

Symbolic Connotations of the Tonalities – are these Archetypes?

1. Prolegomena

The live act of interpretation of musical discourse and the evaluative perception of musical communication, as well as what can be termed as “musical thinking”, have been defined by certain specific stereotypes active all along the hundreds, or even thousands of years of practicing the European art of music. Obviously, this concept is rooted in the Pythagorean doctrine of the musical act, conceived rather as a benefic, thaumaturgical action, suitable for being used in practice under any malefic circumstances, whether of organic origin (somatic affections, dysfunctions, diseases) or of psycho-somatic nature (what we call today stress, neuroses or psychoses). The truth is that the Pythagorean tradition integrated the art of music viewed in its pragmatic aspects into a complex of actions beneficial for the equilibrium and health of the individual and collectivity, along with meditation, strict diet, control of morals and behavior. The art of music was only a component of this inextricable synthesis, deriving from a holistic ideology of the world. As far as the philosophical and scientific aspects are concerned, these were clearly distinguished from the practical applications, while the speculative considerations related to the “harmony of the universe”, to the music of the spheres and to the constructive proportions integrated in the laws of the universe, were completely separated.

This practice, probably thousands of years old, which had its connections with the mythologies of the Near East (Mesopotamia and Egypt) and the Far East as well (India and China), in fact with the oldest human civilizations, has later become the basis of various theories of musical science and art. These will take over, amplify and stabilize in specific canons the capacity of some musical structures of objectively generating “controllable effects” on the psyche of the listeners, in short, a real “theory of the musical ethos” will be constructed. As it can be concluded from the expression, the musical ethos has important correlations with philosophical theories and constructs in the domain of behavior and ethics, generating either malefic, condemnable or at least reprovable effects, or, on the positive side, benefic effects, behavioral models to be followed and modalities of expression suitable for stimulating these values.

A long tradition, which the classical philosophers of ancient Greece had taken over from the last Pythagoreans, survived in the Middle Ages, founded on and infected by the same orientation. From Theetetos, Architas of Tarent, Damon of Athens, through the authoritarian syntheses of Plato (*Republic*, *Theetetos* and *The Sophist*) and Aristotle (*Poetics* and *Rhetoric*) this great tradition will continue through: Aristoxenes, Diogenes, Ptolemy, Plotinos and up to the first medieval theoretician, Boethius. In general, as we can expect, such a continuity, based on the authority of the masters, contains few modifications (only with Aristoxenes and especially with Ptolemy), and the degree of constancy of the correlations between the musical mode, capacity of expression and the effect on the listener proves a remarkable constancy.

The decoding and interpretation of these correspondences is one of the most complex problems of musical hermeneutics. It is extremely difficult to distinguish between the objective-acoustic and the subjective-arbitrary part in the field of this tradition, which has been maintained for more than two millennia. And in the middle, in connection with both extremes, there is the perception of sonority, which is quasi-unconscious if this capacity of influence is objective, or a mental construct if it is subjective.

The belief in the musical ethos still functioned at a latent but profound level among musicians, critics, esthetes, philosophers in the modern period (between the 17th–19th centuries). However, it started to be questioned especially due to the development of a scientific acoustics, and later, at the end of the 19th century, of a psychology of perception, integrated into a perceptive, generalized metrical psychology. One of the biggest enigmas of contemporary perceptive psychology, in connection with musical esthetics, lies in the very fact that, acoustically speaking, despite of some consistent, responsible and prolonged objective research, no scientific argument can be brought for an etiology of musical expression, while, on the other hand, the study of composing, esthetics and theory of interpretation do not seem to be willing to renounce this correspondence, which they consider to be fundamental in the elaboration and evaluation of the musical discourse. In this way we face an obvious paradox, within which we prolong to the extremes old idiosyncrasies which are highly prevalent, both at the level of professionals and at the level of the large amateur public and, respectively, in the incapacity of musical acoustics, physiology and psychology

(whether perceptive or cognitive) of finding justifications for this obstinate “illusion”, considered even today basic in the interpretation and evaluation of the musical discourse.

On the other hand, why should we not accept these specific modalities of thinking about the construction of musical structures as long as a sociological esthetic perspective emphasizes the fact that the majority of participants in the social musical act have firmly believed in these aspects, and have not questioned the capacity of certain structures (chords, cadences, modes, tonalities) of primarily expressing some affective contents and of being suitable for creating communication with specific content? Things advance as far as a biunivocal correspondence between a certain tonality and its expressive spectrum, which characterizes the 16th–19th centuries, and after all, if Monteverdi, Bach, Mozart, Beethoven, Schumann, Brahms, Mahler etc. believed in these correspondences, there are no reasons to reject their decoding in the same register of semantic reception, no matter whether we can find or not scientific arguments in favor of such correspondences.

