Nonsense Syllables in the Music of the Ancient Greek and Byzantine Traditions*

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The origin of nonsense syllables is extremely vague. It is known from the writings of Greek philosophers and from Gnostic papyri that meaningless letters using the Greek alphabet indicated an ancient system of solmization. Several scholars have produced inconclusive evidence that the origins of meaningless letters preceded the Greek alphabet and were derived possibly from Syria or Chaldea. This may well be. Greek letters are not unique in the composition of nonsense syllables. It is the purpose of this article to limit the examination of nonsense syllables and their function to the music of ancient Greece and Byzantium with the hope of providing some correlation between the two traditions.

The appearance of nonsense syllables in the music of ancient Greece and Byzantium can be traced to the use of the seven Greek vowels in gnostic music. From antiquity through the medieval period, the vowels $a, e, \eta, o, u, o$ are discussed in many historical works and treatises for their function as incantations. It is certain that these gnostic formulae were in existence long before they were documented. However, one of the first treatises to mention them is the Handbook of Harmonics by Nichomachus of Gerasa of the second century A.D. Nicho-

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machus was a Pythagorean writer who professed in this treatise that the motion of each of the seven spheres produced a sound and each of these sounds corresponded to one of the seven Ionian vowels.² It should be pointed out that the figure “seven” was considered to be a magical number.³ In another treatise, The Elocution, Demetrius Phalereus, a contemporary of Nichomachus, documents that in Egypt the priests worshiped their gods by chanting the seven vowels which designated certain sounds or pitches and which were substituted for the performance of the aulos or kithara.⁴ The Greek grammarian Servius also comments on a phrase in Virgil’s Aeneid, where Hecate was invoked, not by words, but by mystical sounds or incantations which have been interpreted as the seven vowels.⁵ Saint Irenaeus, a writer who reveals the gnostic system developed in the early Christian centuries, states in the Refutation of Heresies that these vowels represented the seven planets.⁶ Even as late as the thirteenth century, the Greek vowels were used for conjuring magic spells, but in a different context. For instance in the treatise De suffimentis (On Perfumes), the Byzantine writer Nicolas Myrepsus describes the preparation of perfume and declares that under the spell of the perfume’s aroma, the preparer uttered the seven Greek vowels.⁷

The ancients believed that the name of each planet was expressed by one of the seven vowels. According to the order of planets, which included the sun and moon as designated by the Egyptians and Pythagoreans, the vowels corresponded to the following planets: Moon, A; Mercury, E; Venus, H; Sun, I; Mars, O; Jupiter, U; and Saturn, Ω. The planets and their respective vowels also represented the musical notes of the seven-stringed lyre of Orpheus.⁸ There were discrepancies among the ancient theoreticians as to which vowel corresponded to the tones of the lyre. The scheme of concordances shown in Table 1 is one of several schemes.⁹

³ F. Dornseiff, “Das Alphabet in Mystik und Magie,” Στοιχεία, VII (1922), 33.
⁹ It should be noted that both Nichomachus and Aristides Quintilianus deviate from this scheme. In Nichomachus’ Handbook, he reverses Venus and Mercury from the
TABLE 1
Concordance of Greek Vowels to the Planets and the Tones of Orpheus' 7-Stringed Lyre

<table>
<thead>
<tr>
<th>Vowels</th>
<th>Planets</th>
<th>Greek Musical Notes</th>
<th>Pitch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ω</td>
<td>Saturn</td>
<td>Hypate Meson</td>
<td>e</td>
</tr>
<tr>
<td>U</td>
<td>Jupiter</td>
<td>Parhypate Meson</td>
<td>f</td>
</tr>
<tr>
<td>O</td>
<td>Mars</td>
<td>Lichanos Meson</td>
<td>g</td>
</tr>
<tr>
<td>I</td>
<td>Sun</td>
<td>Mese</td>
<td>a</td>
</tr>
<tr>
<td>H</td>
<td>Venus</td>
<td>Trite Synemmenon</td>
<td>b-flat</td>
</tr>
<tr>
<td>E</td>
<td>Mercury</td>
<td>Paranete Synemmenon</td>
<td>c</td>
</tr>
<tr>
<td>A</td>
<td>Moon</td>
<td>Nete Synemmenon</td>
<td>d</td>
</tr>
</tbody>
</table>

From this table it can be seen that the ambitus of the gnostic formula is from the Greek note Hypate Meson, which is the equivalent of an e, to the Nete Synemmenon, which is the d above. With the correlation of vowels to Greek musical notes of the heptachord, a new musical system of notation was designated.

