

1. *Repetitive music* — the most salient contemporary mould in which the iterative building principle is at work — emerged in the United States about the years 1960–64. A comprehensive examination of the conditions in which this idea was born and of its significance is entirely legitimate since repetitive music is a noteworthy event in the 20th century music; in this manner we can also identify the chain reactions through which something of remote origins can appear as entirely new.

2. During the 1945–55 decade, western avant-garde music was dominated by *serialism*. P. Boulez, K. Stockhausen and L. Nono would carry on the work of the “classics” A. Schoenberg, A. Berg and A. Webern in particular. I. Xénakis reacted to the inefficiency of the musical notation (extremely elaborate in *integral serialism* if referred to the somewhat depersonalized sonorous outcome) by incorporating chance procedures, in the so-called *stochastic-music*; so, the composer could determine sets of sounds instead of just isolated sounds. Then, the Polish school (Lutoslawski, Penderecki, Sierocki, Gorecki a.o.) adopted an *aleatoric notation* to obtain an effect almost identical with Xénakis’, over an easier yet less controlled course (i.e. a music of *textures* and “*figured*” *cluster*). Once the *collective improvisation* was adopted, even before 1965, any intentional attempt at structural coherence could no longer be eschewed (since the actual structural coherence is governed by other laws); this would have drawn the composers’ attention to entirely distinct realms (*musical theatre*, *neo-folklorism* and then the “retro”-fashion). During this period, *electronic music* or *musique concrète* together with first attempts at *writing musical programs on computers* have so far brought nothing new in terms of the compositional process.

3. The American avant-garde — almost ignored in Europe before 1960 — had reached this stage much earlier owing to the activity of J. Cage, M. Feldman, E. Brown and C. Wolff, themselves followers of the bold ideas cherished by Ch. Ives. A certain neo-dadaist trend, which was actively supported by J. Cage — an advocate of the Zen doctrine and an outspoken adversary of serial and any Euro-

A STUDY OF MUSICAL ARCHETYPES (II) THE ITERATIVE BUILDING PRINCIPLE*

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pean music (except for E. Satie’s), together with a concern for “democratization” of the composer’s art, have led to two bizarre, typically American solutions of musical performance: *fluxus-music* (a kind of absurd musical theatre) and *scratch-orchestra* (which brings together musicians and non-musicians, the latter performing at their best various accompaniment tunes or structures, ordinarily on percussion instruments). In this context, LaMonte Young takes up the idea of *concentrating on one action* that may be *indefinitely reiterated* and then prescribes *extremely long durations for some sounds*. The scratch-orchestra technique had already established rudimentary rhythmic-melodic structures repeated as an accompaniment, and so a piece like *In C* by Terry Riley (1964) was a natural outcome. In Riley’s work, a group of instrumentalists repeats continuously in the given order, but choosing the number of repetitions at one’s wish, fifty-three figures of some sounds in C major, cast at a quick frequency. The overall structure of the piece relieves in flexibility. This is the first *minimal-repetitive* work to break away with *informal music*. Beside LaMonte Young and Terry Riley one should mention Phil Glass and Steve Reich, the first of whom deals with an *additive* and/or *subtracting repetition* while the latter employs the *gradual process* or the *shifting*

phase process to introduce a kind of developing organization at the overall level. It was shortly later that this group of American composers revived in Europe the interest in the notion of minutely notated detail, rhythmic pulse, modal or tonal melodic figures, chord or even tonality. The new music — which “not only cuts down the sound-activity to an absolute (or absolutist) minimum, but submits the scrupulously selective, mainly tonal material to mostly repetitive, highly disciplined procedures which are focused on an extremely fine definition” (15, ¹¹⁹) — does not in the least resemble the music from which it borrowed these data (actually, archetype structures of universal, a-historical value) as it sounds cool, mechanical, monotonous and obsessive. Conceived at first to be performed “in vivo” in concert halls and grasped by any audience as a composing process, it has later on become contiguous with jazz, pop music and some traditions outside Europe. The origins of repetitive music must be searched in serial music (several compositions by A. Webern), in C. Wolff’s music, in pre-Renaissance or extra-European musical traditions (with which the American composers have steadily cooperated one way or another) or in the challenging attitude *vis-à-vis* pseudo-musical anecdotes or the sentimentality of post-romantic music.