In a larger perspective, we can also consider other types of synesthetic associations – e.g. spatial ones (in architecture), chromatic ones (in painting), and rhythmical ones (in poetry or choreography) – of determined expressions, which could also have a physiological basis. Partially, these things are studied and demonstrated in the sense in which we are influenced by the spaces we live in (rectangular, ovoid, spherical), we are basically determined by a code of colors (though variable from a cultural point of view), or we are as well made to assign precise expressive values to some rhythms, and, as a consequence, to the tempo of the discourse. However, the problem is much more complex and apparently suspended in the arbitrary, within the framework of musical tonalities.

As far as music was thought, composed, interpreted and received within the determined framework of diatonic modality (the ancient cultures and medieval culture, and partially also Renaissance culture), this seems to be justified. Independently of the acoustic system, which founds and regulates the relationships among the sounds: Pythagoras, Dydimos, Aristoxenes, Ptolemy, then Gafurius, Glareanus, Zarlino, we are, though variably, within the framework of an essentially vocal music, which, by using a live sonorous source, adaptable in real time, which is the voice, can overcome any intonational difficulties and subtleties, independently of the relations established as intervals between sounds. A monodic music is completely indifferent (technically speaking) to the acoustic system in which it is actually interpreted, as the voice can instantaneously adapt to any type of intonation, the interdictions being of a cultural or educational nature. Even a homophone or polyphone vocal music can practice perfectly, for example, a Pythagorean or Zarlirian intonation without being, in this way, brought in the situation of “falsifying” the structure through intonational compromises. In this way, in a modal musical culture, in which the intervals of the mode are not “standardized”, and are not brought to an ideal average, it is perfectly normal to accept the fact that modes with different bases (or finals) contain other types of seconds, thirds, fifths etc. This intonational specificity can confer a different expressivity on vocal music and can make us accept the fact that the musical modes can have a different “ethos”, and they can be suitable for expressing certain contents rather than others. It is a viable and acceptable conclusion which can ground the notion of musical ethos in the case of ancient and medieval vocal music.

However, the appearance of the instruments totally changes this perspective. Obviously, the instruments (and here we mean the tunable ones, which emit sounds with definable pitch), whether stringed or wind-instruments, have always existed. However, today we are aware of the fact that human voice tends to instinctively adopt an intonation defined by the Zarlirian system, and also of the fact that the stringed instruments are mainly defined within a Pythagorean intonation, and the wind-instruments are defined within a natural, acoustic intonation. Here we are dealing with three intonation systems, the differences of which can no longer be ignored as we put together these different sonorous sources and wish to build up a vocal-instrumental discourse coherent from an intonational point of view.

There are no data about the “problems” the ancient Greeks might have had, who practiced vocal genres accompanied by instruments, neither about the possible difficulties of accompaniment in the music of the troubadours or of the Ars Nova. However, the problem rose, abruptly and acutely, in the 16th century, when the instruments, discretely at the beginning, then with a growing significance and determination towards the end of the century, start to present complex discourses, which compete, rival and finally overcome, in the Baroque, the prestige of vocal music. Again, it is evident that in the case of stringed or wind-instruments there is a limit of adaptation, of optimization of the emitted sound, which has a smaller or bigger plajă of variability of intonation. The appearance of the instruments with keys will cause insolvable problems to the manufacturers, theoreticians, acousticians and in general to men of science, because here **there is no**

perfect system, only more or less acceptable compromises. As long as the discourse develops only in a certain mode or a certain tonality, these problems can still be ignored, but once the framework has been enlarged by a new kind of thinking in the art of composition and by the quasi-obligation of a musical discourse to perform (by modulation) several modes or tonalities, the differences between the intervals, which in theory ideally should be identical, as they are established by the same step of a tonality as compared to the base, create enormous difficulties to the tuning.

