

Criteria for the Classification of Musical Structures and Forms

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August 2024

This essay explores the classification of musical structures and forms based on criteria such as recurrence, internal relative duration, and tradition, among others. Unlike traditional approaches that often use the terms “structure” and “form” interchangeably, we establish a clear distinction between these concepts. This study expands the traditional classification of musical structures and forms, offering a framework that can be applied to virtually any type of music. This approach may assist composers in reflecting on and enhancing their own structural and formal concepts.

1 Musical Work and Musical Idea

The musical work is the final result of the compositional decisions made by the composer. In other words, what emerges from the work is the product of a set of conscious and unconscious choices, both technical and aesthetic. These decisions shape and characterize the “musical ideas” with which the musical work is constructed.

Musical ideas are “sound concepts” that encapsulate a specific musical thought or intention, expressed through the organization of elements such as melodies, rhythms, harmonies, or timbres. The simple constituent elements, those that, beyond sound, possess a semiotic value within the work¹,

¹This doesn't mean that “sound” cannot be the basis of the material. In the music of “empirical-acoustic sound experience” (“*empirisch-akustische Klangerfahrung*”)—as we might refer to a set of works composed since the late 1950s, using the terms of Helmut Lachenmann (2004, p. 1)—sound becomes a “sound event,” which necessarily holds a semiotic value within the work, at least self-referentially. The

whether intentional or not, are what we call *materials*. The formal groups formed by these materials are instead what we refer to as *structures*.

1.1 Structure vs. Form

In some texts, there is no clear differentiation between musical form and structure. The English Wikipedia, for example, states about musical form: “In music, *form* refers to the *structure* of a musical composition or performance.”²—that is, both concepts would be more or less interchangeable. In this text, however, we make a greater distinction between structure and form.

We see structure as a delimited formal group in which relationships exist between different materials or between a material and its different variants. It could be said that musical structures are the “building blocks” with which form is constructed.

Musical form, on the other hand, is the arrangement or sequence of these structures. It is the way in which structures are organized to create a broader scheme, such as a rondo, a sonata, a theme with variations, or an own scheme. In short, form is the overall pattern that organizes musical structures within a composition. In formal analysis, we examine the size and number of parts, as well as their relationship to each other.

Additionally, musical structures not only have a position within the form but can also serve a *formal function*. William Caplin (2010, p. 26-27) shows us that structures can have an introductory, expository, developmental or medial, recapitulative or closing function, and an after-the-end function (coda),

“sound event” is thus a possible material.

²Italics added.

among others³.

2 Criteria for the Classification of Musical Structures

Musical structures can be classified according to various criteria:

- According to their recurrence: Between *recurrent* and *progressive* structures⁴.
- According to their order: Between *ordered* and *unordered* or *Brownian* structures. Within ordered structures, we distinguish *logical* structures, which are constructed following a “musical logic.”
- According to their internal relative duration: Between *symmetrical* and *asymmetrical* structures.
- According to other criteria: Such as their tradition, into *conventional* structures (like the “period” or the “sentence”) or *heterodox* ones; or their aesthetics, into *linear*, *conical*, *circular*, *undulating*, *centripetal*, *centrifugal*, *palindromic*, *steep*, *dense*, *dispersed* structures, etc..

In this text, we will not go into these last two criteria (tradition and aesthetics) or other possible ones. We will concentrate on the first three criteria for the classification of musical structures.

2.1 Musical Structures According to Their Recurrence

Traditional musical structures are based on concepts like *motif* and *theme*, applicable to the music of the so-called “common practice.” However, although these concepts could be applied by analogy to other types of music, it may be useful to start from a more general classification of musical structures. We recognize two main categories according to their recurrence: *recurrent* and *progressive* structures.

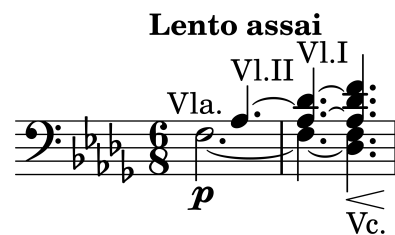
³Although he proposes these functions specifically for the analysis of music of the classical period, we suggest applying this terminology for a broader repertoire.

⁴Pierre Schaeffer (1966, p. 494) classifies structures according to their recurrences “*s’il s’agit d’une musique encore logique*” and “distributions” if it is aleatoric music. We have expanded the second term to include any type of music not based on recurrence, not just aleatoric music.

Recurrent structures have repetition and/or variation of their materials as their main characteristic. When we talk about “motifs,” we refer to materials subject to repetition, and when we talk about “themes,” we refer to structures that are subject to repetition. Most traditional classical music uses structures that fall within this category.