4. The *iterative building principle*, which assumes a hypertrophied form in contemporary repetitive music, has however co-existed, though of an ancillary order, with other modes of organization (e.g. well-balanced by the *progressive building principle*, its opposite) in the music of all times. Nevertheless, it has generally gone unnoticed. (This explains why in an examination of O. Messiaen’s work, which was drawn *ad litteram* from the bird’s song and cast into an exhausting repetitive-figure idiom, C. Samuel does not deem it necessary to note this aspects (19)). Serialism was an overt challenge of any kind of repetition or reprise and searched for “incessant newness”, for an open form. (This was the principal argument levelled by N. Ruwet against this “insufficiently articulated” idiom (18, ^{9,25})). With Debussy and — notwithstanding the differences in language — Stravinski, Bartók, Janáček a.o., repetition, which is often a duplication of an idea, springs from a coalescence with folk music. It

was Ruwet again who noticed that in Debussy’s music repetitions are intricately related with all the other aspects of his work, where the systematic duplication/non-duplication play is essential (as is also the symmetry/non-symmetry play) and can be seized only upon a minute examination of all the parameters or levels of the work of interest (18, ⁷⁵⁻⁹⁹). With Romantic composers (or their neo-romantic followers), repetition becomes a heaped-up (static or dynamic) tension whose origins go back to the developments of Beethoven’s sonata form. Working back through the history of music, one could quote numerous examples as “forerunners of repetitive music” (from Wagner and Liszt to Bach and Gabrieli, a.o.). The meaning of repetition is entirely different in Eric Satie’s *Vexations* for piano, in which a 52-beat passage is repeated very “softly and slowly” no less than 840 times. This piece, which has gone unnoticed for quite a long period, was performed as a *bizarrerie* by two American pianists over 18 hours and the performers’ impressions referred to the continual refinement in the perception of some harmonic relations (15, ³²). Save for this anticipating exception in the American fashion, the iterative principle may be found at work throughout classical music, at the microstructural level, in the bar/anti-bar form (by virtue of this principle, a dialectic of duplication/non-duplication is established) or at the overall structural level (so as to allow for several formal figures based on the idea of reprise: *menuet* or *scherzo* with the *trio*, *lied*, *rondo* — some of which are indirectly taken from folklore, or in the *sonata*, *fugue*, *theme with variations*, etc.). Broadly speaking, the 19th ct. national schools or, before them, the (South)-East European folk music contributed much to the spread of those structures (e.g. the development of the 1st movement of Beethoven’s VIth “Pastoral” symphony or some parts of Brahms’ music rely on this source). The contact with the “exotic” folklore — under queerly idealized forms (as in *Rondo alla turca* of Mozart’s Sonata in A major) or under genuine instances (as was Debussy’s and Ravel’s contact with the extra-European folklore at the International Exhibition in Paris, 1899) (20, ¹⁶⁷) have always given new impetus to the concern for the “primitive” organizational forms of the musical material.

5. In traditional music outside Europe, repetition is essential. In Africa and South-America, rhythmically articulated obstinatos seem to be the grounds of the musical language itself. An ideal case of this kind is the Indonesian *gamelan*, where everything develops cyclically, repetitively (the overall duration is sequentially partitioned in a binary manner, each level being “tinged” by an instrument — usually of metalophone percussion — which returns thus periodically; Jaap Kunst called this procedure a *colotomic structure* and related it to the outlook on time and universe pertinent to the local mythologies) (12, ⁴⁴). Traditional Hindu or Arabian music are imbued with this principle, particularly in terms of ornamental melody; repetition proper is apparently the province of more primitive musical cultures or sacred music.