Regardless for whom or for what the vowels were chanted, the gnostic formulae functioned as invocations and were always chanted in a nonsensical manner. Found in both amulets and magic papyri, the formulae appeared in a variety of arrangements, including anagrams, retrogrades, and most often repeated-note groupings. In explaining the frequent repetition of notes in the gnostic formulae, the scholar Élie Poirée indicates "that these notes had a rapid movement that corresponded to a sort of trembling of the voice, a figure probably called a teretism."10

The term teretism is defined by an anonymous Hellenistic author of a treatise On Music (published by A.-J.-H. Vincent) as a multiple of the scheme of Table 1 and Aristides in his treatise On Music differs on both planets and vowels in five of the seven cases. In other instances, eight rather than seven notes were correlated with planets. This leads to the issue of the octochord versus the ancient heptachord. The scheme of Table 1 was adopted from Kopp. Cf. U. Kopp, Palaeographia critica III (Mannheim, 1829), 304 and 334–35. For the relation of the vowels to the planets, cf. Fredericus Bellermann, Anonymi scriptio de musica (Berlin, 1841), p. 89; A.-J.-H. Vincent, Réponse à M. Fétis et réfutation de son mémoire sur cette question: Les Grecs et les Romains ont-ils connu l’harmonie simultanée des sons (Lille, 1859); Ruelle, "Le chant gnostico-magique," p. 21; Leclercq, "Alphabet vocalique," col. 1281. For further discussion of this problem of concordances, cf. Thomas J. Mathiesen, trans., Aristides Quintilianus on Music in Three Books: Introduction, Commentary and Annotations (New Haven, 1983), pp. 48–49.

EXAMPLE 1. Transcription of a Gnostic Formula.

same sound so that it appears to be a type of trill. A gnostic formula exhibiting the teretism effect is found in Example 1. This musical example is transcribed according to the specified tone of the heptachord appropriated to each vowel.

Up to this point, discussion in this paper has focused on the use of vowels. It is uncertain when a consonant was added to these vowels to make them nonsense syllables. Of the several ancient Greek theoretical treatises in existence, the treatise About Music by Aristides Quintilianus (written sometime between the first and fourth centuries A.D.) and the treatise known as Bellermann's Anonymous (of uncertain date) incorporate discussions on these vowels joined to consonants. In the treatise of Aristides Quintilianus, the elements of creation, the planetary movements, the signs of the zodiac, as well as Greek musical notes, are all designated by the Greek vowels. The vowels are characterized by gender: some being masculine; some, feminine; and others medial, that is, a mixture of the two. Aristides Quintilianus states that the gender of notes is derived from the gender of the vowels. This also applies to the gender of intervals and scale tones. Although all seven vowels are discussed, Aristides Quintilianus considers only four to be appropriately associated to the notes of the tetrachords and consequently used in a system of solmization. These vowels were specifically selected for the vocal qualities that each would emit and for the effect that they would produce on

13 For a more detailed and thorough discussion of gender, vowels, planets, etc., cf. Mathiesen, Aristides Quintilianus, p. 33.
the listener. The four vowels isolated for solmization are alpha, epsilon, eta, and omega. He respectively designates them according to gender as medial (with more masculine tendencies), medial (with more feminine tendencies), feminine, and masculine. Aristides Quintilianus’ reason for excluding the remaining vowels from association with the tones of the tetrachords is that he considered them to be too thin in their production of sound and consequently not strong enough for the purpose of solmization.