Today we are aware of the fact that there is no perfect system and that all our endeavors are reduced, in principle, to acceptable compromises in this domain. However, at the same time, the smaller the selection/sampling within the octave, the better, as this phenomenon reduces in principle the errors of intonation. The acceptance of the partial temperament (in tens of variants) and finally the equal temperament leads to the establishment of the dominance of musical thought over expression through the falsification of intonation. The equal temperament¹ opens up phenomenal perspectives of the evolution of structural thinking related to the musical discourse, and at the same time, completely destroys the basis on which we could perhaps ground a theory of the ethos of tonalities. Most of the musicians of the 18th and 19th centuries were no longer capable of understanding and realizing the consequences of musical acoustics, which, from Marin Mersenne, Atanasius Kircher, Anton Huygens, through Euler, Legendre, Savart, Poisson and Helmholtz created an acoustics based on mathematical instruments and physical theories equally inaccessible for composers, interpreters and listeners. Probably this fact led to the perpetuation, especially among musicians, of this obstinate blind belief in the ethos of tonalities up to beyond Helmholtz, who expressed his total frustration for not being able to find any physical justification of the expression “different” in C major and D flat major, for instance. Musicians and listeners in general, continue perceiving significant differences between the tonalities, which seem to be rather “selective mythologies”, built on an old tradition, prolonged through masterly exercise until the 20th century.

Moreover, the physical falsity of such theories is revealed by the fact that the absolute tuning of the instruments with keys, which constituted the basis of tuning for the entire orchestra working together, varies extremely between the 14th–19th centuries. The variation includes plus-minus a major second, so that, although from a physical point of view G major could perfectly be an F major if we tune the sound A=402 Hz, for example, or in A major, if the A were tuned to 484 Hz, the expressive connotations would still be maintained. In fact, we should say that the ethos of musical tonalities exists only in the score and not in the physical reality of the complex sonorous signal, and maybe we should go even further, saying that the ethos exists only at the level of musical notation and in the mental associations of the composers and interpreters who automatically relate a certain tonality to a certain zone of expression, sometimes surprisingly and even scandalously precise.

In this way, it is possible to explain the shocking constancy of expressivity, associated with a tonality of a period of three centuries, and inversely, the profound belief of the composers that some pieces of music, for some occasions, with some contents, must be necessarily composed in E flat major, whereas others need to be put in D major or A major. Another, even more emphasized and obstinate expressive evaluation of the tonalities manifests itself in the minor tonalities, and the expressive connotations of the c minor, d minor, or g minor advance towards their use from concretely affective correspondences to metaphysical justifications.

2. Connections, Idiosyncrasies, Canons

We can find both continuities and discontinuities when considering the diachronic viewpoint on the correspondences of certain structures bearing expressive features and specific content. This reveals not only the fact that music (as communication process) is socially determined, but also the existence of a multitude of factors and vectors that are orientating and defining the type and permanence of a certain association. As a result, it is natural for these correspondences to be integrated in the more comprehensive framework of a poetical or even philosophical concept, which is dominating in a certain period, therefore specifying, defining and even conventionally and arbitrarily imposing certain correspondences that are neither technically nor artistically supported. In the same time, among those actively practicing the artistic discourse, there are certain widespread idiosyncrasies, which are adopted in principle by masterly authority and exercise.

¹ After Paul Hindemith: “the biggest revolution from the history of European music” (Unterweisung in Komposition, Band I).

The history of music and musical esthetics often reveals such persistent idiosyncrasies, which are laid down in certain periods, becoming constants of artistic conception and even determining expressive and technical aspects, up to the level of the construction of form and typology of musical genre.

Antiquity. From the antiquity there are very scarce sources regarding the musical ethos. It is true that we can find a large number of collateral sources included in the corpora of historical, philosophical or esthetical writings, from which it is possible to extract certain concepts related to the subject. In the same time, it is worthy to note that in a context in which the theory of music is far better known than its direct practice, these assertions should be treated with the required circumspection. We have learnt about certain aspects of Pythagorean doctrine, integrated in a more comprehensive concept bearing ethical connotations, which established correspondences between certain types of musical discourses, individual or social behaviors, cultural level and specific diet. We could say that these considerations were rather some general assertions issued in the framework of a cosmological conception referring to the world and established on the basis of some “harmonic” correspondences. This means that musical and behavioral typologies had to have an intimate correspondence because music was able to induce certain psychic states, effects and emotions, which were put into practice by an ethical behavior. Of course, the way of constructing these correspondences was mainly deductive, by means of global legalities governing the whole universe. It is noteworthy that the Pythagorean School had shaped the first articulated conceptions regarding the theory of music, which were later taken up and have been used up to the present day: the concept of harmony, the notions of consonance-dissonance (*synfonia-diafonia*), the musical modes, intervalistics etc. Unfortunately, most of these writings were lost and the scarce references we have are provided only through the later writings of certain theoreticians and philosophers. Presumably the first more concrete musical conception based on technical examples was presented in Damon of Athens’ lost tract, where we could find also some references at the level of Platonic dialogues.