6. Romanian folk-music exhibits a variety of repetitive forms. Let us mention the pastoral repertory in general (especially the signals blown by alpenhorns), the sung *doina* and the instrumental *doina* in particular (where peculiar “iterative areas” follow the introductory part), several mourning songs from the Danubian plain, children’s folk music and shouts, dancing tunes of archaic form performed on instruments (especially those typologically akin to the *Briu* kind, pertinent to the Carpathian area, in which the iterative principle is at play through various units and micro-units in the entire piece) and, finally, the stanzaed patterns with or without a refrain (as are several ritual songs, Christmas carols or fixed-form tunes or dancing tunes).

7. A rigorous definition of repetition from the standpoint of gnoseology calls forth such notions as *identity/difference*, this pair of terms and the dialectical contradiction between them being inherent to the human abstracting capacity. Admitting the fairly intuitive nature of the notion of *identity* in mathematics (which underlies the definition of the number itself), we have to set the limits and the reference system against which we can deal with repetition proper. This is all the more necessary as we may easily come to recognize repetitions everywhere. (Following R. Jakobson, N. Ruwet shows that the musical syntax, much like the syntax of any coherent language, is inevitably founded on repetition or, more

precisely, on the *projection of equivalence relations along a syntagmatic axis*; generally speaking, repetition would be the *unifying factor of any device*) (18, ¹⁵). G. Rouget contends that repetition accounts for how we tailor the content upon recognition of a form (18, ¹¹¹). Repetition of some elements allows for the variation of others. Additionally, in music (i.e. *in time*) A is never identical to A but can only be so in a paradigmatic representation (18, ²⁹) since the second term, coming after the first, assumes another meaning (the first term in its turn gains back further meaning). A comparison of the *langue/parole* levels in linguistics — which represent the time reversible *versus* the time irreversible of a system thus viewed under a two-fold aspect (18, ¹⁸) — is illuminating for the case under examination.

8. The present approach to repetition will call attention to the following items: (1) *how far exact repetition is*; (2) *what are the structural levels for which repetition is pertinent* (sound, cell, motif, a.o., as this level induces the *rate of repetition*); (3) *the manner in which repetition is performed* (immediately following, by jump-loops, displacements, “representations”, etc.); (4) *its weight* (number of repetition); (5) *the semantic function* (a. harmonic, temporal background; b. an element of redundancy and, hence, the ground for the relation of formal syntactic equivalence; c. emphasising, tensional growth, reprise, etc.; d. cancelling the directional causal time). As repetition entails a choice, or the elimination of some elements in favour of others, a (6)th item would be concerned with the *qualities or requirements to be met by a musical object so as to become a subject for repetition*.

9. We note that the contemporary minimal-repetitive trend allows for the collocation of perceptible differences between cultural areas or between composers (which was sometimes impossible in post-serial or random music, in which a certain uniformity prevails). We can thus distinguish between the four founding composers (LaMonte Young, T. Riley, Ph. Glass and S. Reich) whose music could be cursorily defined as “obsession expressed by prolonged sounds or repetition”, “dynamic repetitions”, “additive-subtractive repetitions”, “gradual process” (these procedures have lately grown into *repetitive collages* and an intercourse with

musical cultures outside Europe) and the various styles of the European composers who have adopted — for good or just in passing — this procedure (e.g. K. Stockhausen, L. Ferrari, Z. Krauze, Th. Sikorski, etc.) and explore the musical expression against an expressionist background. This would do, let aside the particularly distinct personalities of the fore-runners (E. Satie, I. Stravinski, C. Orff, O. Messiaen).

10. In contemporary Romanian music, the concerns of such composers as L. Glodeanu, M. Moldovan, C. D. Georgescu, S. Niculescu, O. Nemesu, L. Alexandra (and also A. Stroe, E. Terenyi, H. P. Türk, S. Lerescu, M. Brumariu a.o.) could be briefly defined as a “folk-forged texture”, “ornamental repetition”, “repetition cycles”, “gradually introduced repetition in a evolutive context”, “inter-spanned additive-subtracting repetitions” and “repetitive harmonic figuration”. The openness of this building principle towards any musical structural level, together with the inherent integration of this music with the creation of the above-quoted composers, is all the more obvious if we note, for example, that the gradually introduced repetition by S. Niculescu entails a change of two distinctive syntactic categories (from polyphony or heterophony to homophony and monody).

