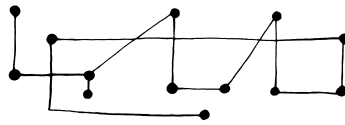


RETHINKING REPETITION: INTERROGATING SCHOENBERG'S WRITINGS



ÁINE HENEGHAN

CONTEMPORARY DISCOURSE ON MUSICAL FORM draws inspiration from the writings of Arnold Schoenberg. Specifically, the central tenets of the so-called New *Formenlehre* project can be traced back to his theoretical and pedagogical writings: his thinking on form, filtered through Erwin Ratz and, in turn, William Caplin, informs an analytical approach currently in vogue. And yet the concept of repetition, arguably the cornerstone of Schoenberg's *Kompositionslehre*, remains trivialized at best and misunderstood at worst. In this respect, John Rahn's remarks on repetition seem not merely apposite but essential for an understanding of the term:

Repetition is . . . more than merely analytical in the sense of laying out all the relevant repeatable component elements of a piece, like a disassembled automobile engine; this would be trivial. The involvement of repetition as an action constituting time and life from the inside makes it equally constitutional for the spirit of music. To understand how this may be, it is necessary first to interrogate repetition minutely as to its particulars.¹

Rahn rightly problematizes the topic of repetition, pondering as he does the relationship between structure and repetition and grappling at the outset with the issue of cognition and recognition. He considers “a schema of bare repetition, A = {a, then-a},” describes how it is perceived in time (“first I experience a, then then-a, which is a again”), and poses questions about context and abstraction. Although he concludes that “a thing as grasped is itself abstracted from any possible context,” he acknowledges the problems with such an ontology: “the practical problem of *Sichselbstgleichheit* (Koyré 1961a)” and the theoretical one he describes as the “the cognitive chicken-and-egg problem—how can one abstractly constitute or cognize a thing before knowing what it is, before being able to re-cognize it?” Rahn’s invocation of the French philosopher Alexandre Koyré, who was himself immersed in the study of Hegel, accounts for the use of the expression *Sichselbstgleichheit*, meaning “equality-to-itself.”²

Philosophical discussions of this kind obviously appeal to composer and music theorist alike. In the same way that Rahn turned to Koyré when thinking about questions of equality and likeness (*gleich* means “equal” or “like”), Schoenberg found a resonance in the writings of another French philosopher—Henri Bergson.³ His personal library contains several of Bergson’s books in German translation,⁴ and his copy of *Schöpferische Entwicklung* (original French: *L’évolution créatrice*, 1907) is annotated: Schoenberg highlighted a passage with a marginal line and underlined for additional emphasis the phrase “von Gleichförmigkeiten und Wiederholungen” (*sur des similitudes et des répétitions*; translated into English, in the singular rather than the plural, as “[and all fabrication, however rudimentary, lives] on likeness and repetition”).⁵ The expressions *Gleichförmigkeiten* and *Wiederholungen* point not just to repetitions [*répétitions*; *Wiederholungen*] but also to similarities [*similitudes*] and equalities [*Gleichförmigkeiten*]⁶—that is, to forms that are alike or equal [*gleich*]. These were the gradations with which Schoenberg was concerned. “Recognition,” for him, was “based on experience and on comparison [*Vergleichung*],” and he would describe objects as “related [*verwandt*], similar [*ähnlich*], or alike [*gleich*],”⁶ defining “similar” as that which is “partly the same [*teils gleich*], partly different [*teils verschieden*].”⁷ Reflecting on the intricacies involved in hearing and grasping such relationships prompted him to probe the concept of repetition. In what follows, I aim, taking my cue from Rahn, to interrogate repetition minutely as to its particulars using the writings of Schoenberg. My investigation prioritizes primary sources, some of which have not been examined before, and in so doing provides an important corrective to Schoenberg’s published work, revising our understanding of his theoretical contribution. I

conclude with an analytical vignette to demonstrate how these theoretical ideas find expression in the musical domain.

