

SUMMARY

The monograph focuses on the issue of changes in the postmodern art music typology and the genetic identity of musical compositions. The symbolic beginning of challenging times and revolutions in the art of music that made them meaningful (the 1950s through 1960s) was marked by the Dada and Fluxus movements. For musicology, they posed a number of fundamental questions at the epistemological level. One of them was whether, from the point of view of modern science, the typological essence of the art of sounds of the late twentieth through the early twenty-first century allows us to talk about the still functioning phenomenon of the music genre (defined by the author of the monograph as “music genotype”). The evaluation of crisis situations in the development of music and the critical analysis of its typological aspect seek to both provide answers to the questions that have arisen and simultaneously expand and deepen the concept of typologizing musical phenomena and initiate the renewal of genrology. The revision of concepts and theoretical approaches at present is similarly dictated by the state of theories in quite a few traditional categories of musicology. The sixteen-chapter scholarly study of *A Theoretical Model of Music Genotype* attempts to overcome the fear of researching into the phenomena of music typology, including music genre (music genotype) as “outdated” and removed to the archives of science, and to transcend the limits of the current issues of musicology.

In the chapter *The Concept of Music Genotype*, the researcher concentrates on the theoretical discourse of “music genotype” as the key concept

of the research. The term was proposed in the monograph author's doctoral dissertation (1990) as a synonym for the traditional term "music genre," with the aim of emphasizing the genetic nature and functions of the music genre (genotype) in the sound art system through the semantics and etymological meaning of the concept. The concept of the music genotype enables us to take a fresh look at the value and function of the genre paradigm and at its ontic status. From the author's point of view, this universal phenomenon of art has been implanted in the overall process of artistic creation and communication and represents a picture of the ongoing creation of music. The term "music genotype" emphasizes the integration of types of musical works into the global process of creation as a bioartistic process. The word "genotype" (*gene + o + type*), derived from genetics, deconstructs the essential meaning of the concept of music genre – the genetic constitution of an object or phenomenon, the totality of hereditary factors, which reflects the fundamental characteristics of the phenomenon. From the viewpoint of art studies, the music genotype is an inherited typological commonality of works, one of the instruments of identity, pervading the development of the composition of music without excluding the contemporary artifacts created by artistic intellect.⁴⁰⁵ A music genre (genotype) is the ontic condition for the inherent existence of sound art. The genres of music are conditioning (*naturans*) in relation to musical works, and simultaneously conditioned (*naturata*) in relation to the types of music.

In this respect, the category and the term "music genotype" signify the totality of hereditary extramusical and intramusical factors implanted in musical compositions, transmitted in a manner similar to the DNA code inherited by living organisms. This analogy raises the issue of the validity of the bioartistic approach relevant to the studies of music morphology, dealt with by philosophers Raymond Ruyer (1952, 1958), Gilles Deleuze and Pierre-Félix Guattari (2004), and Audronė Žukauskaitė (2019) and discussed in the monograph. As emphasized by the author when proposing to integrate the concept and term "music genotype" into musicology, the word "genotype" was later used by François-Bernard Mâche (1997, 2001) in the context of the semiotics of zoomusicology and by Dora A. Hanninen (2001)

⁴⁰⁵ Дауноравичене, *Некоторые аспекты жанровой ситуации* [Some Aspects of the Situation of Genre], p. 11–12.

in her research into segmentation and associative organization of musical compositions.

Since “music genre” and “music type” are structural units of typologies, classifications (systematizations), and taxonomies, it is important to discuss the procedural differences between typology and taxonomy. In the chapter *Typology versus Taxonomy*, the author of the monograph sought to clarify the difference between them as the operations of systematization used in genrology, which she discerned both in the etymology of the two words as well as in the directionality of systematization operations. Typology (grouping of objects by type, the science of types) is an umbrella category, more general than taxonomy, which means a certain specification of typology. Both taxonomies and typologies are classification structures; as the research revealed, the difference between them lies in the concept and development of each: in the monograph, taxonomy, the systematics of empirical origin, is opposed to typology of conceptual origin and its systematization principles. Typology differentiates objects (phenomena) based on the studies of logical solutions and the principles of deduction, while taxonomies are based on the principle of induction and the process of association.

The first historical systematization of music in Boethius’s *De institutione musica* (c. 491–492) was a speculative, hierarchically organized three-level typology of the types of music (*musicae genera*) that eventually legitimized a deductive logic-based typological approach in music systematics. The taxonomic (from the Greek ταξινομία) interpretation of typological phenomena in music was elucidated by Hermann Danuser’s (1995/2016) concept of music genotype, emphasizing the meaning of music genre as a *type of composition* (*Kompositionstypus*), a *generic term of the middle level of logical classification systems*. The research developed in the monograph seeks to substantiate the specificity of the most important classification methods – *typology* and *taxonomy*, although both concepts often appear in the theoretical discourse of art studies as synonyms of the traditional concepts of *systematization* or *classification*, without making a conceptual divide. The logical opposition of typology and taxonomy and the taxonomic origin of the music genotype prompted the author to identify another potential synonym for the concept of “music genotype,” that is, “music taxon.”