11. An examination of the psychological effect of repetition allows us to regard it as a *peculiar form of rhythm or of symmetry, where the elements involved are identical*. One might even speak of the *elimination of any rhythm* by alleging, as O. Messiaen does, that a rhythmic music is rhythmic inasmuch as repetition, quadruple structure and equal partitions are avoided. The elimination of any “unexpected event” reinforces the *cadenced rhythm* and *simple periodicity*, which assume an incantatory value (given by the repetition of a word, figure or sonance) (10, ¹⁵⁸). However, as the perception of *position succession* (between like, hence confoundable, events), *duration* (by indefinite repetitions, whose number is beyond control), hence, of the notions of *order* and *causal chain* themselves are distorted or vanish, repetition induces a steady self-bereavement with respect to one’s expectancies. Once it is accepted as such, repetition brings about a certain *quasi-hypnotic state* (whence its ambient

therapeutical virtues) and so re-entangles with magic, ecstasy and mystical trance bred by Eastern sacred music. In this respect, A. Daniélou shows that certain melodic or rhythmic patterns of sounds are used to induce a state of trance in the Iranian dervish music, in the African music or in the tunes of some races in India, Indonesia, etc. (4, ⁹²). This effect also pervaded the pop, rock, underground or progressive music over the last decade as they all draw on the American repetitive music — be it mediatedly or straightforwardly. It was also Daniélou who stated that jazz, pop or beat music represent the drive-back of an entire civilization to a different value-range, towards the invisible yet real realm of the unconscious (5, ¹⁶).

12. Repetition is likewise linked to the static, linear, foreseeable nature of the musical discourse, its monotony, the absence of unexpected events, directivity and conventional dramaturgy, the lack of evolution proper, of temporal becoming or of some ordinarily perceptible reference points, of some “prospective landmarks” to guide in time (8, ¹⁵⁶). By repetition the laws of informational aesthetics seem to be contradicted (by virtue of these laws the relations among the frequencies of redundant or entropic function signs are optimal so as to score the maximum effect) (13, ^{103–104}). In the case of a *steady sound condition* (hence, repetition included), the subjects react no longer to the stimuli as the exaggerated repetition leads to inhibition and drowsiness (3, ³⁶). However, the question that comes up here is that of *musical signs*, i.e. of certain signs that induce a certain response in the human psyche. The optimal nature of aesthetic messages is not given by the maximum level of *statistical data* but by the *maximum impact level* (19, ²⁸). A. Moles, M. Bense show that one of the basic fashions in which we can diminish the complexity of a sign configuration (i.e. make it more readily graspable) is repetition: what was repeated can often be reconstructed and perceived in this manner alone. By reducing the quantity of aesthetic information in an ensemble of signs, redundancy can make the aesthetic information grow in compliance with a certain *style principle* (13, ^{167–170}). The aesthetic perception identifies *signals* and *basic signs*

— a repertory of sets whose likelihood to occur is subjective — and then the *assemblage laws* or *code laws* and subsequently *supersigns* (i.e. a normed sign organization of a lower level) (14, ¹⁴); thus, for instance, the *moiré-form* (an effect pertinent to *op-art*) is a supersign obtained from the coalescence of overlapping series of uniform elements (14, ¹²). In the case of repetitive music, we are also faced with a supersign and the forces called into play are contiguous to the *weak rhythmized energies* (like those at work in homeopathy).

