Avant-garde and experimental music through the dissolution of the melodic-rhythmic-harmonic unity of the theme and the liberation of the musical components

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Abstract: Looking back at the musical events of the 20th century, we notice that there is a sharp contrast between the previous periods of European music and the trends of post-1950 music; whereas the former, despite being historically continuous, retained, at the same time, their individual characteristics, it is impossible to understand the latter without regard to the ground-breaking changes that occurred during the first three decades of the 20th century. The aim of this paper is to discuss the two main trends of avant-garde music, that is the European and the American, not only through the innovations which resulted from these changes, but also their connection with early Modernism and especially the expressionist works of Second Viennese School composers whose main characteristic was the dissolution of the melodic-rhythmic-harmonic unity of the theme and the liberation of the fundamental musical components. If the dissolution of the melodic-rhythmic-harmonic unity of the theme has been common ground for almost all trends in avant-garde, post-1950 music, the way in which these components are reunified (when they are indeed reunified) has indicated the boundaries between European and American music. This way of reunifying the components is not connected only to the technical aspect, but also to the arising content, that is whether the reunification of the musical components creates a intra-musical content in the context of the continuation of the tradition of absolute music and the preservation of the concept of the work of art, or, on the contrary, this content is not purely the result of intramusical compositional processes, but of open and cooperative (composer, performer, audience) processes through which the prevalent notion about art is to a certain degree challenged.

Looking back at the musical events of the 20th century, we notice that both the avant-garde of the early 1950s and the various manifestations of postmodern music in the 1960s and 1970s cannot be interpreted without taking in consideration the ground-breaking changes of the first decades of that century. While the previous periods of Western music (Baroque, Classic or Romantic) seemed to have maintained their autonomy, each articulating their characteristic and well-developed musical idioms (although this does not mean that we cannot trace a continuity between these periods, conceivable either as expansion or, in some cases, reaction against the ideals of the previous period), the various music movements of the 20th century do not seem to have fully achieved their musical goals. Being self exhaustible, despite the infinite possibilities of the musical material available, they came in a state of continuous exploration and innovation both in the musical material and the compositional methods. The rapid changes in styles and modes of expression support this view and the very course of events points to the collapse of the fundamental principles which govern music as a unity of form and content as well as structure, created through specific compositional processes.

What distinguishes the avant-garde music as a whole –despite its various and often seemingly diverse manifestations– from everything that had preceded it derives, as it is going to be shown, from one and the same underlying cause, namely the dissolution of the melodic-rhythmic-harmonic unity of the theme of tonal music and the subsequent liberation of the musical components.

The fact that the two composers John Cage and Pierre Boulez showed such a great interest in rhythm, regarding it to a great extent as independent from the other musical components, proves that, despite the great differences between them, there were a lot of common points in the way they treated the new sound world as it was emerging in the 1950s. Their friendship and the correspondence they developed mainly between 1949 and 1954 does not only reflect their shared disapproval of any form of academism and their quest of the "new", but it also indicates parallel paths concerning the treatment of the compositional processes and especially those linked to the liberation of the musical components. In a letter dated January 17, 1950 Cage writes to Boulez: "Messiaen was here; - I love him for his ideas about rhythm...One of these days I am going to hear the music of Milton Babbitt, who is the most Webernian. He has talked to me about rhythmic inversions. He takes a duration, and he inverts the fractions (corresponding to the octave and interval inversion)." In the same letter, the composer describes the rhythmic structure of First Construction (in Metal) (1939) in detail, while in a succeeding letter (May 22, 1951), analyzing the Concerto for prepared piano (1950-51), he writes:"...I then made moves on this chart of a "thematic nature" but, as you may easily see, with an "athematic result.""2 This particular letter must have been of great importance to the receiver, since, a shortly afterwards, he responds to the American composer: "I must write you a long letter soon on the subject of your last letter. I found it incredibly interesting. We are at the same stage of research." What seems to have triggered such an immediate response to Cage's letter was not only the "athematic result", but in fact the very cause of this athematicism, that is the liberation of the musical components through compositional processes which, in Cage's case, are based on chance operations derived from the I Ching - the ancient Chinese Book of Changes; indeed, shortly afterwards (August 1951), in a long letter, Boulez presents the results of his own explorations, namely the basic principles of integral serialism, as well as the rhythmic abilities of a particular rhythmic pattern to transform itself. After presenting certain examples from his works *Polyphonie X* (1950-51) and *Structures* (1951-52), he concludes by writing:"...The serial pitch structure dissolves the horizontal-vertical duality, given that composing returns to following 2 coordinates in arranging materials: frequency and duration, which are acoustic phenomena. Thus one is relieved of all melody, harmony and counterpoint, until further information is available, since the serial structure has made these three essentially modal and tonal notions disappear." Boulez's concern with rhythm as an independent musical component started in the late 1940s and this can be traced in his 1948 essay "Propositions", where, denying the accuracy of René Leibowitz's views according to which it is impossible to separate rhythm from polyphony, he cites specific examples of rhythmic canons which are independent from polyphony. The case of one part of athematic development in Sonatine for flute and piano (1946) is a typical example of the complexity of his rhythmic style: using two small rhythmic cells, the composer produces three complex rhythmic patterns which are uneven in terms of duration and applies them in the form of a canon, in a prime or a retrograde order. Ending his article, he wonders: "Why such complexity?" and he answers: "So that there is a coincidence between the twelve-tone and the rhythmic writing which also has to maintain an "atonal" character"⁵.