An essential summary on the musical ethos regarding the Greek modes practiced in those times could be found in Plato’s well-known passage from *The Republic* (Book III, chapter 10). There are described here the modes considered to have in themselves the capacity and power to configure certain affective and emotional contents, implying in accordance with the Platonic conception that a biunivocal correspondence is connecting modes, contents and specific ethic values. The Dorian mode is described as the mode of heroic and tragic values, while the Phrygian mode is related to equilibrium, proportionality, harmony etc. There are fleetingly mentioned also the correspondences of metrical feet and especially of their prosodic combinations, proposed to be adopted in certain types of discourses. The thesis generated a kind of obsession in the field of music and poetry; the concept was used in the exactly same spirit up to the 19th century and also later on. These Pythagorean fundamentals that were filtered through the Platonic reformulation constitute a remarkably durable and persistent ethos of modes.

In his *Poetics*, Aristotle is elusively resuming this capacity of musical structures to express specific values, quality that recommends some of them for tragic poetry, while others for other discourse types. This conception appears more concretely described and is also applied in his *Rhetoric* (chapter VII–VIII), where Aristotle is treating the subject from a social viewpoint, taking into account the efficiency of educational process. Even if the detailed knowledge of musical theory and practice was the privilege of professionals, the classical Greek civilization has widely disseminated the belief that these typologies, which are after all arbitrary from our point of view, were compulsorily associated with an exact ethical value.

The Middle Ages. In the broader sense of the term, the Middle Ages lasted from the 5th (6th) through the 13th (14th) century, covering a more extended period of time than the Greek-Latin Classicism preceding it and the European Renaissance following it. From a theoretical point of view, this period developed almost nothing that could have challenge the conception and complexity of antique theories or surpass the syntheses of Aristoxenes, Ptolemy or Boethius. The old tracts of musical theory were only rewritten, reshaped and sometimes reoriented according to a dominantly Christian dogmatic and philosophic conception. Besides the significant mutation concerning the sense of reading the musical modes (from down upwards), which reveals an equally important mutation in the spatial conceptualization of musical construction, the Middle Ages proceeded to a drastic simplification towards a diatonism that practically allowed four principal (authentic) and four secondary (plagal) modes. However, each mode was associated with a certain specific expressive typology. Or rather, we could say that musical practice itself has created certain habits of using the modes in certain discursive typologies, with reference to both the properly

so-called text and the general contents of ideas and emotions expressed by music, which constituted a poetical-musical synthesis. In this way, the modes are associated with specific features.

By means of a long-term theory adopted through authoritative traditions, the space of the Middle Ages is pervaded by these relatively constant connotations, from their first theoretical conceptualization (Oddington, Joseph of Moraria) up to the Renaissance and the later ages. They were adopted even by Protestant music, for example, by Martin Luther.

Taking into account that each mode had a certain specific structure, which evinced sounds that were already connected to some functions of the discourse, it is relatively obvious to attach to them expressive values and different structural ethical capacities. Each mode is characterized by a *finalis* that usually determines the beginning and ending of the composition, by a dominant note (*repercusa*) that represents a significant part of the upper space of melodic development and by a *medianta* that constitutes a supporting step for the different melodic figures. The authentic modes usually possessed *finalis*, *repercusa* and *medianta* (Dorian, Phrygian, Lydian), while the plagal ones only *finalis* and *repercusa*. This is leading to an essential contrast between authentic and plagal modes. In the same time, it is noteworthy that Mixolydian and Hypomixolydian modes are exceptions from the general classification.

In the context of an almost exclusively vocal music that was intentionally and intervallically subjected to the Pythagorean based theory, the relations of fifths were fundamental within the mode. We do not know and it is probably impossible to find out whether the intentional practice was actually Pythagorean or instinctively natural – that is to say Zarlirian. Possibly both intonation types were effectively used in accordance with the perceptive differentiation instead of that theoretical, in the monodic (solistic or choral) and in the later primitive polyphonic vocal discourse, in different places, periods and by different schools.

A mode is not only a simple list of musical notes, because the internal permutational relations are connecting sounds. The mode is made up and described in the same time by opening (introitus) or closing (cadences) melodic types and figures, by simple or more complex figures of reaching the *repercusa*, of oscillation around it (*flexa*), and by other expressive figures as well. When considering the melodic typology of a mode, it is possible that we must take into account also the temporal value associated with certain steps through longer or shorter values. In conclusion, a mode is, in itself, an independent system that could reveal structure, expressivity and own value as well. Moreover, in case that we assume that the height of a certain step is not compulsorily identical (due to different intonational systems or specific execution habits), then we could affirm that the medieval modes were actually different. On this basis we can justify the theories, which have attached to each of them own expressive features, contents of ideas and ethic aspects. It is very possible that the singers themselves utilized various texts in different modes. Accordingly, although we could not issue clear and precise arguments in order to confirm or refute the assertions of medieval theoreticians, it seems that we have a rather solid base, in the framework of the medieval theory and practice subsumed to the specific affective conception regarding the modes, to consider this fact a reality for the medieval music.