Through repetition, the sign is charged with a particular, essential kind of energy, as if in a ritual, and, additionally, becomes isolated from the context and apparently outside the irreversible onflow of time. Repetition is the proclaimed symbolism of *Number One*, the principle of *Unicity* instead of duality or multiplicity in general. Repetition of a module wipes out space or time limits (1, ¹¹¹), whereas a sequential order (where the ordering principle is such that identical elements are added one after the other) causes the isolated element to lose its individuality (2, ¹⁸⁷). Deception, boredom and irritation are the first reaction of the unexperienced audience, who is only familiar with a continuously new information at a certain level. But gradually, a peculiar *state of conscience* seizes one: the *attention focuses on the detail*, in the *soft-focus area*, where the most refined details, relations and variations are identified. In the extremal case, the system of human perception itself determines the oscillating setting of identical signs (again as in *op-art*). This effect is no novelty: in the traditional modal Indian music, where droning is constantly held and modulation is absent, the attention is concentrated on several subtle nuances — and this is well-known to the American composers (16, ¹¹). Ockham's words "less means more" illustrates the increased concern, already about the fifties, for refined-perception effects, as a reaction against informal art (2, ¹⁷⁵⁻¹⁸³). Repetition postulates a re-generating anteriority and suggests the myth of the endless origins. The most rigorous repetition goes beyond identity: what is added turns what precedes into an always different quantity that is distinctly grasped in terms of quality. Repetition self-generates variation and becomes the background for diversified figures. There

exists an antinomy between remembrance and repetition which replaces the former; thus, the invasion of remembrances is forbidden by a unique-pulse motion throughout. Repetition brings about a narcissistic pleasure with respect to a noteworthy object which is kept independently of the outside world; it is an image of all that self-generates untiringly as in a perpetual motion. An approach to the erotic realm through a symbolic psycho-analytical insight is self-evident. Likewise, pulsation repeated, which cancels or hollows out all tension represents the path to death (17, ⁴²⁻⁴⁴). A comparative study of contemporary trends in fine arts and music seems generally promising; however, a mechanical approach to repetitive music and some fine-art procedures (i.e. *serial art*) would be oversimplifying since whereas in visual arts the faithful repetition of an ornamental motif may be thought of as pertaining to the ordinary procedure, contributing to the specific rhythm of a work, in music — a temporal art for which the newness of information seems to be essential — faithful repetition acts apparently against its temporal nature itself, in an attempt to demolish its fundamental dimension.

13. As the iterative building principle is the *most primitive form of order, control and system*, it is only natural that it is most frequently adopted throughout *aural cultures* (and in the aural aspects of notated music). Repetition and duplication in particular are essential in the first undertakings that make up the culture, and also in the beginning of articulated language in children (18, ⁷⁰⁻¹⁴).

14. It is not devoid of interest to show that repetition occurs under most varied forms in environmental reality (at the cosmic level: the motion of planets, satellites around the sun, etc.; at the level of the vegetal kingdom: the petals of flowers, the leaves of trees, etc.; at the level of the animal kingdom: the duplication, in terms of physiology, of some members, organs or the multiplication of others in compliance with the module-based principle; at the level of prelinguistic communication: signals, gestures and actions, or at the level of linguistic communication: the first words uttered by children, as analysed by R. Jakobson and B. Nettl (18, ⁷⁰).

15. Minimal music, in which the repetitive principle is entailed, is from the perspective of the year 1985 one of the most radical innovation of the 20th century, coming naturally after serialism and aleatoric music *to reconsider the archetypal bases of the art of sounds*. We note that initially serialism was solely concerned with the organization of the sound pitch (the melodic-harmonic structure) and aleatoric music is conducive to informal, music, whereas minimal music deals principally with musical syntax (with original solutions against the European context) and then makes a *systematic attempt to re-gain the control of the*

fundamental structures of music (by gradual experimentation of, search for and re-discovery of what is irreducible in it). This is all the more understandable if we consider the late "retro" fashion, which represents a bare withdrawal from the issue of the audience crisis which has imperilled modern European music for at least the past 6–7 decades.

16. The study of repetitive music is, no doubt, inconvenient at present, given the scarcity of pertinent surveys and the dearth of a sufficient reach to allow for a correct evaluation of its recent development versions or trends.

Notes

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The first figure in the quotation numbers refers to the author's name in alphabetical order, whereas the superscript indicates pages of the book.)

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