After designating the four vowels most suited for solmization of the tones of the Greater and Lesser Perfect Systems, Aristides Quintilianus indicates that these vowels should not stand alone because of their gaping sound. To counteract this, he proposes that a consonant be juxtaposed to the vowel. The most appropriate consonant was the tau: “the most beautiful of the consonants.” He considered the tau to be the most perfect prepositive letter and supports this claim with the fact that in almost all the definite articles of the Greek language the tau precedes the vowels. He also equates the sound of the tau to a stringed-instrument as indicated in the following description:

... it [the tau] alone makes a sound answering to the strings of the instruments, and its sound is the smoothest. It is neither made harsh by a certain breathing, like the rough mutes; nor does it allow the tongue to be motionless, like each of the other two smooth mutes; nor does it ignobly and boorishly emit a hissing, like the double consonants and the independent sigma; nor is it thin and weak, like the liquids.

Aristides Quintilianus compares the marriage of tau to the four vowels with the unity of the elements of creation. The vowel epsilon was symbolic of earth; alpha represented water; eta, air; and omega, fire. The letter tau was combined with these vowels and represented ether, “for its form is akin to the plectrum and it is sacred to god, who, a phrase of the wiser men declares, is the plectrum of universe. Therefore, it has been combined with all the vowels corresponding to the notes, just as the ether accords living power to the other elements. Therefore, a cosmos of matter is the motion of the elements, while a cosmos of the soul is the melody of the vowels.” With the selection of the consonant tau preceding the vowels for the purpose of articulation, the syllables τα, τε, τη, and

14 Ibid.
15 Ibid., p. 142.
16 Ibid., p. 143.
17 Ibid.
18 Ibid. The various forms of the Greek definite article are τοῦ, τῶ, τῶν, τῆς, τη, etc.
19 Ibid.
20 Ibid., p. 201.
TABLE 2
The System of Solmization in the Greater Perfect and Lesser Perfect Systems

<table>
<thead>
<tr>
<th>Greek Name</th>
<th>Pitch</th>
<th>Tetrachord</th>
<th>Syllable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proslambanomenos</td>
<td>A</td>
<td>Hypaton</td>
<td>τε</td>
</tr>
<tr>
<td>Hypate Hypaton</td>
<td>B</td>
<td></td>
<td>τα</td>
</tr>
<tr>
<td>Parhypate Hypaton</td>
<td>c</td>
<td>Hypaton</td>
<td>τη</td>
</tr>
<tr>
<td>Lichanos Hypaton</td>
<td>d</td>
<td></td>
<td>τω</td>
</tr>
<tr>
<td>Hypate Meson</td>
<td>e</td>
<td></td>
<td>τα</td>
</tr>
<tr>
<td>Parhypate Meson</td>
<td>f</td>
<td></td>
<td>τη</td>
</tr>
<tr>
<td>Lichanos Meson</td>
<td>g</td>
<td>Meson</td>
<td>τω</td>
</tr>
<tr>
<td>Mese</td>
<td>a</td>
<td></td>
<td>τε</td>
</tr>
<tr>
<td>Mese</td>
<td>a</td>
<td></td>
<td>τα</td>
</tr>
<tr>
<td>Trite Synemmenon</td>
<td>b-flat</td>
<td>Synemmenon</td>
<td>τη</td>
</tr>
<tr>
<td>Parane Synemmenon</td>
<td>c</td>
<td>(used in Lesser Perfect)</td>
<td>τω</td>
</tr>
<tr>
<td>Nete Synemmenon</td>
<td>d</td>
<td></td>
<td>τα</td>
</tr>
<tr>
<td>Paramese</td>
<td>b</td>
<td></td>
<td>τα</td>
</tr>
<tr>
<td>Trite Diezeugmenon</td>
<td>c</td>
<td>Diezeugmenon</td>
<td>τη</td>
</tr>
<tr>
<td>Parane Diezeugmenon</td>
<td>d</td>
<td></td>
<td>τω</td>
</tr>
<tr>
<td>Nete Diezeugmenon</td>
<td>e'</td>
<td></td>
<td>τα</td>
</tr>
<tr>
<td>Trite Hyperbolaion</td>
<td>f'</td>
<td>Hyperbolaion</td>
<td>τη</td>
</tr>
<tr>
<td>Parane Hyperbolaion</td>
<td>g'</td>
<td></td>
<td>τω</td>
</tr>
<tr>
<td>Nete Hyperbolaion</td>
<td>a'</td>
<td></td>
<td>τα</td>
</tr>
</tbody>
</table>