In the same time, it is difficult to make distinctions. This is because a certain conception, which was reinforced by tradition, influenced the choice of the composer to create, by means of certain modes, certain compositions with specific compulsory content, drafted and then consolidated and froze certain genres (like the missa or the motet), according to multi-secular traditions concerning the mode in which a certain part or section of the composition must be created. And reversely, the question is to what extent the choice was determined by the real expressivity of the discourse in itself. After all, the dilemma is probably unsolvable, taking into account that a huge part of the musical practice was constituted in this period not necessarily of “explicit codes” statable by means of theoretical assertions mentioned in tracts, but rather of “implicit codes” related to the mentality of the age, governing ethic and religious values, as well as to the artisanal practice that lasted up to the 15th century and later on.

In conclusion, even if we can assert that the substance of the music that was practiced is justifying the ethos of medieval musical modes, it is difficult to distinguish between theory and practice, preconception and compositional reflection of professionals.

3. Expressivity in the Homogeneous Sphere of Tonalities

The mutation from the tradition of diatonic modes towards that of the future tonality has occurred relatively slowly, during almost two centuries (1450–1650), partly due to the restrictive character of tonality that allows only two modes in the musical configuration, and partly to the fact that the approach of tonality required the resuming of all the major problems of musical acoustics related to definition of

structural intervalistics of major-minor mode. The beginning of the process is signaled by the acceptance of Ionic-Eolic duality, together with the other four diatonic modes, a fact that has generated a structure comprising six authentic and six plagal modes. The mirror symmetry of the major mode against the minor mode became a significant problem to be solved and led to the conclusion that the perfect major mode is the Ionic and the perfect minor mode is not the Eolic, but the Phrygian.

However, the determinant vector in the later evolution of musical art was harmony. As a mode, and later a tonality, it had to justify by its own structure (the inner interval relation of each sound to the other six) the grounding of a major or minor trison. This instance launched a parallel process, the definition of harmonic entities which theoretically were supposed to be homogeneous, determining thus the musician (or at least the composer) to move in an isotropic space which would allow him to place the trisonurle on any pitch, these keeping their perfection in tuning.

Obviously, this launched an acoustic frenzy which mobilized this time not only an arithmetic and geometric speculation based on a true visual “imagology” of the relation between sounds, but also modern physics, algebra, and mathematics with much stronger instruments (sequence theory, algebraic functions, the corpus of algebraic equations, etc.). It was this approach which interested the entire 17th century, from Mersenne and Kircher until the beginning of the 19th century, to Huygens, Euler, Savart, etc. However, for the first time in musical history, mathematical acoustics became so complex that most musicians lost their access to justifying discourses. Mathematical instruments and projections could no longer be precisely translated into images and could no longer be understood only on an intuitive level. This was probably the fact which made mathematical acoustics an ever more important branch of modern physics, while the cleavage between acousticians and composers was becoming more and more emphatic. It is also the reason for which musical imagology still contains extremely persistent falsities passing from one generation to the next, which, lacking a clear scientific justification, have more and more expressive, affective, and even ethical connotations. The composer, banished from this abstract, logical and rational space of scientific justification, constructs a different space of perceptive habits, consolidated in increasingly intuitive-connotative assertions on the expressivity of musical tonalities. These, although mostly not corresponding with the acoustic-mathematical reality, are as important as they are persuasive.

In order to lay the foundations of a theory of tonality, it is necessary to summarize the main systems of intonation as well as, especially, the difficulties these have to face and **do not solve**. In fact, it is much more significant to examine the level of ignorance which mostly derives from the impossibility of solving acoustic problems. Unfortunately, there is a metaphysical gap between physical and mathematical reality and the ideality of the expressive compositional space, and at the same time an essential impossibility to translate the laws of the one to the space of the other, causing thus a quasi-complete asymmetry. No system of intonation can solve these essential problems because music needs simple, clear, and homogeneous harmonic entities which cannot be obtained from this physical and mathematical space.

In short, the problem of the Pythagorean system of intonation can be resumed to the physical fact that seven octaves do not equal twelve perfect fifths $(2)^7 \neq (3/2)^{12}$, as it should be. This generates in fact the appearance of what is called the Pythagorean coma, which aggravates the homogeneous application of interval relations and the impossibility to close up the cycle after 12 octaves. The Pythagorean system is built in fact upon the 2 and 3 prime numbers. Any interval can be expressed by the proportions of the powers of 2 and 3. However, these whole numbers cannot rationally express the interval mutation on all 12 chromatic sounds.