Schoenberg's writings abound with statements on repetition:

- A motive is used by repetition.⁸
- The motive *reproduces itself* by repeating itself and bringing forth new shapes from itself.⁹
- Whatever happens in a piece of music is nothing but the endless reshaping of a basic shape.¹⁰
- Repetition in music, especially when linked with variation, shows that *different things* can arise from *one* thing [*aus Einem Verschiedenes*], through its development, through the musical vicissitudes it undergoes, through generating new figures.¹¹

The expression *aus Einem Verschiedenes* is attractive because of its succinctness and yet problematic because of its vagueness or even imprecision. Taken out of context, this and similar statements would seem to invite generalized portrayals of musical form and form-building. Far more than mere demonstrations of organicism, however, they encapsulate a detailed and nuanced conception of repetition that has ramifications for how we think and write about form. For Schoenberg's brand of organicism is concerned less with the fact that everything can be traced back to the "germ" or "germ cell" [*Keim, Keimzelle*] and more with *how* that "germ" is composed to organize and engender the form:

The notion that everything that occurs goes back to the germ cell, and, conversely, that nothing can occur that was not contained in it, is very satisfying, but [it] only explains the whole and not at all the singularities, hence therefore it explains nothing, and moreover frequently contradicts the events.¹²

Privileging the singularities [*die Einzelheiten*] over the whole [*das Ganze*], he takes issue with "the usual understanding of the motive as germ [*Keim*] of the piece out of which it grows" and explains:

For if this conception were correct, only one single piece could arise from one motive. As is well known, such is not the case. I consider the motive as the building material [*Baustoff*] that can assume and fulfill all forms.¹³

The question for Schoenberg is how that building material is treated, how it can be shaped to realize a multiplicity of forms. Celebrating the individuality of the art work, he is necessarily concerned with the particularities of a piece, the diverse ways in which repetitions can be realized. My goal here is to call attention to the underlying principles that inform his thinking while also attending to the specific ways in which those principles manifest themselves.

In Schoenberg's understanding of form, repetition takes place at a variety of levels, as shown in Example 1: he discusses the repetition of the motive (including its rhythmic, intervallic, and harmonic features),¹⁴ of the phrase or *Grundgestalt* (typically the two-measure unit that begins the theme),¹⁵ of the fore-sentence or antecedent that constitutes the first half of the period,¹⁶ and of the A section in ternary form, to mention only the most obvious parts.¹⁷

How those various parts [*Teile*] are repeated is accorded much attention in his writings, and even though Schoenberg focuses his discussion on the motive, as the smallest part that is repeated,¹⁸ his observations in that context are applicable to other, larger parts (phrase, antecedent, etc.). The most detailed account of repetition is to be found in *Fundamentals of Musical Composition*, in a passage entitled "Treatment and Utilization of the Motive," where he expounds at length the ways in which the motive can be repeated. Quoted frequently, the passage has informed our understanding of repetition as well as variation and developing variation, but, as I will demonstrate here, its import has been severely compromised in the published version. The sources for this book, which are not in the public domain (and which have not been examined until now), enable us to reconstruct the passage as Schoenberg intended it.

Repetition of the motive	"Every melody results from the repetition of a more or less varied basic motive."
Repetition of the phrase or <i>Grundgestalt</i>	"You see, it is my intention to show you that the individual phrases are always nothing else than the more or less varied repetitions of the <i>Grundgestalt</i> ."
Repetition of the antecedent	"The consequent is a modified repetition of the antecedent[.]"
Repetition of the A section in the ternary form	"The recapitulation [A ¹] may be an unchanged repetition. More frequently it is changed, modified or varied."

EXAMPLE 1: REPETITION AT DIFFERENT LEVELS

Published posthumously, *Fundamentals of Musical Composition* (hereafter *FMC*) underwent a number of revisions—four during Schoenberg's lifetime and a further two thereafter. Edited by Gerald Strang and then Leonard Stein, it was not published until 1967, even though Schoenberg began writing the book in 1937–38. In dealing with repetition of the motive, the published text reads:

A motive is used by repetition. The repetition may be exact, modified or developed.

Exact repetitions preserve all features and relationships. Transpositions to a different degree, inversions, retrogrades, diminutions and augmentations are exact repetitions if they preserve strictly the features and note relations (Ex. 14).