whole-tones =
	τε-τα
	τη-τω
	τω-τα
	τω-τε

semitones =
	τα-τη

τω were assigned to different pitches of the tetrachords and were used in the practice of solmization in ancient Greek music. Table 2 outlines this system of solmization and shows the order of syllables corresponding to the scale of Greek tones and the intervallic relationships of whole tones and semitones with the scale.21

21 In this solmization system the order began with the syllable “τε” and followed with the repeating sequence: τα, τη, τω. The exception to this was the note Mese in the Meson tetrachord that was sung to the syllable τε. Cf. Mathiesen, ibid., p. 144.
NONSENSE SYLLABLES

In the treatise from antiquity known as Bellermann’s *Anonymous*, the Greek solmization system is included with few differences from those presented in Aristides Quintilianus. It should be especially noted that in Bellermann’s *Anonymous* these same vowels preceded by the tau are employed for singing intervals. Example 2a displays how the syllables were used in the solfege of a repeated-note slurred scale. In this scale the tau is sung only on the first note of the slur and is not repeated on the second note, so that the vowel sound of the first pitch elides with the second. Example 2b shows that this same solmization system applies to the solfege of intervals. The treatise also reveals that these nonsense syllables functioned as a means of articulation. To this end three methods or groups of articulation were created: kompismos, melismos, and teretismos. As demonstrated in Example 2c, all three types of articulations were formed by the letter tau producing a dental consonant which always preceded the vowel and by the letter nu producing a nasal liquid consonant which could precede or succeed the vowel. An ornament applied to instrumental music, the kompismos was an emphasis or accent on the first of a repeated note and was articulated as “τών το.” More suitable to vocal music, the melismos was a detached articulation of a repeated note and was chanted “τών νο.” The combination of these two articulations on a repeated note was called the teretismos.

Between the period of antiquity and the fourteenth century, there is a gap in the theoretical treatises which mention vocalisations set to these same meaningless syllables. It is not until the Byzantine theoretician Manuel Bryennius that these syllables are discussed. Bryennius in his treatise, the *Harmonics* written about 1300, draws heavily on Aristides Quintilianus. The affinities between the two treatises are so plentiful that there is no doubt that Bryennius adapts much of his information on nonsense syllables from Aristides Quintilianus and provides a bridge in their usage between antiquity and the Byzantine tradition where they reappear. Although much of the information on the syllables and their

23 Ibid. Also, Ruelle, “La Solmisation chez les anciens Grecs,” *Sammelbände der Internationalen Musikgesellschaft* IX (1907–08), 520.
EXAMPLE 2. System of Solmization Presented in Bellermann’s *Anonymous*; a) for the repeated-note slurred scale; b) for intervals; c) for the three groups of articulation.

a) 

b) 

Kompismos

Melismos

Teretismos

articulations is identical, Bryennius’ interpretation of the teretismos is worthy of mention:

Teretismos is used in reference to both [instrumental and vocal music], namely when a person, in singing a melody plucks the strings at the same time with his fingers or with a plectrum in accordance with the melody; strictly speaking, however, this last term must be reserved for the case when a person, in singing and playing the instrument at the same time, traverses not only the upper part of the musical scale, i.e. the Neton tetrachord, but also the lower part, i.e. the Hypaton tetrachord, for this is what the cicada distinctly appears to do. 27

It is of significance in this passage that the teretismos is described as a musical sound that compares to the warbling or trilling sounds produced by the cicada.