The Renaissance solution to this problem was to introduce the number 5 beside 2 and 3. As we shall see, a system of intonation is in fact a system built on the proportions of prime numbers. The more advanced these are, the higher the possibility of a good, yet never perfect, approximation. This is the system known as Gioseffo Zarlino's, although it had already been proposed by Aristoxenes of Tarent, a disciple of Aristotle. Working in the same field of whole numbers, he could perfectly define a major (4:5:6) or minor (10:12:15) chord within one single mode, or later in Zarlino's case, one single tonality. The immediate problem resulting from here is the appearance of different semitones, the diatonic (15:16), the chromatic (24:25), and the tempered (17:18). None of these intervals satisfy the closing of the system in a perfect octave. There has been a long debate over the hypothesis that this system might have been extracted from the phenomenon of natural resonance. Neither Aristoxenes, nor Aristotle knew or intended such a thing. It is the result of 17th century acoustics, which establishes the isomorphism of the two projections.

A fine later solution is that of the mezzotonic system. This system balanced the difference between a *Major Major* second (8:9) and a *Major minor* (sic!) second (9:10), introducing an average value of $\sqrt{5/2}$

for balancing the system. As an irrational value itself, it does not solve the problem either acoustically by the impossibility of reaching a sufficient mathematical precision in defining $\sqrt{5}$, or practically, as by the use of this procedure the fifths and fourths built on mezzotonic sound are falsified.

A long row of theoreticians followed, who tried different tunings for each of the 12 chromatic sounds of the scale, proposing a rational falsification generally under the level of the perception of the human ear. Andreas Werkmeister invented no less than 15 such temperaments, Mathessohn at the beginning of the 18th century proposed three such temperaments, and Kirnberger other four typologies in which each time the tuning is just by the falsification of certain sound, thus certain intervals becoming false. Each time, the result is preferential tuning. Certain tonalities sound better than others. This is a real physical basis for the later connotations of expressive typologies and the ethos of tonalities. As an illustration, I will offer the examples of certain widespread typologies in musical practice, which have generated in time certain interpretive and expressive habits both in case of musicians and of interpreters.

In Johann Mathessohn's² approach the expressivity of major tonalities is as follows.

This is the generally average basis of tonal typologies which appear statistically as the most often used tonalities in musical creation. The extreme areas of tonalities with several alterations have connotations of special characteristics, and are used intentionally, willingly in certain sections, parts or pieces of special expression. This area of extreme tonalities was studied by Christian Friedrich Daniel Schubart.³ He analyzed these extreme tonalities in general with reference to Bach's work, especially his great oratorios, the *St John Passion* and the *St Matthew Passion*. His analysis was completely justified as the world of Bach's oratorios is an unprecedented and unequalled field of application for the expressive dialectics of tonalities. Here are certain connotations of extreme majors.

As far as Kirnberger is concerned, he had a theory of his own, establishing the partly identical, partly idiosyncratic connotative attributes of tonal structures by using the typology of temperaments. The complete inventory of the most important theoretical approaches to the ethos of tonalities is not as important though as the fact that this "belief" was widely spread in the 17th and 18th centuries and it functioned for musicians as a certainty or at least a compulsory requirement. Consequently, the strategy and dialectics of the tonal construction of musical discourse was largely subordinated to these entirely extra-musical determinations. Another significant aspect is that musicians, especially composers, needed the projection of a field of expressive values, organized according to certain criteria of distancing (by alteration) from the original tonality (C major) and creating a space of expressive tensions, and thus the possibility of exploring the world of affections and of visual or poetical imagery at the same time, reaching even to the level of theology or philosophy and metaphysics. It is difficult to assess the actual contribution of this approach to the evolution of European musical art, and to the creation and formation of the greatest masterpieces of music in the 17th through the 19th century. It is clear however, that these masterpieces responded to a real need of the composer to deal with a determined problem of the subject of a musical piece by concrete compositional methods (harmony, structure, subject, tone and form). This interest created the possibility of an over-determined space of expression, that of a hermeneutic decoding, by emphasizing certain aspects of the content by a perfectly abstract art, at least on the level of instrumental music.

