow to the Phrygian house of Cybele, to the Phrygian forests of the goddess, where the noise of cymbals sounds, where timbrels re-echo, where the Phrygian flute-player blows a deep note on his curved reed, where the Maenads ivy-crowned toss their heads violently, where with shrill yells they shake the holy emblems, where that wandering company of the goddess is wont to flit about, where it is right for us to hasten with fast dancing.

(trans. Cornish, rev.)

As oral interpreter here in the role of Attis you look out at your audience as s/he looks out at her/his followers. At this point in the everquickening narrative, after his mad self-mutilation in line 5 and after Catullus changes his grammatical gender from masculine to feminine in line 8, the galliambic beat has accelerated further; and you as oral interpreter, as opposed to prosodical analyst, will move about within Attis transgenderally as best your horrified Roman imagination will allow. The cultural conflict felt by the narrator between Roman security in moderation and eastern mad excess will, not unexpectedly, aid performance since the best model, at least politically, for engaging such seemingly non-Roman emotions was that recommended by Cicero (De Or. 2.182) for public presentations – namely, to give the impression of being under involuntary compulsion. You as oral performer today can encompass this and pretend that you and your audience/Attis-followers enter into this duality. This is where you as oral interpreter differ from the ideal of the high and dry, pure Classical Scholar, because like any good actor doing a play from a remote era, you connect with the audience of your day in part through interpretive allusions to the contemporary world around you - the very thing that the objective scholar is said to eschew. It is your very job, as oral interpreter, consciously and deliberately to collect your own observations of the world around you and allow them to filter into your oral reading either designedly or serendipitously. If you pursue oral interpretation of Greek and Roman Literature, you should prepare your "oral interp" instrument by exceptionally keen observation of people who are alive now, students, adults, the old. Audiences of this kind of performance will respond (be entrained).

Yet in performance, you are like Plato's rhapsode, Ion, or like one riding the irrational and unbalanced two horses of the soul in Plato's *Phaedrus*; in our Catullan selection you wildly ride the galliambic lines of two dimeters unevenly yoked by asynarteton, the first being acatalectic, the second catalectic (abruptly missing the final element). You as oral interpreter call out in line 19 to your followers/audience with as much ictus-pumped body-language as you sense appropriate to the size and distance of the audience and to the architecture of the playing

space. The quantitative rhythm of both dimeters is exceedingly choppy, staccatoed, and convoluted by the metrical device of anaclasis ('a bending back or overlapping,' whereby quantitatively short elements exchange places with adjacent long elements), contrasting wildly with pure ionics.

As a further, starker contrast, line 20 differs from 19 in that the syllable just before the diaeresis (-bes), although it ends in s, is "hypercharacterized"-a technical term used by W. S. Allen in his books on Latin and Greek phonology, but perhaps explained better for our purposes by Dionysius of Halicarnassus (De Comp. 15): "There is more than one kind of length ... of syllables; some are actually longer than the long... The most elegant writers of poetry have understood [the different properties of letters and syllables] ... and with elaborate artistic skill adapt the syllables and the letters to the emotions which they wish to portray."22 Catullus' choice of the form Cybebe in this metrical position for Cybele's name is repeated thrice elsewhere in the poem, especially hauntingly in the narrator's coda to the poem. The non-native (but educated) sound of the letter y (for Greek upsilon, like that of French u or German ü) occurs three times in this line and three more times in the next two lines – which is another vehicle for the sense of Roman horror; this is coincidentally paralleled if oral interpreter and audience are Americans since this sound is also in general strange to their native language; an oral interpretation, after all, happens in a particular place and a particular time between the making of the script and now.

In line 21 not only are the y-sounds continued, but the final syllable of *cymbalum* rhymes with, and is in the same metrical position as that of *domum* in line 20. These rhymed sounds are nasalized u's, which resonate with the bilabial nasal-endings of the rhyming first syllables of *cymbalum* and *tympanum*. All of these sounds combine with the three assonantal o's in the line to produce the very music accompanying the Maenads' dance envisioned by Attis. The nasalized final syllables are also a further performer's vehicle to contribute to the atmosphere of non-native strangeness; Velius Longus (Keil,vii, 54) tells

<sup>&</sup>lt;sup>22</sup> Dionysius of Halicarnassus, *The Critical Essays in Two Volumes*, Vol II, With an English Translation by Stephen Usher. Harvard University Press/William Heinemann Ltd, 1975, p.105.

us that m at the end of a word sounds like a 'foreign letter' (*peregrina littera*).<sup>23</sup>

Line 22 has one more y-sound, preceded by two long i's, which resonate with the y because they modulate into it, sounding to Roman ears similar to it. The line climaxes the series of o-sounds with two long final syllables. Under these drum-, cymbal-, and oboe-sounds the invisible *ictus*, the baton of Cybele, goes on. Anaphora of the word *ubi*, which began in line 21, continues in fivefold liturgical succession to line 25, controlling audience and oral performer ritualistically, but wildly resisted and broken by the content of the lines. Concerning the musical instruments mentioned in line 22, "Longinus" in the treatise "On the Sublime" (39) provides us associations that in part confirm the above:

"A sense of melody is not only inborn in man as a means of persuasion and delight, but it is also a marvelous instrument when allied to a free flow of passion. Does not the music of the flute stir the emotions of an audience, take them out of themselves, fill them with Corybantic frenzy, and by its rhythmic beat compel him who hears it to step to its rhythm and identify himself with its tune, even if he be quite unmusical?" [trans. G.M.A. Grube]

In line 22 the two long i's of the first two syllables of the first word, *tibicen*, provide an abrupt change of line-onset rhythm, calling attention to the flute, and work together with the long o's of *curvo* and *calamo* to provide assonance at each end of the spectrum of vowels from phonetically most closed to most open; you can use these to suggest a melody and perhaps the consonance of the six (!) velar stops to suggest musical precision. This line is very onomatopoetic.