To explore fundamental issues of music genrology and to shape a theoretical model of a dynamic music genotype, in the chapter *A Methodological*

Approach to the Conception of Music Genotype, the author of the monograph chose the general systems theory (GST, von Bertalanffy, 1951) as the basic concept of music genre theory. Thus, in the context of GST-associated theories, musicology has the opportunity to apply the research methods and the terminology of this interdisciplinary critical paradigm. The GST's methodological approach enables the central object of this monograph, the music genotype, to be interpreted as an "open system," initiated by the sociocultural environment (the precondition for the emergence of music genotype) and targeted by the impact of the system (the communicative function of music genotype). In other words, from the GST point of view, the music genotype is a dynamic artistic system of sociocultural origin that exchanges free energy and information both within the system and with the environment. The principle of *self-organization*, *self-regulation*, or spontaneous order of systems, conceptualized in synergetics (a branch of the GST), is directly related to the homeostasis of genotype systems. This paradigm implies that, in the process of evolution, the system or (macro) system of music genotype can be modified depending on the emerging challenges in the milieu of functioning: it tends to adapt and to constantly transform itself (as in the case of biological, adaptive systems). It is these processes that the genotype of music, preserved in the creation of art music, represents in the framework of the post-Fluxus era and in the present.

The GST offers an active, meaningful terminological system that can be productively applied to the analysis of music genotypes. For her own conception of music genotypes and the analysis of their development, the author of the research chose such GST concepts as the study of the structural dual: the (genotype) structure and the (genotype) function. She argues that the processes identified in the GST, such as isomorphism, fractality, self-organization, equipotentiality, equifinality, entropy, and homeostasis have been observed in the development of the music genotype system and macrosystem.

Based on the GST paradigm, the hierarchical levels of the taxonomies and typologies of sound art are pierced with identical (isomorphic) typologization principles. In order to prove or reject this GST-formulated law, the monograph author tested the universality of the structural elements of music genotype through an analysis of the most important historical systematizations of music (see Table 2). The principles used as the basis

to typologize music types, or to develop historical taxonomies of music genotypes in later classifications, were surveyed and sought to identify. Using Wolfgang Marx's (2004) systematized historical classifications⁴⁰⁶ as an object of analysis, the author explored music classifications (from Boethius to the late nineteenth century) in search of objective prerequisites for systematization. The study revealed that the system of music developed in the treatise *Ars musicae* (c. 1300) by de Grocheo integrated the genres that functioned in French music at that time at the lower levels, while the typologization principles more or less represented all the six structural elements (criteria) conceptualized by the monograph author as a canon of the music genotype structure (see Chart 5). Subsequent historical classifications with different levels of representational activity have also retained these principles (see Table 2).

The next stage of the research in the chapter *Determinants of the Structural Elements (Criteria) of Music Genotypes* naturally approached the issue of the structure of genotype as a system and its elements. The monograph summarized the insights of influential authors in musical genology, such as Victor Zuckerman (1964), Walter Wiora (1966), Wulf Arlt (1973), Carl Dahlhaus (1973, 1974, 1978), Reiner Kluge (1974), Hermann Danuser (1995/2016), Jim Samson (1998), Wolfgang Marx (2004), and Alla Korobova (2007). After systematizing the proposed structural elements (criteria) of the music genotype, the monograph author chose the five elements of the structure of music genre listed in Victor Zuckerman's monograph *Music Genres and Intro to Music Forms* (1964) as a reference position. These are the sociocultural circumstances of the music genre, the audience, the characteristics of the place/conditions of performance, the characteristics of the composition of performers, and the characteristics of the artistic content.⁴⁰⁷ The sixth criterion, the element of formal structure, was supplemented by the monograph author in 1990.⁴⁰⁸ She formed the system (criteria) of the structural elements of music genotype as a modulating sequence of prerequisites located between the two dominant centers of the music genotype structure – the pole of the *social determination factors* and the pole of the *aesthetic determination factors*. Thus, the structure of the music geno-

⁴⁰⁶ Marx, *Klassifikation und Gattungsbegriff*, p. 285–380.

⁴⁰⁷ Цуккерман, *op. cit.*, p. 60–61.