Modified repetitions are created through variation. They provide variety and produce new material (motive-forms) for subsequent use.

Some variations, however, are merely local “variants” and have little or no influence on the continuation.

Variation, it must be remembered, is repetition in which some features are changed and the rest preserved.¹⁹

Reading this passage, we might ask whether he is describing two or three kinds of repetition? We could conclude that there are two: exact, on the one hand, and modified *or* developed, on the other. Certainly, the descriptions that follow suggest that, with explanations provided for “exact repetitions,” in the first instance, and “modified repetitions” in the second. But the grammar, “The repetition may be exact, modified or developed,” suggests three kinds of repetition: exact, modified, *and* developed. Tracing this passage back through the various drafts, we learn that he had in mind not two but three kinds of repetition: exact, modified, *and* developed. The unintended confusion arises because of the copyist's mistake: specifically, an omission in the typing up of the final draft in 1965 resulted in the description for “developed” repetitions being given for “modified” repetitions (Example 2).²⁰

Treatment and Utilization of the Motive

A motive is used by repetition. ^{The} repetition may be ^{tone} exact, modified or developed.

Exact repetitions ^{preserve all features and relationships.} are duplicated in the same or another octave, without any change. Transpositions to ^{a different} another degree, inversions, retrogrades, diminutions, and augmentations are exact repetitions, ^{if} because they preserve strictly the features

and ^{note} ~~tone~~ relations (Ex. 14). 10

Modified repetitions are those in which only minor features are changed, ^{usually as} with no other purpose than ^{adaptations} melodic ^{accommodation} to a change of the harmonic basis. The rhythm is seldom changed ^(Ex. 35 and 38) (see Exs. 35 and 38, p. xx).

Developed repetitions are created through variation. They provide variety, and produce new material (motive-forms) for subsequent ^{use.} structures.

Treatment and Utilization of the Motive

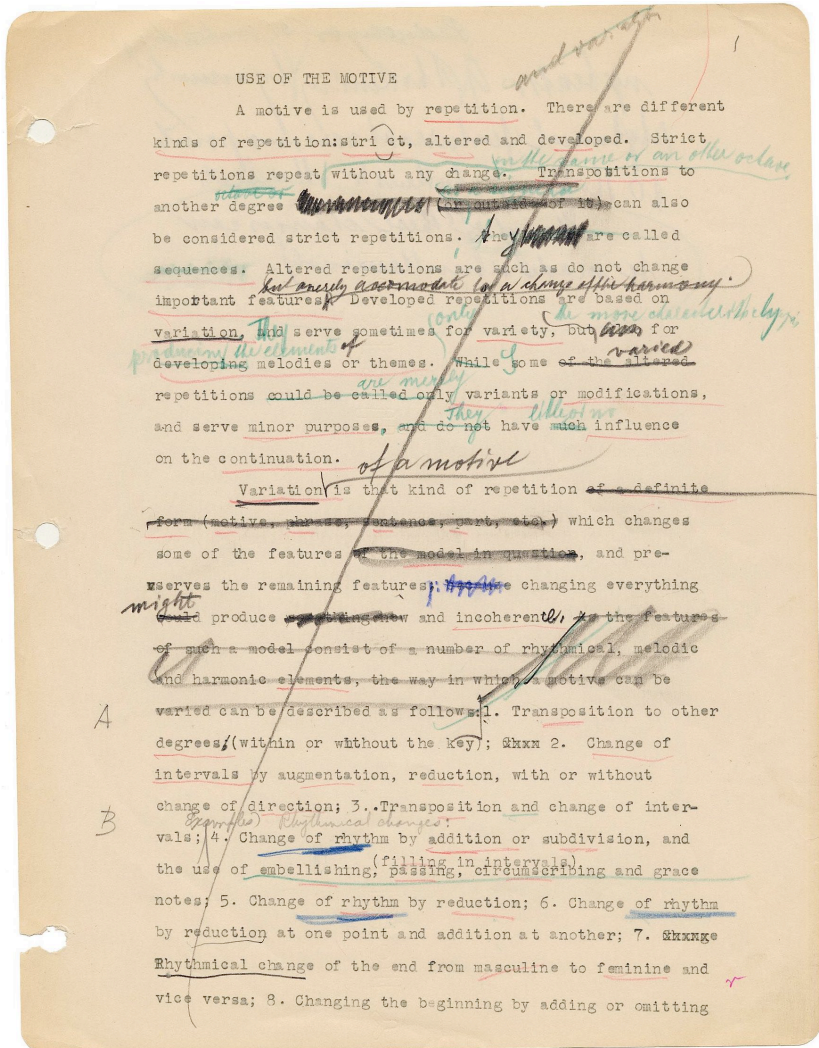
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Modified repetitions are created through variation. They provide variety, and produce new material (motive-forms) for subsequent use.