For the time being, what seems to be bringing the two composers close to each other is the initial liberation of the musical components and their subsequent reunification through specific compositional processes and this becomes apparent in Cage's next letters to Boulez: "I am delighted with your charts; when I send you the (Music of) Changes I shall also send you the charts I used", he writes a little later, responding to the French composer's previously mentioned letter, while in the summer of next year (1952) he writes: "I am full of admiration for the way in which you are working and especially for the way in which you have generalized the concept of the series, and in your Etude for a single sound made the correspondences between frequency and duration." In this letter, however, what is eventually going to cause the rift between them is beginning to emerge. Referring to his work Williams Mix (1952), Cage writes: "As you see I have increased rather than decreased the element of chance in this work." This last sentence is probably a response to a preceding letter by Boulez (December, 1951) in

which the French composer mentions Cage's *Music of Changes* (1951) and writes: "Everything you say about the tables of sounds, durations, amplitudes, used in your *Music of Changes* is, as you will see, along exactly the same lines as I am working at the moment... The only thing, forgive me, which I am not happy with, is the method of absolute chance (*by tossing the coins*). On the contrary, I believe that chance must be extremely controlled: by using tables in general, or series of tables, I believe that it would be possible to direct the phenomenon of the automatism of chance, whether written or not, which I mistrust as a facility that is not absolutely necessary. For after all, in the interpolations and interferences of different series (when one of them passes from durations to pitches, at the same moment as another passes from intensities to attacks, etc...), there is already quite enough of the unknown".

Judging by the two composers' subsequent correspondence and mainly their interviews, speeches and texts which followed in the next years, it seems that the break in their relations, which became clear after 1954, was inevitable 10. At the end of the introduction of his book about Boulez and Cage's correspondence, Jean-Jacques Nattiez claims that their friendship and the respect they shared were more the result of a misunderstanding which can be explained by the context of the 1950s, rather than a real concurrence of their beliefs; for Boulez, it was the attraction of discovering America through Cage and the same was true for Cage, who wished to discover European culture¹¹. However, besides any psychological or sociological interpretations and regardless of the great differences between them, it is evident that there has been a real, if short-lived, concurrence of their beliefs. As Morton Feldman rightly states: "The fact that men like Boulez and Cage represent opposite extremes of modern methodology is not what is interesting. What is interesting is their similarity. In the music of both men, things are exactly what they are - no more, no less. In the music of both men, what is heard is indistinguishable from its process. In fact, process itself might be called the Zeitgeist of our age". 12 Nevertheless, it is not these similarities that brought the two composers into contact (besides, such similarities can be seen in many other avant-garde composers), but the coincidence in the compositional processes¹³ they used in the early 1950s, which, both for Boulez and Cage, go through two stages: first, the liberation of the musical components and then the attempt to unify them. These two processes are essentially opposite: the first one concerns the dissolution of the melodic-rhythmic-harmonic twelve-tone thematic unity inherited from Schoenberg, whereas the second one relates to the attempt to reunify the components through specific processes. However, although there was coincidence as far as the first process is concerned, which is, in the final analysis, common ground for most avant-garde composers, it was the approach towards the structure of the second process that not only differentiated the two previously mentioned composers, but in fact constituted the main reason for the division of avantgarde music in two main currents: the European on the one hand and the American on the other. Michael Nyman correctly places composers such as Boulez, Xenakis, Berio and Stockhausen in the first current and Cage, Feldman, Brown and Wolff in the second, whether we agree or not on the terms "avant-garde" to describe the first group and "experimental music" to refer to the second. 14 Although in both cases it is avant-garde music that is discussed, the differences are huge. The core of European avant-garde composers aimed at works of art which would continue the inherited tradition but would reject any kind of academism, especially as it had been expressed within Neoclassicism. Boulez's characterization of Schoenberg as conservative reflected the inconsistency found in the latter's work: the twelve-tone method should be accompanied by new, complex rhythmic patterns and not the commonplace neoclassical-type rhythmic formulas and the same should happen with the rest of musical components, as well as with musical form. But the ground of European avant-garde has not been solid: just like Boulez, who criticized Schoenberg, Xenakis, in his famous article "The Crisis of Serial Music" (1955), also accuses integral serialism of contradiction, since the two fundamental principles on which it is based (the row and the polyphony that stems from it) contain, as the Greek composer proves, the seeds of their self-destruction. In the same article we also find a short passage closely related to the aims of our paper: "Domination of the sound world through the analysis of its components and through their reunification. This is the motto of every trend of the so-called avant-garde. A craze to decompose sound and recompose it ..."