⁴⁰⁸ Дауноравичене, *Некоторые аспекты жанровой ситуации*, p. 6–7.

type system in the theoretical model of music genotype is organized by six elements (criteria): the characteristics of a) the sociogenesis of the music genotype, b) the audience, c) the place and conditions of performance, d) composition of performers, e) the formal structure (the conveyance of the idea/poetics through the sounds of music), and f) the poetics (idea) of the genotype (see Chart 5). At the level of music genology, the scholarly arguments enable us to argue that the prerequisites for identification of the sound art genres and types of art music (Germ. *Kunstmusik*) are valid: the structural elements are objective and universal. In the process of analysis, the hierarchical nature of the systemic objects – both music genotypes and music types – was revealed. However, specific centered structural elements (criteria) were represented with different activity both at different stages of the development of art music and in the theoretical epistemology of musicology itself.

Continuing the procedure of assigning “weights” to the structural elements of music genotype and the further process of systematization, the system of factors shaping the music genotype structure, generalized at a higher logical level and reduced, was crystallized in the monograph. Such an opportunity was provided by the insight that the structural elements of a genotype naturally group together while belonging to the determinants of different origins. Thus, further systematization of the structural elements of music genotype results in the *trinomial tetractys*, and ultimately, in a *binary* structure. The tetractys of the determinants of music genotype in the monograph is formed by:

1. *Factors of sociocultural determination*, covering the aspects of socioculture and audience;
2. *Factors of communicative determination*, covering the aspects of the place of performance and the composition of performers;
3. *Factors of artistic determination*, covering the aspects of the poetics (idea) of music genotype and the formal structure of music genotype (introduction of poetics through the sounds of music).

In the study, the authorial model of the music genotype structure undergoes a two-stage logical reduction ($6 \rightarrow 3 \rightarrow 2$): the system of six structural elements of a genotype was reduced to a triad of determinants, and the latter to the binary structure of the extramusical and intramusical spheres initiating the phenomenon. In this way, from the typological

viewpoint, the canon of the structure of music genotype, the ontic binomial of sociocultural and artistic determinants, encodes the synthesis of the extramusical and intramusical spheres of sound art. Chart 5 presents the monograph author's conception of a theoretical model of music genotype as a holistic system of its structural elements.

As set out in the chapter *A Specific Function of Music Genotype*, in the discussions of the music genotype functions, quite a few researchers (Zuckerman [1964], Dahlhaus [1974, 1978], Reiner Kluge [1974], Herman Danusser [1995/2016], Marx [2004], Fabian Holt [2007], and Daniel Silver and team [2016]) recognized the typologization of musical works in accordance with their respective conventional traits as its main function. Upon examining the issue of the music genotype functions, the author proposes a new approach. In her theoretical model of the music genotype, a specific function of the phenomenon (typologization of musical works) is realized by two subordinate functions – the compositional (sub)function of the music genotype and the communicative (sub)function of the music genotype. Both (sub) functions are presented in the monograph through numerous analyzed examples of music from different epochs (see chapters *The Compositional (Sub)function of the Music Genotype* and *The Communicative (Sub)function of the Music Genotype*).

A critical revision of genotypic trends in the postmodernist “turning point” of the music process, as stated before, encourages the deconstruction of an institutionalized approach of music genrology. In order to achieve a critical and simultaneously innovative constructive revision, the choice of a theoretical-methodological model acquired fundamental importance in the monograph. To substantiate the systemic structure of music genotype and their historical accumulations as well as the specificity of their functioning, as mentioned above, the author chose the paradigm of a contemporary metascience, that is, the general systems theory (GST). Based on it, music genrology was enriched with research methods of this interdisciplinary theoretical-critical concept and adapted its terminology. As set out in the chapter *The Approach of the General Systems Theory and Art Studies*, even though the theoretical approach of the GST in musicology has already been applied by Cosmin Georgescu and Mario Georgescu (1990) and the author of the present study (1990, 2013, 2020), the principles of its functioning in the analysis of literary genres have been used by Peter Bøgh An-

dersen (2000), and the self-organizing systems of music have been studied by Zuzana Martináková-Rendeková (2005), the paradigms of the GST and the theory of synergetics can be applied much more productively in music genrology, especially in the studies of the stages of crisis in the development of music genotypes.

In the monograph, the structure of music genotype, the self-organization of its elements and systems, the dynamics, the functioning of (macro) systems, and other issues have been interpreted based on the GST. To this end, two hierarchical meanings of the term “system” have been used: the first has been perceived as an element of the “music genotype macro-system” (music genotype as a system), and the second, as the “macro-system of music genotypes,” applied to the totality of the historical accumulations of these elements. To note the isomorphic structural and the functional principles identity of both phenomena, the author applies the term of a “(macro) system.” Thus, following the GST paradigms, the unified GST-based approach in the monograph has been applied to the study of both the central object (music genotype) and its functioning and the development of historical accumulations (macrosystems). The principal concepts of the GST terminological system, such as fractality, self-organization, isomorphism, and homeostasis, have been adapted to the epistemology of music for the study of the genotype development. This theoretical approach has helped to reveal an important ontic regularity of the typological identity of music: music genotypes (systems) and their (macro) systems are self-organizing and constantly self-transforming immanent phenomena of art.