Progressive structures, on the other hand, are not based on repetition. In these, we cannot refer to “motifs” or “themes.” The materials of these structures include intervals, chords, sound events, among others, and the structures they form are curves (e.g., melodic), harmonic progressions, textures, distributions, among others. An example of this is Renaissance music, where both the melodic curve and intervallic order shape the musical discourse; or aleatoric or stochastic music, where we can only discern distributions and/or tendencies of sound objects.

It is possible to combine both types of structures in a single piece, for example, to highlight the formal function that each section fulfills, or for other reasons. For instance, in a piece characterized by the use of recurrent structures, the transitional sections can be progressive, smoothly connecting one section to another. In music from the Classical period, the introduction, lacking the “expression of a genuine basic idea” (Caplin, 1998, p. 15), did not necessarily rely on repetition. William Caplin shows us, in the cited passage, an example from Beethoven (String Quartet in F major, Op. 135, III), where the introduction, of only two bars, presents a gradual establishment of the tonic through the staggered entrance of each of the four instruments.



This small structure, without motifs or true repetition, can be considered as “progressive” in a context otherwise rich in recurrent structures. The reason for this is that these two measures have an independent formal function. It follows from this that an element of progressivity, when it is a dependent part of a fundamentally recurrent structure, is not sufficient to consider the structure as progressive. An example of this is what Schoenberg (1970, p. 30) calls “liquidation,” a technique through which a

theme is freed from its “motival obligations”. Liquidation consists in “gradually eliminating characteristic features, until only uncharacteristic ones remain, which no longer demand a continuation. Often only residues remain, which have little in common with the basic motive. In conjunction with a cadence or half cadence, this process can be used to provide adequate delimitation for a sentence” (Schoenberg, 1970, p. 58). In general, this technique can be applied to the endings of any recurrent structure⁵.

2.2 Musical Structures According to Their Order

Musical structures can also be classified according to their order into *ordered* and *unordered* or *Brownian* structures⁶. Here, it is necessary to clarify the concepts of “logic” and “order” in music, especially since serial music from the 1950s has perhaps given the impression, even to this day, that it is possible to order music through arbitrary rules or that precompositional order is equivalent to perceptual order.

Pousseur et al. (1966, p. 94-95), when analyzing some measures of Boulez’s *Structures I* (1951), specifically two fragments in retrograde relation to each other, note that

Our difficulty in making a precise comparison between the two figures when we listen to them is caused, among other things, by the fact that each one is organized in the most irregular, least periodic fashion possible. Both passages might be likened to what are called “Brownian movements”, i.e., movements lacking (from the observer’s viewpoint) in all individual signification and therefore offering a high degree of resistance to unified over-all apprehension and to distinct memorization.

[...] Far from establishing perceptible symmetries and periodicities, regularity in similarity and in differentiation—in other words, an effective and recognizable ordering of diverse figures—they seem instead to *hinder* all repetition and all symmetry: or to put it another

way (insofar as order and symmetry may be assimilated one with the other), all true *order*. The effect of statistical disposition (differentiation of dynamics, tempo, and attack as in the two fragments [...], or differentiation in density between the two and other moments of the piece) upon the “over-all form” is to guarantee a *permanent renewal*, and an absolute degree of unpredictability, at this higher structural level.

With the result of the technique used, Boulez affirmed his intention to express the essential irreversibility of time, which in turn denied the possibility of repetition and, in general, of perceptible “order.” In other words, his structures are progressive but not ordered at the perceptual level. This places many of the structures of serial composers, and those of aleatoric music, essentially in the same category concerning their order: that of “Brownian structures.”

Renaissance music, which we have already used as an example of progressive structure, can be considered with less hesitation as ordered music, given that the constituent elements of order (in this case, modes, melodic curve, phrasing, meter, tessitura, cadence, among others) are arranged in a communicative and orderly manner for perception, not just at the precompositional level. This is important because it implies that it is not necessary to use recurrent structures for musical order to be perceived.

Within ordered structures, we find a subtype, namely, *logical* structures. The concept of logic in music is intrinsically linked to the concept of *musical development*, a concept we can apply more confidently to music written from the 17th century onwards (especially the music of Bach) and with greater certainty on Classical period music. “Musical development means exploring possibilities, drawing conclusions, considering effects: development is an expression of *musical logic*. It links instead of loosely arranging, it thinks instead of associating, it aims forward instead of seeking balance. Because every moment of a musical development is doubly involved: it is the *result* of what came before and the *starting point* of what follows.” (Kühn, 2007, p. 75)⁷. In contemporary music, among the composers

⁵See (Schoenberg, 2006, p. 175).

⁶The temptation to name unordered structures as “Brownian structures,” using the language of Pousseur et al., prevailed in this case. Due to the distinctive value of the term, we risk here a pseudoscientific classification of musical structures. In any case, we use the term “Brownian” according to the definition of “Brownian motion” given by Pousseur et al. (1966, p. 95).