4. Sociological projections of tonality

The history of European musical art reveals the fact that the tonal language is probably the most coherent and persistent linguistic structure that had ever existed in the course of discursive historical evolution. Naturally, during the thousands of years of music practiced, the music imagined and theoretically perceived in a modal language dominates quantitatively. But as far as the structure and legislation of musical thinking is concerned within the discourse of tonal language, it is much more consistent, generating probably for the very first time a consistent concept of language, coherent, with its own rules, and autonomous with regard to musical syntax, aspects of notation, as well as with regard to the content, subject, or consistency of the idea articulated by the musical discourse.

The range of the three centuries of the tonal age, between 1600 and 1900, witnesses probably the most consistent episodes of musical thinking and creation in Europe, known usually as styles: the Baroque, Classicism, Romanticism, Post-Romanticism, etc. The particularities of these styles, such as territorial typologies in the Baroque or the national schools of Romanticism, are also subject to the same linguistic

² Das Neu-Eröffnete Orchester, Leipzig, 1713.

³ Aesthetik der Tonkunst, Wien, 1803.

rules generated by the tonal language. Tonality is presented as strongly connected with important social changes at the end of the 16th and the beginning of the 17th century. We know of speculations of philosophers, esthetes, or musicologists who attributed to the tonal structure the quality of being a logical “summary” of social relations and hierarchy. Just as in the 12th, 13th centuries the basic structure of a Gothic cathedral was perceived as a concrete, material image which related hierarchical elements to each other: the nave, the vaults, the apses, or apsidioles to social strata: kings, dukes, counts, knights, etc., the typology of tonality is connected both to the social structures and to the new imagology of conceptions about the world in the 17th century.

Certain somewhat oversimplifying speculations ascribe to the tonic (the fundamental, and also incipient and final sound) the role of the king in the absolute royalty, especially French, of the 17th century. It is followed by the dominant, which is assimilated to the position of a prime-minister, the other levels being taken by ministers, secondary ministers, lower officials, etc. Evidently, this is a reductionist imagery, yet having some circulation, and still existent today in certain explanatory discourses of the tonal language. At the same time the mutations that occur in the case of architecture tend to assimilate the new organic, hierarchical concept around a fundamental structuring principle – the main vertical axis, marked by the central dome, while the other elements are built in a strong connection and subordination to it. It has been and still is tempting to represent a phenomenon as strong and complex as tonality by simple images and, as far as possible, general principles. This is why the idea of “gravitational” harmony is also advanced in connection to tonal harmony, because in the new tonal conception each chord has a tonic which generates the remainders of the components, these gravitating around it (around always meaning above) at various distances and this distance establishes the degree of “attraction” of the elements to the tonic. At the same time the system is generalized for all the seven steps of tonal heptatony, the tonic being reckoned as a sort of central element (the star around which the planets gravitate, around which again other satellite elements gravitate). Interesting about it is that it was not the 17th century, fundamentally marked by mechanics, celestial mechanics, and Newton’s theory of universal attraction, which created this image, but later interpretations.

Actually, the definition of affections, sentiments, attitudes, and finally the purified appearance of values has always been an essential preoccupation both of religion and of leadership. In the great Far Eastern civilizations, as well as in Mediterranean and later European cultures these elements of the definition of man in social context have always been objectives equally for study and for control by norm. It is possible that tonality brought to European cultures the kind of universal unification to which 17th century rationalism and later 18th century Enlightenment was tending. At any rate, every time philosophy embraces a discourse over social subjects, over the foundations which must justify the principle of the hierarchical structure and leadership of the society, it always has to refer to musical analogies and specifically to the framework of tonality. Already since the end of the Renaissance, the music which had still been composed on the basis of a diatonic modal language started to become increasingly aware of the necessity of a structure of triadic (harmonic) elements, as these are more or less subordinated to a tonal centre. The notion of centre may create confusions, because in the case of the tonal that what is called a tonal centre is in fact the frame of reference which is the starting point and the finality of a musical discourse. It is equally impossible and senseless to have a spatial, geometric projection of tonality, as it only exists in its continuity, its perpetual formation in which all avatars, all “adventures”, everything which means a distancing from the tonic, have their precise role and must be symmetrically rebalanced in order to conclude again in the reference area of the tonic. This discursive and continuous convergence is mainly connected to an eschatological religious principle and, if so we desire, to the fundamental inertial principle of Galilean and Newtonian mechanics. There are diverse forms which exert an influence over harmonic entities (which are no longer sounds, but harmonic triads), mobilizing them, and the vectors of the forces must be “carefully calculated”, subjected to precise discursive rules in order to keep the coherence of the whole. This fundamental principle of tonality made tonal language to be able to pass through changes in style, concept, and notation unthinkable at the beginning of the 17th century, and ultimately made it able to cover all syntactical and technical necessities of notation. High and late Baroque, then Rococo, Classicism, early and high Romanticism and post-Romanticism have always enlarged the limits of tonality from elementary diatonism towards the enlargement of the concept of harmonic function, from a simple accidental sensibilization to a generalized one, from modulatory inflection (mostly a patch of color) to distant modulations and then to the quasi-perpetual modulation of Wagner and finally to the dissolution of tonality in post-Romantic language, from Liszt to Wagner, Bruckner, Strauss, Mahler, Scriabin, etc.