In the Byzantine tradition these nonsense syllables reappear in the Kalophonic or Beautified style of Byzantine chant and are called teretismata—an obvious derivation from teretismos, the term described so explicitly by Bryennius. The Kalophonic style is a new melodic style of the fourteenth century that was extravagantly embellished and extremely melismatic. This differs from the earlier simple, syllabic style of chant that was based on traditional formulaic principles. The work of identifiable composers, these new kalophonic chants developed a characteristic idiom: freely composed melismas chanted to meaningless syllables known as teretismata. These newly composed chants more commonly expanded traditional forms with the interpolation of teretismata. Used for vocal effects in melismatic sections, the teretismata displayed a type of coloratura style of chanting with rapid, repeated single-note articulations and wide leaps.

In the Kalophonic style the teretismata were meaningless syllables beginning with either the consonants tau (τ) or rho (ρ) and followed by a vowel: τε, ηε, ηε, το, ρο, ρο, τε, ρε, τε etc. The rhapsodic melodies of the teretismata were most often found in the concluding sections of the Akolouthia manuscripts that were known as Kratemata and/or Anagrammatismoi and were usually arranged according to modes. The title "Kratemata" is derived from the function of these nonsense syllables in Byzantine chant: that is, to prolong or “xρατω” the melody from moving. The title “Anagrammatismoi” signifies that to the Byzantines these vocalisations were “agrammatoi” or senseless. As Kratemata the teretismata were most often found as independent musical selections; as Anagrammatismoi they could be interpolated into liturgical chants, especially the stichera or verses for a feast. Besides the teretismata, which begin with the consonants tau or rho, there were other meaningless syllables and letters found in the Kalophonic chants: such as, χ, ου, γ, ζ, and ι (non-alphabetical letters sounded as an “n”).


30 Conomos, Byzantine Trisagia, p. 274.

31 Levy states that these meaningless letters were first found in the Asmatikon manuscripts. Cf. K. Levy, “The Byzantine Communion Cycle and its Slavic Counterpart,” Actes du XIIe Congrès International d'Études Byzantines, Ochrid 1961 II (Belgrade, 1963), 575.
changeably, these non-alphabetical letters were also used in the solmization of the enechemata or intonation formulae. These letters functioned similarly to the teretismata in that they prolonged the melody or separated words or phrases.

Interpolated sections with these nonsense syllables occurred in many of the liturgical texts of Byzantine chants of the fourteenth, fifteenth, and sixteenth centuries and even the neo-Byzantine era. It was in these interpolations with nonsense syllables that composers had the freedom to concentrate on the musical style of the chant and not the relationship of melody to text. Dimitri Conomos' explanation as to why such a large amount of embellished material was inserted in settings of liturgical texts is that “chanters freely included or omitted such additions according to the time allowed by the type and nature of the service.”

It was one thing to have nonsense letters included in the magic papyri and in the pagan rituals of antiquity but how could their presence be explained in Byzantine liturgical chant? From the commentaries written by the church fathers, as well as scriptural references, nonsense utterances in liturgical chant were accepted as the Christian concept of glossolalia or the Pentecostal experience of speaking in tongues. Furthermore, the patristic expositions explain glossolalia as “wordless jubilation” by humans who were attempting to imitate the singing of angels. This hypothesis is also supported in the *Exegesis* of Gerasimos, a mid-seventeenth century monk of Crete:

The origin of the ‘terere’ is to be found with the prophets who heard from heaven the sound of much water, which is a sound, not a word. Similarly, the angels chant with wordless sounds as St. Paul relates in his description of the third heaven.

Although the teretismata are “wordless sounds,” in his *Exegesis* Gerasimos attempts to give them a specific purpose through symbolism. The teretismata represent the Trinity by means of the letter tau which in the Byzantine system of numbering is equivalent to 300, representing

