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CHANGE OF RHYTHM AS A COMPOSITIONAL TECHNIQUE

ABSTRACT. Stępień Piotr, Change of Rhythm as a Compositional Technique.

The paper demonstrates rules and some of the basic applications of metarhythmia that is one of the compositional techniques used by Greek tragedians. The presentation of the examples is proceeded by discussion on the phenomenon of the so-called verbal rhythm, and distinction between metrical pattern and its syllabic realization. In the context of metarhythmia, verbal rhythm produces rhythmic ambiguity that reveals itself in specific syllabic realizations of metrical patterns. The result of the process is used by poets to generate consecutive rhythmic phrases (cola), and thus to shape artistically the structure of a song.

Keywords: Greek metrics; metarhythmia; song structure; Greek tragedy; lyric metres.

One of the most important and so far unsolved problems in the study of Greek versification is the issue of lyrical stanza structure. The existence of structure in "high" poetry is basically an axiom. It is present in such simple lyrical forms as for instance the elegiac distich[1] or Alcaic stanza,[2] therefore it should be all the more expected also in the choral lyrics of Greek tragedy – "high" poetry both in terms of content and of form. High formal qualities of Greek poetry are reflected in the manner Greeks spoke about it. In the archaic and classic periods it is referred to as κόσμος ἐπέων. In Democritus (B 21), this expression refers to Homer's poetry, and Parmenides (B 8, 52) speaks this way about his hexameter poem. In a fragment of Solon's elegy (1-W), κόσμος ἐπέων is an apposition for the word "song":[3] κόσμον ἐπέων ὠιδὴν ἀντ' ἀγορῆς θέμενος. In the case of the use of this expression by Democritus and Parmenides it can be presumed that "word order" refers first of all to stylistic and rhetorical qualities, i.e. content ones. In Solon, however, this expression carries a broader meaning, because as an equivalent (within the apposition) of ὠιδή it also describes aspects of more formal structure of the work, i.e. metre and rhythm.[4] Since – according to

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[1] Analysis in van Raalte 1988, 146–150.

[2] Analysis in Korzeniewski 1968, 129–30.

[3] Compare Bartol 1999, 261.

[4] J. Danielewicz translates this Solon's verse as follows: "pieśń chcąc śpiewać *rytmiczną,* nie na agorze przemawiać." (italics added by me), cf. *Liryka starożytnej Grecji,* 445.

Aristides Quintilianus – the formal features of ὠιδή include melody, rhythm and metre,[5] then the words κόσμον ἐπέων can only refer to these last two elements – metre and rhythm. For Pindar, the essence of poetic work is proper "mixing" of instrumental accompaniment with an elaborate compilation of ἔπεα:[6] φόρμιγγά τε ποικιλόγαρυν καὶ βοὰν αὐλῶν ἐπέων τε θέσιν Αἰνησιδάμου παιδὶ συμμεῖξαι πρεπόντως[7] (Ol. 3, 8 n.). The noun θέσις appears here in the meaning of συνθέσις, and like the verb συντίθημι it expresses "making a harmonious whole out of individual elements."[8] For Pindar, the poet is a wise craftsman who joins the voiced ἔπεα: ἐξ ἐπέων κελαδεννῶν, τέκτονες οἷα σοφοί ἅρμοσαν, γινώσκομεν (Pyth. 3, 112 et seq.). The terms compiling, joining, intermingling, etc. refer to the formal structure of poetic work. They describe the process of composing (ἅρμοσαν) and the effect of this process (θέσιν).

Antique sources do not inform us of possible mechanisms this process consists of. Because of the heuristic and imitative nature of Greek poetry,[9] such mechanisms must have existed. Both imitation and its modification require a certain point of reference – a common compositional model. Metre and rhythm cannot decide per se about the common nature of this model because Greek lyrical poetry uses a limited repertoire of colons. To some extent, also limited is the number of various types of settings in which colons can appear.[10] Thus, there inevitably occur more or less distinct similarities in using colons and their settings by particular poets. The compositional model consists in using certain techniques, which, generally speaking, serve to generate individual

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[5] Aristides Quintilianus 1.4.14 et seq.: χρὴ γὰρ καὶ μελῳδίαν θεωρεῖσθαι καὶ ῥυθμὸν καὶ λέξιν, ὅπως ἂν τὸ τέλειον τῆς ὠιδῆς ἀπεργάζηται. Word „λέξιν" (textual layer of the work) refers to metre, which is confirmed in the follow-up: περὶ μὲν γὰρ μελῳδίαν ἁπλῶς ἢ ποιὰ φωνή, περὶ δὲ ῥυθμὸν ἢ ταύτης κίνησις, περὶ δὲ τὴν λέξιν τὸ μέτρον.