This excerpt does not only summarize what was happening in Europe and, to a certain degree, in the United States at that time (which becomes evident through the previously mentioned correspondence between Boulez and Cage), but it also manifests what Xenakis himself did, even if the method he used was different. With his 1955-56 work *Pithoprakta* he introduces the theory of probability in the compositional process, formalizing the concept of chance and reunifying the musical components of sound using Poisson, Maxwell-Boltzman and continuous distributions mathematical laws which determine the intervals, durations and dynamics, as well as the glissandi. The mathematical models (symbolic logic, set theory, sieve theory etc.) used afterwards by Xenakis, especially in the next two decades, aimed, like the stochastic music in *Pithoprakta* did, at the reunification of the musical components on the basis of a specific mathematical principle which the work as a whole would be derived from, down to its last detail. Despite the fierce conflict between Xenakis and the composers of integral serialism, there are actually many common characteristics of which the following might be mentioned:

- 1. Dissolution of the melodic-rhythmic-harmonic unity of the theme in a tonal, atonal or twelve-tone context.
- 2. Liberation of the musical components.
- 3. Reunification of the musical components either by means of the number 12 in the case of integral serialism, or via mathematical procedures in the case of Xenakis.
- 4. The element of chance as a result of a) conscious mathematical procedures (Xenakis), b) the procedures of integral serialism which lead to non-absolutely predictable outcomes Boulez) or c) open works (Boulez, *Third Piano Sonata*, 1955-57/63)
- 5. Use of extra-musical compositional models, given that the work as a whole is no longer the result of the development of an initial theme expressed through a melodic-rhythmic-harmonic unity, but the outcome of processes which originate from principles that lie outside the code of music language (mathematical laws in the case of Xenakis, application of a combining logic based on the number 12 in the case of integral serialism).
- 6. Through these extra-musical models a particular work is formed; its musical and aesthetic existence, however, maintains all the qualities of a work of art, in the way we have looked at it since Renaissance.

This last point is actually not only the common ground between Xenakis' and the serialist composers' music (both European and American), but also the dividing line between the European avant-garde and the American experimental music, if we wish to use Nyman's terminology¹⁶. If the dissolution of the melodic-rhythmic-harmonic unity of the theme and the liberation of the musical components is the common point in both cases, the way of their reunification (if there is indeed a reunification of the musical components) is what radically differentiates avant-garde from experimental music.

In the first case, although extra-musical compositional models can also be used (Xenakis), these models which are put into music replace, in a way, the tools of tonal, atonal and twelve-tone music, therefore reintroducing, albeit in a different way, the basic principles of European music in the centuries that preceded the 20th. Any musical meaning which arises is the result of "strict" internal processes, through which the musical components are reunified. Therefore, this content which is internally structured and arising from within "imposes" itself on the external world. In the second case, the reunifying processes either do not exist (John Cage's 1952 composition 4'33" is such an example) or, when they do, they are much looser, since they do not aim at a "strict" construction of the music material, but rather its "deconstruction", as, both in the composition and in the performance, the outcome of these processes involves the element of chance. The resulting content or meaning is co-created by the composer and