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32 Conomos claims that the letter “ iota” preceded the vowel epsilon and the letter “ omicron” was used before alpha, omikron or omega. Conomos, *Byzantine Trisagia*, p. 263.
33 Ibid., p. 286.
36 Gerasimos' *Exegesis* is in Πανδεκατη της τού Χριστού μεγάλης Ἐκκλησίας IV (Constantinople, 1851), 885–91. The translation is found in Conomos' *Byzantine Trisagia*, p. 275.
the Father, Son, and the Holy Spirit. The letter rho stands for the source or root (ριζα), which is God the Father. The joining of the vowel, epsilon, with either of these consonants was the creation of divine melody. With a reference obviously taken from Aristides Quintilianus, Gerasimos states that the teretismata represented the plucking of a stringed instrument. Therefore, they were used as a substitute to the soulless instruments which were used by the ancient Greeks who worshiped soulless gods. Lastly, Gerasimos compares the teretismata to the birds in heaven and the cicadas of nature—the latter, a reference from Manuel Bryennius. Through this symbolism Gerasimos tries to prove that teretismata were not accidently used in liturgical chant, but were there for the purpose of glorifying God.

In Gerasimos’ Exegesis there are several references comparing the teretismata to the singing of birds, the trilling of cicadas, and the running of rivers. These references to nature often appear in the descriptive titles of Kratemata: such as, ποτάμις (river) and ἄγιοδών (nightingale). The descriptive titles are not limited to the sounds of nature but include musical instruments, such as τρούμπετα (trumpet), σήμαντρον (bells in a wooden frame used in monasteries), and καμπάνα (a bell) and even descriptive occasions, such as πολέμικῶν (warlike). These evocative titles were intended to convey a sense of aural imagery in the listener. Example 3 is a transcription of a Kratema entitled “A Bell” from Athens MS. 2406, folio 18r, which was written in 1453, the fall of the Byzantine empire. From the rubric on the preceding folio, it is indicated that the composer is Gregoritze domestikos (Γρηγορίτζη δομεστικός) and that this Kratema was to be chanted within the palace for the current emperor who was Constantine XI, the last Byzantine emperor. In this Kratema the nonsense syllables articulate repeated single-notes and a recurring interval of a fifth so that these vocalisations imitate the chiming of a bell. The function of the nonsense syllables in this mid-fifteenth century example, therefore, is no different from those in antiquity. In both traditions the nonsense syllables served as a substitute for instrumental music.

Present in the Hellenistic and Byzantine eras, nonsense syllables—vowels preceded by consonants—were used for aes-

37 Conomos, Byzantine Trisagia, pp. 275–76.
38 Ibid., pp. 276–77.
40 Athens MS. 2406, folio 17v: “τὸ παρόν οὖσ’ ποίημα, Γρηγορίτζη δομεστικός, ποιήθην παρα αὐτοῦ, καὶ ψάλλει, ἐν τῷ τὸ παλατίῳ ὀρίῳ τοῦ βασιλέου τὸ ὑπὸ τε καιροῦ ὑποκάτω στέφηνς . . . .”
EXAMPLE 3. A Kratema Entitled "A Bell" by Gregoritze Domestikos.

Mode IV Authentic

Athens MS. 2406, folio 13r
NONSENSE SYLLABLES

thetic reasons. The consonant erased the gaping sound of a prolonged vowel. Although more meaningless letters were found in the Byzantine tradition, the most common syllable in both eras was a Greek vowel preceded by a tau. By giving the singer a means of articulating with the emphasis of a consonant, an instrumental sound could be achieved vocally. In antiquity the gnostic vowels and nonsense syllables were associated with specific musical notes. In the Byzantine tradition this was not the case. These syllables were not attached to any specific pitch nor were the interpolations of these syllables in musical phrases consistent. In Byzantium the unrestricted freedom of insertion and of attaching a syllable to a pitch was left to the discretion of the composer. What was common to both traditions was that these syllables articulated a teretism, a type of melodic ornament, and that they emitted vocal qualities which produced an effect on the listener. It is not accidental that this solmization practice was found in both traditions but is evidence of Greek theory influencing Byzantine theory and practice. This ancient system of solmization not only influenced the Byzantine tradition but also provided a link to the mnemonic solmization practices which developed in the West, for it is probably from similar syllables that the noeane formulae of Western medieval theory were derived.

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41 Other evidence of Greek theory influencing Byzantine theory may be found in C. Høeg, “La Théorie de la musique byzantine,” Revue des études grecques XXXV/112, 321.