[6] For the meaning of ἐπέα with reference to the sung poetry, compare Gentili 1983, 184; Danielewicz 1990, 57.

[7] According to the Greeks, "appropriateness" is a fundamental feature of music. With this concept all its aesthetic features are related, and it is present in its definitions quoted by Aristides Quintilianus 1, 4, 4 et seq.: τέχνη πρέποντος ἐν φωναῖς καὶ κινήσεσιν. Aristides defines music as follows: γνῶσις τοῦ πρέποντος ἐν <φωναῖς τε καὶ> σωματικαῖς κινήσεσιν (1, 4, 5–6). Also compare Barker 1984–9, 402, footnote 13 and *Anonyma de Musica Scripta Bellemanniana* 29.

[8] Cf. Bartol 1999, 261.

[9] Cf. Gentili 1983, 54.

[10] The most distinct (although, apparently, not observed so far) example of such a restriction in early tragedy is avoiding the sequence 3 *ia* | *lec*. In Aeschylus, there are no examples of such a setting, therefore *Supp.* 851–2 = 862–3 must be treated very cautiously, where M. L. West reconstructs the metre (the text is fairly damaged) to the form of 3 *ia* || *lec* ||; cf. *Aeschyli Tragoediae cum incerti poetae Prometheo* 1990, *ad loc*. In the case of Aeschylus, avoiding the setting 3 *ia* | *lec* is especially symptomatic due to a wide use of colon *lec* by this poet. Hence, *lec* appears in diverse settings of *lec* | 3 *ia*. Similarly in Sophocles we will not find a reliable example for the sequence 3 *ia* | *lec*, so both the text and the metre in *Phil.* 683/4–5 = 698/9–700 in the edition of H. Lloyd--Jones / N. G. Wilson should raise legitimate doubts (cf. *Sophoclis fabulae* 1990, *ad loc*.) as this place would be the only example of 3 *ia* | *lec* in Sophocles' tragedies.

rhythm portions within a song. These techniques are governed by certain rules. Taking into consideration tragedy lyrics, it can be stated that compositional techniques are common for all three tragedians. Common are also the rules of their operation, therefore a reference can be made to a common model. This model remains like this, regardless of the metre and rhythm used, because these are peculiar construction elements of the song, while the techniques provide the composer with tools and ways of joining these elements together.

In this article, I will demonstrate one of those compositional techniques. The analysis will cover selected lyrical parts from Aeschylus' tragedies composed using the technique, which I tentatively specify here as "metarhythmia." As the name implies, metarhythmia is a certain manner of changing rhythm within a song. The examples give just a taste of the possible uses of this technique, and metarhythmia is only one of several compositional techniques present in the drama. It usually "cooperates" together with the other ones within a song. So, in an attempt to show all the aspects of using metarhythmia, one must become acquainted with the other techniques. For obvious reasons, there is no room here for such a complex presentation. Therefore, I have selected examples that present the way this compositional technique works in a manner appropriate for one poet, and in an application restricted to changing dochmiac rhythm into Aeolic rhythm (examples 1–4) or dactylic (example 5) or from dactylic into Aeolic (example 6). They will help us to understand how this technique works, and will equip the reader with the necessary tools to reveal it in the drama songs. Before I get into detail, it is necessary to specify the notion of rhythm in Greek poetry, as metarhythmia is closely related to it.

The words ματέρος αἷμα σᾶς make a certain syllable setting. These syllables, in turn, demonstrate a certain *chronoi* setting,[11] which looks like this – ∪∪– ∪–. The rhythm in this setting is verbal because it's made up of the words and their syllables. If the above sequence of *chronoi* were to remain consistent with its possible musical rhythm, then the notes on which phrase ματέρος αἷμα σᾶς will be performed must remain in the same time relationship as the *chronoi* of individual syllables. In other words, its musical rhythm must be composed of two types of notes only: short and long – the latter with a time value of two short notes. Moreover, the long syllable must be performed on a long note, and the short syllable on a short note. This conformity is guaranteed where the word is the primary carrier of rhythm, and verbal rhythm determines the shape of musical rhythm resultant from the setting of the notes of certain values. The primacy of verbal rhythm over the musical one was a fundamental feature of music from the Archaic and Classic Periods.[12]This is confirmed, among others, by Pindar: Ἀναξιφόρμιγγες ὕμνοι (Ol. 2, 1). The sense of this invocation implies

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[11] Gr. χρόνοι – length of syllables, notes or gestures performed during the dance.
[12] Evidence of this in West 1992, 130–33.