Essentially, the irrepressible tendency of theoreticians to interpret tonality by social or spatial-architectural analogies reveals the basic essence of tonality. Because, as Arnold Schönberg suggests, tonality is only an “instrument” invented in order to produce unity. Only an “instrument”, but at the same time a very powerful, supple and creative one. However, the actually artificial and illusory character of tonality must also be underlined, which generates a “false” sense of unity, of community in which the whole is made up of autonomous voices; this projection surpasses in fact the limits of the musical discourse and reveals once again the extreme force of the utopian philosophical discourse as a legitimizing reflection over the social ideal of order, discipline and harmony.

At this point, music is in fact one of the best arguments for political order, for the “harmonization” of the social division of work, in which a large class of individuals, groups, states of mind compete for the harmony of the social body. At the same time, this is the field of one of the most corrosive “attacks” on the unity of the social body when, exceptionally, it proposes not unity but rupture, not balance but expressive conflict, not harmony but abstract functionality. Even more aggressive is the undifferentiated interpretation of the sonorous space as a homogeneous and isotropic field of elements completely equal among which relations become arbitrary. This is why in terms of the above interpretation dodecaphonism has constituted a real exercise of anti-social “volunteerism”, later bruitism an aggressive rejection of a dialoguing-concerting collaboration, and finally stochastic or totally improvisational music revealed a completely disorganized field, a sort of social “anarchy” which, at a higher level is regulated by inhuman and asocial laws.

Instead of conclusions I would like to offer a memorable fragment of Adornian meditation⁴ on the issue of music signification:

- *Music resembles a language. Expressions such as musical idiom, musical intonation, are not simply metaphors. But music is not identical with language. The resemblance points to something essential, but vague. Anyone who takes it literally will be seriously misled.*
- *Music resembles language in the sense that it is a temporal sequence of articulated sounds which are more than just sounds. **They say something, often something human.** The better the music, the more forcefully they say it. The succession of sounds is like logic: it can be right or wrong.*
- ***But what has been said cannot be detached from the music. Music creates no semiotic system.***

Santrauka

Simbolinės tonacijų konotacijos: ar tai archetipai?

Hermeneutinis muzikinės komunikacijos turinys yra vienas iš subtiliausių, sudėtingiausių ir nuostabiausių aspektų, apibrėžiančių muzikos meną. Kaip ypatingas reiškinys, hermeneutinės tonacijų konotacijos (tonaliojoje funkcinėje sistemoje) nuo XVI a. iki pat XX a. kelia daugybę klausimų ir pateikia ne mažiau atsakymų. Yra daug prasmų, įvairiais lygmenimis įtvirtintų istorinės ir sisteminės muzikologijos: melodiniai, harmoniniai, tekstiniai atitikmenys, numerologija, muzikos formos proporcija ir t. t. Viena iš jų – problema (tikra arba klaidinga) dėl tonacijų ir jų vidinės jėgos (objektyvios arba įsivaizduojamos) reikšmės perteikiant konkrečią idėją ar turinį, ji yra didelių debatų tarp fanatiškai nusiteikusių šalininkų ir nuolatinių priešininkų objektas.

Pranešime šią temą bandoma gvildinti pasitelkiant semiotines priemones, sukuriant konkrečius apibrėžimus („neutralus“ požiūris), nustatant vidinę išraiškos jėgą („estetinis“ požiūris) ir konfigūracijos strategiją („poetinis“ požiūris).

Vienareikšmis sprendimas negali aiškiai konkretizuoti šio tikslo, nes muzikoje (taip pat ir muzikologijoje) mokliškai nenuginčijamų sprendimų nėra. Nuo seno vykstančiuose debatuose dėl archetipų ir jų raidos yra įvairiausių nuomonių – nuo analitinių minčių iki filosofinių spekuliacijų. Tačiau renkantis tarp plačiai paplitusio įsitikinimo (populiaraus tarp daugelio didžiųjų kompozitorių) ir destruktuvios kritikos (dominuojančios šiandieninėje muzikologijoje) semiotinis požiūris gali pasiūlyti naujų idėjų ir naujų perspektyvų.

⁴ T. W. Adorno. Music and Language.