Line 23 is, if I may say, very "onomatokinetic"! It too has an abruptly changed onset, consisting of resolutions. You can use them for Attis' launching of the rapid-tempo entry of the Maenads into his imagination/fantasy. Their mode is staccato. They are very fast. They

<sup>&</sup>lt;sup>23</sup> The clear and convincing evidence for the Classical Latin pronunciation of a word-final vowel plus m as a nasalization and lengthening of the vowel without closing the lips is presented in W. S. Allen, *Vox Latina*, Cambridge University Press, 2nd Edition, 1978, pp. 30-31, 74, 119.

toss their ivy-crowned heads violently to the beat of their dance. The last word of the first dimeter is *vi*, the long vowel of which not only continues the long-i musical assonance of the preceding line, but offers the performer the desirable option of "riding," perhaps with glissando change of pitch, the long i's phonetically closed aperture into its sister semi-consonant [i=j=y],which begins the next word, *iaciunt*. Your Attis might picture the Maenads so vividly as to become one of them. Your performance style and stage circumstances will tell you at what level of expression you will toss your head, or imagine doing so.

The first dimeters of 24 and 25 revert to anaclasts, like 19-21. 24 adds to the music some prominence of the sounds of s and u, accompanying the yelps and yodels of the Maenads. 25 is a last glimpse of them, pictured in your Attis's mind's eye as flitting about in a band obedient to the Goddess. The oxymoronic words *vaga cohors* summarize for performer and audience that which holds all this uproar together. The adjective, so to speak, contradicts the noun. The Goddess holds the reins in ecstatic tension. The "cohort" is at the same time disciplined and wild, as is further confirmed in the next line.

The first syllable of line 26, like that of 22, is unresolved, but unlike in 22, the fourth element (-cet) of 26 is also long; these five long elements can be used to relax performer and audience from the corybantic frenzy for a moment on a slower beat, a final controlled ritardando signaling the concluding of this musical subsection comprising Attis' speech and yet anticipating the wild narrative that follows; you as performer are like a dancer poised and resting. The word *tripudiis* perhaps reflects upon the military connotations of *cohors* of the preceding line and provides further anticipation, since the *tripudium* is originally a martial dance of the *Salii*, priests of Mars. Livy 38.17.4 mentions the *ululatus* and the *tripudia* of [the terrifying warrior-Gauls] *ineuntium proelium*. A little philology goes a long way to load a performer's imagination with stimulating connotations of the sort that are at the heart of oral interpretation.

# Conclusions

Further investigation and experience by oral readers and listeners can reveal more about the impact of such texts both in antiquity and now. If it is the duty and passion of Classicists to bring the new light of successive generations upon Classical literature, then it is surely ours to make what use we can of the cutting edge of scientific work that in our

time has transdisciplinary value. In this essay we have not by any means totally melded science with philology, but we have attempted to show possibilities for them to meet in a third field quite different from the usual Classical philology. They can meet in the field of Oral Interpretation, a field which, like the theater, has on its own incorporated many diverse arts and sciences. Oral Interpretation, like Theater interpretation, can at times stand in uneasy relationship with the high and dry kind of scientific and philological scholarship; but as actual performers, as opposed to those who write about performance, we can maintain the best from one end of this spectrum to the other by the creative use of both. We can also synchronize readily with audiences and freely enter into multiple modes of entrainment with them because we do not need to regard being alive today and having common experience and awareness of today's world as an embarrassment. The American Philological Association, by affiliating with The Society for the Oral Reading of Greek and Latin Literature, has opened a way. The philological dichotomy between the oral and the written word does not need to impede it.<sup>24</sup>

<sup>&</sup>lt;sup>24</sup> That dichotomy sometimes privileges the written word over the oral, viewing the written as evolutionary "progress"; or it may privilege the oral over the written, viewing the oral as more spontaneous. Thus W.A. Graham's conclusions in his *Beyond the Written Word: Oral Aspects of Scripture in the History of Religion* (Cambridge University Press, 1987, pp. 156-159) can be useful in the study Classical literature generally, beyond the focus on the much discussed techniques of oral composition; his graphic theory of *Mischbildungen*, or combinations of the oral and written along the spectrum between the oral and written poles, can be translated into actual acoustic, scenic, and entraining practice by oral interpreters. I believe (see note 19 above, *loc.cit.*) that this idea dates from Aristotle's interaction with Plato or earlier, among rhapsodes and actors.