"un adeguamento del discorso melodico alla catena verbale."[13] The same conclusion can be drawn from a statement by Plato, who in the *Republic* (399e, 8 – 400a, 2) calls for melody in music to follow the word, and not the other way around – as happened in innovative "new" music of the 4th century.[14] Of much significance is also an often cited statement by A. M. Dale: "no poet would write words in elaborate metricalal schemes merely to annihilate and overlay these by a different musical rhythm."[15] Such an understanding of rhythm with reference to archaic and classic Greek poetry is reflected in the views of T. Georgiades. This Greek scholar assumed that rhythm is single-layer in nature – as opposed to Western musical rhythm which is double-layered (*doppelschichtig*).[16] The double-layer rhythm of modern music manifests itself in two time dimensions – its abstract dimension (*ein leeres Gesetz*), in which time is a basic unit of the metrical scheme of the work, and its real dimension, in which time is filled with certain note layout, and thereby it receives real rhythmic value.[17] According to T. Georgiades, single-layer Greek rhythm manifests itself in that vowel-length opposition of syllables is its basic determinant. This opposition corresponds precisely to the opposition of tones, as a result of which verbal rhythm is identical with musical rhythm. T. Georgiades precludes the presence of time (in its modern dimension) in Greek music. This allows him to challenge the musical character of *arsis* and *thesis*, to which he only confers a function in "corporal feeling of rhythmics": "Daß die Rhythmik körperhaft empfunden wurde, zeigen auch Termini wie Fuß, Thesis, Arsis. (…) *Thesis* (Senkung) bedeutet das Stellen des Fußes auf den Boden, *Arsis* (Hebung) das Heben."[18] Yet, *Opinio communis* with reference to these terms is different. It is generally accepted that they are musical in nature, and a segment in the form of *arsis*/*thesis* is a certain analogy to time in modern music. Such a view is held by M. L. West, who specifies a proper character of Antique "bar."[19] In the same vein as M. L. West, B. Gentili and

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[13] Cf. Gentili, Lomiento 2003, 17.

[14] Cf. Gentili, Lomiento 2003, 17. Evidence of the new music characteristics can be found in West 1992, 356 et seq.; Schönewolf 1938, 26 et seq.

[15] Dale 1969, 161. It's worth noting that basically the words of this English scholar constitute a slightly different approach (as she applies different criteria for assessing metre and rhythm) to what was already stated in the mid-19th century by A. Rossach and R. Westphal, cf. Rossach 1854, 19.

[16] Cf. Georgiades 1958, 18.

[17] "Wir bestimmen hier (sc. inn Western music rhythmics) zuerst ein leeres Gesetz, eine abstrakte Betonungsordnung, und erst dann nehmen wir die Ausfüllung durch konkrete rhythmische Werte vor. Hier gibt es also eine Zweiteilung des Vorgangs. Mann trennt zwischen Ordnungsprinzip und wirklicher Zeitdauer der einzelnen rhythmischen Werte, zwischen Zeitabsteckung und Zeitausfüllung." (Georgiades 1958, 18).

[18] Georgiades 1958, 39.

[19] For substantial differences occurring in this Antique "bar", cf. West 1992, 134–5. When writing about the *arsis/thesis* segment as Antique "bar", I will consistently put this word in inverted commas to highlight that it's not about the exact equivalent of modern time (M. L. West uses italics for this).