the performer (often even by the audience) due to the fact that it is not the result of a specific musical idea of the composer which is developed, but of (not necessarily musical) ideas which are implemented in a musical way through cooperative and non-absolutely predictable processes. Referring to musical notation, Nyman cites a short passage of Cornelius Cardew, which is in full accordance to what we have described; he says:"A composer who hears sounds will try to find a notation for sounds. One who has ideas will find one that expresses his ideas, leaving their interpretations free, in confidence that his ideas have been accurately and concisely notated". 17 This passage is really revealing because it concisely reflects the aims of experimental music: the composer expresses ideas, and not musical ones, using, therefore, a new notation which is appropriate for them and leaving, eventually, their performance free (open to interpretation). Of course, the ideas about which Cardew talks are not those that are going to be put into music but the ones which, being a combination of philosophicalsociopolitical nature and questioning the inherited as well as the recent musical tradition both at the level of composition and that of performance, lead to an entirely different conception about music; a music which, as Christian Wolff says, is characterized by stillness and a lack of direction¹⁸, in sharp contrast to the avant-garde, whose main qualities are mobility, tension and resolution and the feeling of a direction. "The classical system, and its contemporary continuation (in the hands of Stockhausen, Birtwistle, Berio, Boulez, Maxwell Davies and others) is essentially a system of priorities which sets up ordered relationships between its components, and where one thing is defined in terms of its opposite. In this world of relationships dualism plays a large part: high/low, rise/fall, fast/slow, climax/stasis, sound/silence...etc." Nyman writes, briefly presenting the basic features of avant-garde music in contrast to the respective elements of experimental music.

It is very interesting to note that, in spite of the great differences between them, both trends have a common reference: the music of Anton Webern. Although it has been mostly linked to the avant-garde, his music seems to have an equally profound effect on experimental music composers, since it appears to contain a lot of the elements which interest composers such as Cage, Wolff or Feldman. The multiplicity of interpretations of Webern's music after his death results from his idea about the concept of the theme and this can be summarized in his famous statement: "The twelve-tone row is not a theme, but, since it guarantees the unity in another way, I can work without the theme and therefore much more freely" The dethematicization of the row, that is the complete dissolution of the melodic-rhythmic-harmonic unity, had important consequences in Webern's work, since it resulted in:

- 1. abstract structures (thematic sections, where any distinction between the horizontal and the vertical dimension disappears) as substitutes of the theme in the way we had conceived it for the last four centuries
- 2. the serialization, to a certain degree, of the rhythmic component
- 3. the liberation of timbre, since it is no longer the result of the initial thematic idea or its further development.
- 4. the upgrading of silence as equal to sound, which is the result of the minimalization of the row in a core of three or four notes: such a conception of the row does not favour its continuous horizontal development, as was the case of a tonal, or even a twelve-tone Schoenbergian theme, but rather its abstraction with the use of rests between the notes of the row (see op.24).
- 5. a static music, whose stillness is achieved either through asymmetrical abstract structures or through repeated symmetrical structures of steady dynamics.
- 6. the "loss" of the meaning, or content, of the musical work, due to the elimination of the tonal or even the twelve-tone Schoenbergian theme²¹ which had been producing both content and form. If we accept Eduard Hanslick's theory²² that the theme is the content of a musical work, within, of course, the framework of tonal music, then, in the case Webern's music, what would this content be, given that what appears to be the initial

theme in the work is not really a theme but the "metamorphosis" of a "theme" that lies outside the work?

The minimalization of the intervals used and the internal symmetries of the rows in works such as op.21, op.24, op.28 and op.30 are actually the "themes" themselves in the above mentioned works, and the themes which appear in several movements of these works in the form of thematic sections are but "metamorphoses" of the qualities of those pre-composed "themes".

The most typical example of this Webernian abstraction comes with the *Variations for piano*, op.27 (1936): in the score there are no indications of a theme or a variation. Every section can be a theme or a variation. Here, the underlying cause is not the basic principles of the row, but the idea of symmetry in space, which is realized in three different ways in the three movements of the work. This means that the real "theme" is precisely this idea of symmetry which lies outside the work and only its metamorphoses are realized.

The first three of these six qualities of Webern's music played a crucial role in the development of avant-garde music, while the next three were those to which experimental music composers turned their attention.