The pre-history of the postmodern “turning point” in sound art in the chapter *Collapse of Music Genotypes versus Further Development* has been composed of the fragments of manifestos of the most active twentieth-century art movements (see Exemple 3). The facts of the transformation of the typological system of music were documented in the Intermedia Chart, or the chart of the new typological art forms, developed in the situation of intersystemic “chromaticism” by Fluxus artist Dick Higgins in 1965/1995 (Chart 6). To substantiate the hypothesis of an ongoing intersystemic transformation of music genotypes, the monograph author uses a third exploratory comparative “section.” Table 3 presents the most important facts of comparison of the processes of similar-scale intersystemic revolutions in music (those of the late sixteenth through the early seven-

teenth century and of the hypothetical late twentieth through the early twenty-first century). Chart 7 demonstrates crystallization processes of the emission of the “old” (macro) system genotype characteristics, taking place in the active, passionarist zone of interrelationship, and the elements of the admitting “new” genre (macro) system. The chart conceptualizes the correlations of the dynamics of the micro- and macro-systems of genres, which substantiate the identity of self-organizing, self-regulating systems of music genotypes. The recombinant interaction of music genotypes, in which the disintegration of traditional forms and the formation of new ones takes place, became the dominant form of the relationship between musical (macro) systems over the last six decades of art music.

As previously indicated, in the present study, in the chapter *Music Genotypes as a Self-organizing (Macro)system* and elsewhere, substantial attention has been paid to the Dada and Fluxus movements in the 1950s through the 1960s as well as to the hypothesis of the change in the music macro-systems (“chromaticism”) initiated by the intersection of modernism and post-modernism. The inter-systemic seismicity of sound art has been decoded based on the methods of processing of the data set analysis, offered by the GST and synergetics. Representative of synergetics M. J. Wheatley (2006) conceptualized intersystemic tension as a chaos that becomes inevitable in the creation of a new order. The monograph exploring the post-Fluxus, post-positivist identity of music genotype relied on three exploratory comparative “sections.” When examining the issue of the constancy and change in the music genotype structure, each focuses on different objects, research parameters, and chronology.

In the chapter *The Statuses of Genotypes of the Chromatic Milieu of (Macro) Systems*, the author used the case study method to review the characteristic musical compositions of the second half of the twentieth and the early twenty-first century through grouping them by status of genotypes applicable to the “chromatic” intersystemic milieu, from the perspective of the old system monogenre – polygenre – free genre – new system monogenre. From the viewpoint of art studies, the music genotype gives meaning to the natural kinship of works, represents the ontic condition for the tradition-predetermined development of music, serves as an identity mark for the products created by individual artistic intelligence, and is a recursive self-organizing system. From the author’s point of view, both genotypes-

systems and their (macro)systems have been experiencing the process of intense change and transformation that began in the 1950s through the 1960s, possibly resulting in the crystallization of a new typological (macro)system of sound art. According to the author, the “chromatic” milieu of the (macro) systems of music is identified by the abovementioned characteristic forms of music genotypes of the late twentieth and the early twenty-first century and their various intermediate mixes. Thus, in the present monograph, the author proposes a new systematization of music genotypes based on their dynamic statuses and the network of the models of *mono-*, *libro-*, and *poly-*genotypes.⁴⁰⁹ The formed hypothesis of the change in the (macro) systems of music genotypes is the result of the analysis of art music practices carried out in the framework of the present research as well as the outcome of the scientific studies and interpretive musicological analysis. Although the ongoing fundamental overhaul of the sound art system is intuitively felt by both art critics and participants in the art process, its documentation would call for a significant chronological retreat of observers and evaluators.

At the level of the object of study, these processes respond to the diagnosis of postmodernist culture by French philosopher Jean-François Lyotard, emphasizing the catastrophic, chaotic, and unpredictable nature of development. It is probable that such an exploratory approach helps to explain the ongoing complex metamorphoses of sound art and in a typological form reflects the ontic situation of the typology of contemporary music art objects. On the other hand, any theoretical model does not claim to be a complete and final instance, as the change in the process of art and its conceptualization will have to be considered and to be epistemologically reflected in new theoretical conceptions of music genotype.

⁴⁰⁹ Дауноравичене, *op. cit.*, p. 13–21.