L. Lomiento argue that *arsis* and *thesis* have a rhythm and musical value,[20] and in the case of the sung poetry accompanied by instruments, they introduce another rhythmic plane beside verbal rhythm, namely musical rhythm.[21] This rhythm occurs as a result of the regular alternation of time included in *arsis* and *thesis*.[22] Italian scholars, like T. Georgiades and M. L. West, also argue that in the Archaic and Classic Periods a tendency prevailed for musical rhythm to be determined by verbal rhythm. With regard to this tendency, the question arises: What did the Greeks actually need "bar" for, since musical rhythm was consistent with verbal rhythm, and the latter resulted from rhythmic implementation of metrical pattern? After all, rhythmic pattern could perfectly serve the purpose of organising both these rhythmic levels – hence, the purpose fulfilled in modern music by bar in its abstract dimension. I believe that the basic reason for the existence of segments in the form of *arsis* and *thesis* is a special character of the material in which vowel-length rhythm occurs. This material is the language which uses the natural vowel-length opposition of syllables, but is devoid of expiratory accent. Lack of this accent deprives vowel-length rhythm appearing on the language level of any dynamism. If verbal rhythm in the sequence $- \cup \cup - \cup -$ were to be rendered by gestures (e.g. by lowering and raising a foot), then signals are needed to delineate the place to lower it and raise it. For us – language users of stress accent – such a place may be made up of long syllables as the most natural carriers of stress accent, and thus the most natural places to lower the foot. However, it's important to remember that the rhythmic nature of a long syllable did not automatically imply any movement dynamism the same way as to our view this dynamism is implied by the presence of a stressed syllable.[23] Moreover, if we take the sequence $\cup - - \cup -$, then foot lowering where the long syllables are, and raising it where the short syllables are, is not feasible, because in order to lower the foot where the second and third long syllables are, it needs to be raised between these syllables. The time necessary to made an upward movement will automatically change the nature of the vowel-length rhythm. (The Greeks distinguished this time between syllables, but it did not participate in the rhythm as such[24]). So, since the rhythmic material – language – misses a signal in the form of stress accent, which would naturally transfer rhythm onto the gesture level, and since rhythm is based on the opposition in duration of individual syllables, then the signal for gesture must also refer to *duration*. Thus, the place for lowering and raising the foot are determined by the time relationship (λόγος) between *arsis* and *thesis*. Their determination results not

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[20] Gentili, Lomiento 2003, 31.

[21] Gentili, Lomiento 2003, 4.

[22] Gentili, Lomiento 2003, 41.

[23] This is easy to observe based on such measures as iambs, trochees, Aeolic measures or dochmiuses, in which *thesis* occupies time volume of two syllables: long and short.

[24] Cf. Aristox. fragment 3 (Psell '6).

only from the intention to provide a given rhythm sequence with the most regular character possible, but also the setting of such places for the gesture should not cause a situation in which the places of foot lowering would be adjacent. As we have already mentioned, such a vicinity would prevent the rhythm from being transferred onto the gesture level. Therefore, e.g. in ionic ∪∪ − −, *arsis* falls on two short syllables, and *thesis* takes the place of two long syllables.[25]

The role of the *arsis/thesis* segment finds its analogy in modern timing that also refers to the gesture representation of rhythm (e.g. in conducting). However, this is not the only and fundamental function of Antique "bar." Aristoxenos informs of its proper role: Λεκτέον καὶ περὶ ποδὸς τί ποτέ ἐστι. καθόλου μὲν νοητέον πόδα ᾧ σημαινόμεθα τὸν ῥυθμὸν καὶ γνώριμον ποιοῦμεν τῇ αἰσθήσει. (p. 27, 21–23). According to Aristoxenos, the foot[26] serves to interpret rhythm, and makes its perception possible. In an attempt to explain what this means specifically, we will refer again to the sequence −∪∪−∪−. First of all, it must be noted that in order to determine *arsis/thesis* segments, it is necessary to know the metre of this sequence.[27] It's metre, as abstract pattern, determines the setting of "bars" within ματέρος αἷμα σᾶς. If we consider this as dochmius, i.e. a metre with pattern × −−∪−, then we must assume that the order of *arsis* and *thesis* is the following:[28] −ar : ∪∪th : −ar : ∪−th, because this setting is consistent with the metrical pattern.[29] This sequence, however, can also be interpreted as dodrans, i.e. a colon presenting another type of rhythm. According to the metrical pattern of dodrans, its *arsis/thesis* setting is other than in dochmius. Although papyri with musical notation do not attest to this setting for dodrans, the *arsis/thesis* segments are attested to for a metrically similar colon – aristophanean (*ar*):[30] −∪th : ∪−ar : ∪−th −. Consequently, it's most likely that in terms of "bars" the scheme of the dodrans is: −∪th : ∪−ar : ∪−th.

The sequence −∪∪−∪− shows verbal rhythm which is the same regardless of whether it appeared as an implementation of the metrical pattern of dochmius or dodrans. Exactly the same holds for musical rhythm, provided that long notes are assigned to long syllables and short notes to short syllables. And precisely such was the fundamental tendency in the music of Archaic and Classic periods. So, dochmius of syllabic form −∪∪−∪− and dodrans of the same form, differ in metrical use, which, in turn, introduces a difference in the "bar" setting. If this difference were to be measurable, i.e. if it were to be audible somehow, then there would need to exist a signal to highlight the presence of a certain

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[25] Cf. West 1992, 145.

[26] A "foot" is a segment composed of *arsis* and *thesis*.

[27] Cf. Georgiades 1958, 39: "Fuß (πούς) ist Schritt, auch Maß."