⁷“Musikalisch entwickeln heißt, Möglichkeiten abtasten, Folgerungen ziehen, Auswirkungen bedenken: Entwicklung ist Ausdruck *musikalischer Logik*. Sie verknüpft statt locker zu reihen, sie denkt statt zu assoziieren, sie zielt vorwärts

whose works have been associated with musical logic, we can mention Steven Stucky and his student Eric Nathan.

In an extreme case of this subcategory, we have the process music of Steve Reich. According to Schoenberg's definitions, Reich's musical processes would be a "strictly logical construction." Within these constructions, decades before Reich wrote, for example, *Piano Phase*, where he explored phasing processes, Schoenberg (2006, p. 103) foresaw that

the variations of a motive (or of a *grundgestalt*, etc.) would have to occur in a systematic manner and would have to lead to a predetermined goal. [...] a systematic development of *grundgestalten* could [...] be carried out in such a way that either first the rhythm and then the intervals would be varied (or vice versa) or somehow both would be varied simultaneously or in alternation. It is easy to imagine, and to recognize without further ado, that what would come out of such a mechanical procedure cannot be the way music works: countless superfluous, albeit varied, repetitions of *gestalten* that would be for the most part basically uninteresting in themselves and in many ways without expression.

From this quote, we can infer that much of the impact on the aesthetic experience of musical works is mediated by the construction of their structures. Reich's process music, despite its significant impact on 20th-century music, would then be the demonstration of how music *doesn't work* according to Schoenberg. The fact that in the 20th century, at least one composer (Steve Reich) followed almost to the letter Schoenberg's recipe for a "strictly logical construction" (which Schoenberg conceived only theoretically and devoid of any expression) and created with that some of the most interesting works of the 20th century is, at the very least, ironic.

2.3 Musical Structures According to Their Relative Internal Duration

The evaluation of musical structures must also consider their duration, because through the duration and, eventually, the correspondence of the different

statt Gleichgewicht zu suchen. Denn jeder Moment einer musikalischen Entwicklung ist zweifach eingebunden: Er ist *Ergebnis* des Vorherigen und *Ausgangspunkt* des Folgenden".

parts of the structure (e.g., antecedent and consequent), we can compare their sizes with each other. This opens up two additional possibilities for classifying musical structures: *symmetrical* and *asymmetrical* structures.

When discussing the two essential types of themes in Classical period music, namely the "period" and the "sentence," we are fundamentally referring to symmetrical structures, in which the antecedent and consequent are, in most cases, of the same duration. This is not necessarily the case in Romantic music, where the lyricism of the main melody could lengthen or shorten the different parts of the thematic structure, making it asymmetrical. In 20th-century music, we can mention composers like Bartók or Webern, who used palindromic structures, which are in turn a type of symmetrical structure. Palindromic structures, due to their particular form, can also be considered a type of structure according to aesthetic criteria.

3 Criteria for the Classification of Musical Forms

After defining three criteria for the classification of musical structures, and mentioning two others that were not developed in the previous section, we can apply these same principles to the categorization of musical forms. Considering that when analyzing form we compare sizes and correspondences between musical structures, it is possible to use a series of criteria to classify musical forms that go beyond conventional labels such as "sonata form" or "rondo." Some of these criteria are conceptually identical to those used for classifying musical structures:

- According to their number of parts: Between *simple* and *compound* forms.
 - Simple forms have only one part, in which the structure and the form coincide in duration. This type of form, although rare, can be found in musical miniatures or in certain drone music works, such as those of La Monte Young, which lack clear formal articulations.
 - Compound forms have more than one part (starting with the simple binary form AB) and are the most common.

- According to their recurrence: Between *recurrent* and *progressive* forms. While the rondo, the sonata form and the theme with variations are examples of recurrent forms, a form of the type ABCDE... would be progressive.
 - According to the relative duration of their parts: Between *symmetrical* and *asymmetrical* forms.
 - According to tradition: In *conventional* forms (such as the “rondo” or the “sonata”) or *heterodox* forms.
 - According to their aesthetics: For example in *circular* forms (where the end connects with the beginning), *centripetal* (like the rondo or any form of the ABACADA type...), *palindromic* (ABCBA, ABCDCBA...), *metamorphic* (like the theme with variations or any form of the type A A'A'A' "...), etc..
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4 Conclusion

We consider that the choice and configuration of both musical materials and their arrangement or distribution within a structure, as well as the arrangement of various structures into a form, are a substantive part of musical ideas and contribute decisively to the understanding and aesthetic experience of the work. Hence, the importance of the study of form and structure is vital for every composer.

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