However, the dissolution of the melodic-rhythmic-harmonic unity of the theme and the great degree of abstraction in Webern's works do not only characterize the twelve-tone period but are also fundamental elements of the expressionist-atonal period of the beginning of the twentieth century. In works such as Five Movements for string quartet, op. 5 (1909), Six Bagatelles for string quartet, op. 9 (1913) or Five Pieces for orchestra, op.10 (1911-1913) the same or even further degree of abstraction and athematicism is present compared to respective twelvetone compositions and the compositional techniques are similar²³. Indeed, the very fact that resembling characteristics can be seen in the expressionist compositions of Schoenberg and Bera²⁴ proves that the dissolution of the melodic-rhythmic-harmonic unity of the theme and the subsequent liberation of the musical components were bound to lead to the same musical "resolutions", namely athematicism and abstraction. Athematicism, abstraction and the shrinking of form in works such as Webern's op.5 and op.9 and Schoenberg's op.19 led music to an inevitable self-destruction, and the twelve-tone method appeared exactly in order to bring back traditional forms.²⁵ However, while Schoenberg restores the classical forms (sonata, rondo) by identifying with the aesthetics of neoclassicism of the beginning of the 20s, the large-scale works of Webern, despite containing some neoclassical elements, do not follow the classical forms but continue the abstracting processes of the works of the expressionist period. But, even in the late music of Schoenberg and Berg the row is not completely thematicized; even in their twelve-tone compositions, this lack of complete thematization of the row results in athematicism and abstraction, although to a lesser degree than the respective twelve-tone compositions of Webern.²⁶ The separation between the rhythmic and the melodic component²⁷, the "thematicization" of certain rhythmic patterns (Hauptrhythmus, Nebenrhythmus), the derivation of the rhythmic component by means of the 12 notes of the row in the third movement of Lyric Suite (1925-26), the use of tonal melodies in Lulu (1929-35) and the thematicization of the derived rows, and not of the prime one, in Concerto for violin and orchestra (1935) in Berg's music, as well as the internal symmetries in Ode to Napoleon (1942) and the dethematization of the prime row, without completely thematicizing the derived themes in Schoenberg's String Trio (1945) are all symptoms of the innate inability of the row to be completely thematicized, eventually leading the twelve-tone music to the same dead end expressionism had reached in the beginning of the 20^{th} century. 28

If the "twelve-tone method has been a necessity"²⁹, according to Schoenberg, for the music after 1920, then the various trends in Europe and America after 1950 have been the result of the ways the late works of the Second Viennese School composers and Webern in particular was interpreted. And, if the dissolution of the melodic-rhythmic-harmonic unity of the theme

and the liberation of the musical components has been common ground for almost all trends in avant-garde music after 1950, the way in which these components are reunified has indicated the boundaries between European and American music. This way of reunifying the components is not connected only to the technical aspect, but also to the arising content, that is whether the reunification of the musical components creates a intra-musical content in the context of the continuation of the tradition of absolute music and the preservation of the concept of the work of art, or, on the contrary, this content is not purely the result of intra-musical compositional processes, but of open and cooperative (composer, performer, audience) processes through which the prevalent notion about art is, to a certain degree, challenged.

References

Boulez, Pierre. 1966. Relevés d'apprenti. Paris: Ed. du Seuil.

Hanslick, Eduard. 1957. The beautiful in music. The Liberal Arts Press Inc.

Leibowitz, René. 1949. Introduction à la musique de douze sons. Paris: L Arche.

Nattiez, Jean-Jacques. 1993. *The Boulez – Cage Correspondence*. Ed. & transl. Robert Samuels. Cambridge: Cambridge University Press.

Nyman, Michael. 1981. Experimental Music; Cage and beyond. New York: Schirman Books.

Perle, George. 1968. Serial Composition and atonality. London: Faber and Faber.

Pousseur, Henri. 1975. Écrits d'Alban Berg. Paris: Domaine musical du Rocher.

Schoenberg, Arnold 1977. Le style et l'idée. Trans. Christiane de Lisle. Paris: Buchet/Chastel.

Webern, Anton. 1980. *Chemin vers la nouvelle musique*. Ed. Didier Alluard and Cyril Huvé; Trans. Anne Servant, Didier Alluard, Cyril Huvé. Paris: J.C. Lattès.