[28] Cf. Pöhlmann, West 2001, 12, 15.

[29] Cf. West 1992, 142–3. As opposed to M. L. West, I'm not using note symbols here. This procedure, however, is not methodologically incorrect, as long as we recognise that musical rhythm is identical to verbal rhythm.

[30] Cf. Pöhlmann, West 2001, 89–91 and West 1982, 23–4.

arsis/thesis setting, other for dochmius and other for dodrans. The pioneers in research on Greek rhythmics, A. Rossbach and R. Westphal, considered ictus to be this signal. They understood ictus as stress accent.[31] However, ancient sources (Aristotle, Aristoxenos, Hephaestion, Aristides Quintilianus) do not mention this type of musical aspect, and this would be a very important aspect, because during singing ictus would add to the language quite new accentuation features, not present in ordinary speech. Besides, it would be an important feature introducing a difference between colons used in artistic prose and poetry.[32] This potential differentiating feature, however, is neither perceived by Aristotle nor Dionysius of Halicarnassus, who compare artistic prose rhythm with poetry rhythm. This could not have been the Greek tonic accent either. In dactyl $-^{th}$: $\cup\cup^{ar}$ this accent might occur in a long syllable, thereby highlighting the *thesis*, but where the *thesis* covers two syllables, one of which is short, highlighting it by one tonic accent is impossible. The participation of tonic accent in highlighting *arsis/thesis* is precluded by the practice used in antistrophic songs, where it was never attempted to introduce accentuation conformity between strophe and antistrophe.[33] The necessity of such a measurable signal to exist is unfounded in the light of the foregoing statement by Aristoxenos according to whom one becomes aware of "bar" and related rhythm on the level of one's perception (αἴσθησις). A certain order of *arseis*/*theseis* in the sequence $-\cup\cup-\cup-$ is a manner of becoming aware of this setting.[34] Knowing the metre, the recipient is able to became aware of this, and possibly to include timing in this sequence (e.g. through foot movements, as we can see this timing in the aulete on the famous Pronomos' vase).[35]

One can suppose that this or another division of this sequence into feet does not substantially influence the reception of rhythm since this division generally refers

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[31] I believe this is the way the sense of expression "Die stärkere Intension" should be interpreted; cf. Rossach 1854, 23: "Die stärkere Intension, Ictus genannt, besteht nicht etwa in der Tonhöhe oder in der grösseren Zeitdauer, sondern lediglich in der grösseren Stärke des Tons, in der grösseren Kraft, der er hervorgebracht wird." Also, cf. Rossach (1854, 24, footnote 7), where "Accent" refers to vowel tone height, i.e. Greek musical accent, which – according to the German scholars – should not be confused with ictus.

[32] And these colons, contrary to Aristotle's recommendations (Rhet. 3, 1408b, 32 et seq.), are often identical – particularly in Demostenes' prose, cf. Lomiento 2004, 108–9.

[33] Cf. West 1992, 198–9. In some Greek tragedy songs, however, a *certain* degree of accentuation response can be seen. These include S. *Ant*. 352–61 = 362–71, in which as many as four out of nine colons have identical accentuation pattern between stanza and anti-stanza. So, in this respect this song is exceptional, and thus it's hard to agree with R. Chodkowski, who, in referring to its analysis made by J. G. Landels (cf. Chodkowski 2005, 146–7; transl. by M. Kaziński) states that it is a "typical choral song." Cf. also Chodkowski 2003, 178, footnote 209.

[34] This is brought up by Quintilianus: "ubi tempora etiam *animo* metiuntur et pedum et digitorum ictu…", *Institutio Oratoria* 9.4.51.

[35] Vide Kocur 2011, 11.

to[36] perceiving the rhythm consciously. But this is not the case. The difference, which is implied by the presence of certain "bars", can be best realised on a practical example. The easiest way to *rhythmise* the rhythm of a clock ticking is to verbalise it. On the language level, we usually render it by classical[37] [tic-tac, tic-tac…]. Just as well, however, we can express this rhythm by a slightly different grouping of linguistically highlighted elements, e.g. [tic-tac-tic, tic-tac-tic…]. Objectively speaking, each time we use the same rhythm elements appearing in the same order. A change in grouping these elements causes the rhythm to acquire other properties although its objective features are identical in both cases. Can the nature of these "other properties" be specified? In order to do that, one would need to do the impossible, namely, define the phenomenon of rhythm itself – this "invisible god", as it is vividly described by T. Georgiades.

Based on the above analogy, obviously I do not suggest that in Greek poetry the recipient could afford this subjective perception of "bars." This seems to be impossible, as the metre and the rhythm of this poetry are formal elements *assigned* by the poet. So, these elements are accompanied by a certain intention concerning their usage, and this intention is imposed, as it were, on the listener. All this does not mean, however, that the compositional scheme could not have implied the presence of ambivalence. In the case of the sequence $-\cup\cup-\cup-$ ματέρος αἷμα σᾶς,[38] ambivalence is present on the level of verbal rhythm. This rhythm appeared from the metrical pattern of dochmius $\times--\cup-$, in which the metrical properties of its position were used (position *anceps* was filled with a long syllable, the first long position took on two short syllables). Thanks to a certain syllabic implementation of the dochmius metrical pattern, there appeared verbal rhythm identical to that of the dodrans – the colon belonging to the so-called Aeolic measures. If such poetic practice is not intentional, this means that this or some other syllabic figure (e.g. dochmius) is a certain side product of the content.[39] If, however, the appearance of ambivalence on the level of verbal rhythm is achieved on purpose, then in analysing the formal features of the work one must try to explain this purpose.

Metarhytmia is a compositional technique, in which the poet uses the ambivalence occurring on the level of verbal rhythm. This ambivalence results from a certain syllabic implementation of a metrical pattern deviating from the metrical paradigm. Hence, the technique explains the purpose of assigning a certain syllabic implementation to a metrical pattern. It should be underlined that this is not about intentions related to ordinary rhythmic variation. It's about a specific function and topics related to the principles of operation which are

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[36] Naturally, one cannot preclude that the *arseis/theseis* settings were interpreted by dance. This seems most probable with reference to march anapests, because anapest foot $\cup\cup^{ar}:-^{th}$ is suitable for marching pace; cf. West 1992, 136.

[37] Cf. Dłuska 1978, 17.

[38] Eur. *Or*. 338.

[39] For the dependence between form and content of the work, cf. Kraus 1957, 13.

always the same regardless of the metre or colon setting used. Here's a short characterisation of metarhytmia.

As it has been established, verbal rhythm in the dochmius $-\cup\cup-\cup-$ is identical to the verbal rhythm of dodrans. This identity was caused by a certain syllabic implementation of dochmius. In this case, verbal rhythm, identical to dodrans rhythm, is a rhythmic *aspect* of dochmius. This aspect will be tentatively described as "metarhythm." If a poet creates in a song such rhythmic conditions in which, for instance, there appears the dochmius with syllabic implementation $-\cup\cup-\cup-$, and this dochmius precedes the colon or Aeolic colons, then it shall be called the Aeolic rhythm modulator, which will be put as δ (= *dod*) in the notation. Thus, metarhythmia means a change in the rhythm using a modulator. The essence of this technique is a metrical implementation of modulator metarhythm. For modulator δ (= *dod*), the metrical implementation of its metarhythm and both metre and rhythm change will be constituted by the Aeolic colons that follow it. Before passing on to the analysis of examples, I owe the reader an explanation of some terms which must be used when not only song metre, but also its rhythm undergo analysis.

Metrical pattern: This is a paradigmatic setting of positions proper to a metron or colon. Since the pattern refers to the position, it is an abstract notion. The ancients realised that, which is attested to by Hephaestion's practice, who uses symbols α (= $\cup$), β (= $-$) to present the general metrical scheme, compare Hephaest. 44.

Rhythmic implementation: This is a concretisation of abstract metrical pattern. Rhythmic implementation includes: **syllabic implementation and verbal segmentation**. Syllabic implementation means filling metrical positions with syllables. Consideration of this phenomenon is critical in metarhythmia as it's the specific syllabic implementation that causes the concretised pattern to show the presence of metarhythm. Verbal segmentation results from implementation of a certain pattern in respect of the word end falling within it. Verbal segmentation is not essential for metarhythmia, although it is important for other compositional techniques.

Rhythm carrier: This is a metrical pattern implemented rhythmically. This term facilitates references to rhythm. The terms "metron" and "colon" appear with reference to metrical pattern.

Example 1: A. *Sept*. 686–688 = 692–694.[40]

(686 = 692) 1. $\cup\cup\cup-\cup-|-\cup\cup-\cup-\int$ δ| δ $\int$
(687 = 693) 2. $-|\cup\cup-\cup--\cup\cup-\cup-|$ 2 δ | (= 2 dod)   modulator
(688 = 694) 3. $-\cup\cup-\cup--|||$ ar ||| metrical implementation

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[40] In all the translations, I rely on the edition *Aeschyli Tragoediae* 1990. Abbreviations and symbols are according to West (2003, 15–17). The symbol <u>D</u> means $---\cup\cup-$ or $-\cup\cup---$.