Xenakis, Iannis. 2001. *Texts about Music and Architecture* (Keimena peri mousikis kai architektonikis). Ed. Makis Solomos, trans. Tina Plyta. Athens: Psychogios.

Zervos, G. 1994. The crisis of the theme in the work of the Second Vienna School composers (Schoenberg, Berg, Webern). Ph.D. Diss., Aristoteleion University of Thessaloniki.

Zervos, George. 2002. *Schoenberg, Berg, Webern. The crisis of music through the crisis of the theme and the forms*. Athens: Papagrigoriou – Nakas Editions.

¹ Jean-Jacques Nattiez, *The Boulez – Cage Correspondence*, ed. & transl. Robert Samuels (Cambridge: Cambridge University Press, 1993), 48.

² Ibid., 93

³ Ibid., 97

⁴ Ibid., 102-103

⁵ Pierre Boulez, *Relevés d' apprenti* (Paris: Ed. du Seuil, 1966), 74.

⁶ Jean-Jacques Nattiez, *The Boulez – Cage correspondence*, 110.

⁷ Ibid., 133

⁸ Ibid., 132

⁹ Ibid., 112-113

¹⁰ See Nattiez, introduction to *The Boulez – Cage Correspondence* and particularly pp.16-24.

¹¹ Ibid., 24

¹² Michael Nyman, *Experimental Music; Cage and beyond* (New York: Schirman Books, 1981), 2 (footnote).

¹⁴ Ibid., 2

¹⁷ Michael Nyman, Experimental Music, 3.

¹⁸ Ibid., 23

¹⁹ Ibid., 24

²⁰ George Zervos, *Schoenberg, Berg, Webern. The crisis of music through the crisis of the theme and the forms* (Athens: Papagrigoriou – Nakas Editions, 2002), 13 (footnote).

²¹ In Schoenberg's twelve-tone compositions the way the theme was conceived as well as the methods of developing it are quite similar to respective processes in tonal music.

²² Eduard Hanslick, *The beautiful in music* (The Liberal Arts Press, Inc. 1957), 125.

²³ See René Leibowitz, *Introduction à la musique de douze sons* (Paris: L Arche, 1949), 52-80; George Perle, *Serial Composition and atonality* (London: Faber and Faber, 1968), 9-39.

²⁴ Such qualities are present in Schoenberg's *Erwartung* (op.17) and *Six little piano pieces* (op.19), and Berg's *Four pieces for clarinet and piano* (op.5), all of which were written between 1909 and 1913.

- ²⁵ George Zervos, *Schoenberg, Berg, Webern*, p.15 footnote 6, p.16 footnote 8. See also Arnold Schoenberg, *Le style et l'idée*, trans. Christiane de Lisle (Paris, Buchet/Chastel, 1977), 164-165 [original title: Schoenberg, Arnold. 1975. *Style and Idea*. A Selection of Schoenberg's texts. Ed. Leonard Stein, trans. Leo Black. London: Faber & Faber]; Anton Webern, *Chemin vers la nouvelle musique*, trans. Anne Servant, Didier Alluard, Cyril Huvé, (Paris: J.C. Lattès, 1980), 137-138 [original title: Webern, Anton. 1960. *Der Weg zur neuen Musik*. Vienna: Universal.]
- ²⁶ George Zervos, "The crisis of the theme in the work of the Second Vienna School composers (Schoenberg, Berg, Webern)" (Ph.D. Diss., Aristotle University of Thessaloniki, 1994).

²⁷ Henri Pousseur, Écrits d'Alban Berg (Paris: Domaine musical du Rocher, 1975), 106.

²⁸ See George Zervos, *The crisis of the theme...* as well as George Zervos, *Schoenberg, Berg, Webern...*

²⁹ Arnold Schoenberg, *Le Style et l' Idée*, 163.

¹³ At this point it should be stated that the term 'process' is used in its typical meaning, that is 'composing' and not in the way Michael Nyman does in his book *Experimental Music*, where the term refers to experimental music exclusively. See, Michael Nyman, *Experimental Music*, 3-6.

¹⁵ Iannis Xenakis, *Texts about Music and Architecture*, ed. Makis Solomos, trans. Tina Plyta (Athens: Psychogios editions, 2001), 54.

¹⁶ We should mention that there were several pioneers of serialism in America, too. Such was the case of Milton Babbitt, while English composers, like Cornelius Cardew for instance, whose contribution has been of great significance, were also in the forefront of experimental music.