In carriers 1–2, dochmiuses are a series in which the first metron, thanks to its syllabic implementation in stanza ∪∪∪−∪−, i.e. right at the beginning of the song, determines the specific type of metre and dochmius rhythm.[41] This, in turn, precludes ambivalence in terms of metre in the second, third and fourth metres.[42] At the same time, in these metres appears metarhythm (= *dod*). Carrier 2 shall be considered as a proper modulator, because it directly precedes the colon *ar*, implementing metarhythm in carrier 3. Clausal *ar*,"takes over" the Aeolic metarhythm from carrier 2 and implements it metrically to a hypercatalectic form.[43] Due to the female cadence in *ar*, there appears a natural clausal opposition with reference to the male cadence in carrier 2. Considering metathythmia in this example helps to understand why in this example the dochmius timing[44] present in carriers 1–2 did not pass directly on to carrier 3, which would then assume another metrical form, i.e. δ⁺. Furthermore, what informs the recipient that carrier 3 was formed from pattern *ar*, is the breaking verbal synaphaea which connects dochmius colons 1–2.

This does not mean that the syllable sequence −∪∪−∪−− could not be perceived dochmius-like – as a rhythm formed as a result of implementation of pattern δ⁺. The poet, however, must create necessary rhythmic conditions for that – as can be observed in A. *Eum*. 169–170/1 = 174–175/6.:

1. −∪−|−∪−−∪−‖   3 cr ‖
2. ∪∪∪−∪−−∪∪−∪−−‖   δ δ⁺ ‖

In the other carrier mentioned here, the first metron determines unequivocal dochmius rhythm (∪∪∪−∪−). This rhythm and its related timing passes directly (verbal synaphaea) on to the second metron, because it is not precluded by the setting of the first six syllables in metron δ⁺. Metarhythm (= *ar*), formed in metron δ⁺, is not implemented metrically further on in this song,[45] so here it is not a matter of metarhythmia and modulator in carrier 2.

Example 2. A. *Ag*. 1448–1449 = 1468–1469

(1448 = 1468)   1. −∪∪−∪−|−∪∪−∪−   δ| δ (= 2 dod)   modulator
(1449 = 1469)   2. −∪|−∪∪−−‖   ph ‖   implementation

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[41] This syllabic form of dochmius in the drama is even more frequent than ∪−−∪−, cf. Parker 1997, 65.

[42] Ambivalence in terms of metre would first of all mean lack of clarity in "bar" settings within given metres or colons.

[43] In this context.

[44] I.e. perceiving dochmius in terms of "bars."

[45] The carriers following δ δ⁺ ‖ are δ | δ | and a clause in the form of *ia* δ ‖‖.

The song begins with a modulator in the form of dochmius colon. The Aeolic metarhythm (= 2 *dod*) is this time implemented by Aeolic colon *ph*. Because of simultaneous Aeolic character of carrier 2, the presence of Aeolioan synaphaea connecting it with dochmius cannot lead to the transfering of the dochmius timing on to *ph*. Thus, an analogous situation as in *Eum*. 169 et seq. cannot take place here.

This is a variant of metarhythmia with regard to example 1. The variant potential manifests itself in using *ph*, i.e. colon implementing metrically metarhythm from carrier 1. Due to verbal rhythm in δ | δ (= 2 dod), *ar* would be more natural here, although the presence of *ph* does not at all break the rules of metarhythmia, because *ph* still shows Aeolic rhythm present as aspect in modulator 1.

An apparent problem here is the metre of carrier 1. The dochmius colon as modulator appears at the beginning of the song, so what is missing here is an unambiguous dochmius rhythm. However, the dochmius interpretation of the ambivalent sequence $-\cup\cup-\cup-$ from carrier 1 is favoured by the context of the directly preceding song. In A. *Ag*. 1407 et seq., we are dealing with a majority of δ measures, among which – what's important – there also appears $-\cup\cup-\cup-$ (A. *Ag*. 1409 = 1428), and, as in example 2, this dochmius participates in the metarhythmia, constituting modulator δ (= *dod*). *Ph* (A. *Ag*. 1411 = 1430), which is also the metrical implementation of the Aeolic metarhythm there.

Example 3. A. *Suppl*. 630–642 = 643–655.

(630 = 643)	1. $-\cup\cup-\cup-\|$	dod |
(631 = 644)	2. $-\cup\cup-\cup--$	ar
(632 = 645)	3. $-\cup\cup-\cup--\|$	ar ||
(633/4 = 646/7)	4. $-\cup\cup\cup\cup\cup-\|-\cup\cup-\cup-\|$	δ| δ |
(635/6 = 648/9)	5. $\cup\cup\cup-\cup-\cup-\cup\cup\|\cup-\|$	2 δ |
(637/8 = 650/1)	6. $\cup\cup\cup-\|\cup--\cup\|\cup-\|\cup--\|\|$	δ δ⁺ || (= δ ar) modulator
(639–42 = 652–55)	7–10. ph| ph|| gl ph |||	implementation

In the carrier, there appears 1 sequence $-\cup\cup-\cup-$, which thanks to its initial position in the song and the lack of context[46] must this time be interpreted metrically, as is indicated by its verbal rhythm. Therefore, carrier 1 must be considered as a dodrans. Typically for Aeolic measures, the next colon is an extension of dodrans in the sense of $-\cup\cup-\cup-+-$. Two consecutive *ar* additionally confirm the Aeolic rhythm of carrier 1. Consequently, it can no longer be perceived as metron δ, subject to special syllabic implementation, which, as has been stated above, is the condition for metarhythm and modulator to occur.

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[46] The preceding song ends in 599, and contains no rhythms occurring in 630 et seq.

Metrical interpretation of the second metron from carrier 1 results from the context in the form of dochmius drawn from the first metron. Drawing[48] also occurs in the second metron. The verbal rhythm of the modulator, resulting from syllabic implementation of pattern δ, also shows another rhythmic aspect, other than dochmius one, namely, this rhythm is also proper for dactylic carrier D. So, modulator 1 (second metron) shows dactylic metarhythm (= $\underline{D}$), which is metrically implemented in colon D from carrier 3.

Example 6. A. *Pers*. 568–572 = 576–580.

(568 = 576)	1. −∪∪−∪∪−x‖	D× ‖	
(569 = 577)	2. −−−∣∪∪−−‖	$\underline{D}$ – (= ph) ‖	
(570 = 578)	3. −−∣−∪∪−−‖	$\underline{D}$ – (= ph) ‖	modulator
(571 = 579)	4. −−−∪∪−∪−∫	gl ∫	implementation
(572 = 580)	5. −∣∪∪−∪−−‖	ar ‖	

Carriers 2 and 3 come directly after unambiguous dactylic colon D×, therefore their metre is dactylic as a result of their context. However, due to the syllabic implementation of pattern D× in carriers 2 and 3, there appears Aeolic metarhythm on the level of their verbal rhythm (= *ph*). Aeolic metarhythm is used in the section that directly follows carrier 3. So, carrier 3 is the proper modulator, and the period in the form of *gl* ∫ *ar* (carriers 4 and 5) owes its metre to the metarhythm included in the modulator, as it constitutes the metrical implementation of the modulator metarhythm. In this way, there appears a smooth passage from dactyls to Aeolic measures.

Based on the above examples, one can become convinced that ambivalence on the level of verbal rhythm can be intentional, reaching deeper than a desire to diversify the rhythm. Unambiguousness, which appears as a result of rhythmic implementation of the metrical pattern, can be used in the compositional technique whose basic function is to preserve smooth passage between two different rhythm types within the song. Metarhythmia is a compositional technique that explains one aspect of the compositional scheme of the song. Also, it shows that formal structure is related to a certain repeatable scheme for various rhythms remaining in different settings. Observation of this technique in tragic song allows us to judge their formal qualities, and facilitates interpretation of metrical data which is not always clear using traditional methods.

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[48] Explanation of the term "drawing" in West 2003, 126.

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CHANGE OF RHYTHM AS A COMPOSITIONAL TECHNIQUE

S u m m a r y

The content of the paper can be summarized in five main points, in which the author:

1. Makes references to some of the ancient authors in order to give an account of their views on such notions as metre , rhythm, and the composition process relating to lyric songs;

2. Discusses the phenomenon of verbal rhythm and its relation to metrical pattern pointing out that syllabic realization of a given metrical pattern can produce ambiguity on the level of verbal rhythm.

3. Suggests that the proper identification of such rhythmical phrases in terms of their metre was still possible due to musical rhythm resulting from a specific arrangements of *arseis* and *theseis*.

4. Explains the basic rules and applications of the compositional technique called metarhythmia, and the most important notions that are relevant to its use. These are metrical pattern, rhythmic implementation, and rhythm carrier.

5. Using six examples illustrates the functioning of metarhythmia within the songs of Greek tragedy.