EXAMPLE 2: FMC TYPESCRIPTS FOR DRAFTS 5 AND 6

When the original text is restored, we observe three kinds of repetition. Draft 1, page 1 (Example 3), begins: "A motive is used by repetition. There are different kinds of repetition: strict, altered and developed." ²¹ Following a description of each, he lists the ways in which



EXAMPLE 3: FMC DRAFT 1, PAGE 1

variation, which he considers a “kind of repetition,” can apply to the different parameters: “A” in the left-hand margin refers to the points pertaining to interval, “B” to rhythm, and, on the following page (not shown), “C” to harmony. All the changes, whether intervallic, rhythmic or harmonic, are applied to the opening of Beethoven’s String Quartet, Op. 18, No. 1, and in the accompanying examples (one of which is reproduced in Example 4), Schoenberg and Strang provide a systematic account of the manifold ways in which intervallic, rhythmic, and harmonic variation can occur.²²

Draft 2 follows draft 1 in describing the three kinds of repetition as “strict,” “altered,” and “developed.” In preparation for draft 3, these are revised to “exact,” “modified,” and “developed,” as shown in Example 5.²³ Schoenberg is careful to distinguish between “variants” (or “modifications”), on the one hand, and “developed repetitions,” on the other. “Variants” are the product of “altered” or “modified” repetition,²⁴ while “developed” repetition relies on the generation of “new” material. This distinction is one that preoccupied him over twenty years earlier when writing on coherence. There he wrote of “two kinds of varying a motive,” differentiating between changes that serve an “ornamental purpose” and those that “proceed . . . toward the goal of allowing new ideas to arise.”²⁵ Example 6 shows how Schoenberg’s comments of 1917 are consistent with those made in the drafts for *FMC*: “ornamental” varying corresponds to “modified repetitions,” while the description for “developing variation” matches that for “developed repetitions.”²⁶

In both texts, Schoenberg is documenting the changes that can be wrought on the motive: what were expressed as “kinds of varying” [*Arten von Variierung*] in the earlier text are recast in *FMC* as “kinds of repetition.” This is not surprising, since variation is understood as a “kind of repetition”: “Variation of a motive is that kind of repetition which changes some of the features and preserves the remaining features; changing everything might produce incoherence.”²⁷ That desire to understand variation in the context of repetition is also apparent in 1917, when he writes of the motive that can be repeated “exactly” [*genau*] or “inexactly” [*ungenau*]: he lists the various kinds of exact repetition, arranging them by subcategory (intervallic and rhythmic), and concludes the inexact repetitions with “developing variations” [*entwickelnde Variationen*].²⁸ In doing so, he has construed developing variation(s) as repetition—as an “inexact” repetition in 1917 and as “developed repetitions” in *FMC*.

1. Transposing to other degrees.

2. Changing intervals.

3. Transposing + changing intervals.

4. Changing sh. by addition.

5. By reduction.

5 missing - 7 on back of 1

The manuscript is a page of handwritten musical notation on aged paper. It contains five numbered examples of musical transformations, each with one or more staves of music. Example 1 is titled 'Transposing to other degrees' and shows a single staff with arrows indicating transposition. Example 2, 'Changing intervals', shows two staves with arrows indicating interval changes. Example 3, 'Transposing + changing intervals', shows one staff with arrows. Example 4, 'Changing sh. by addition', shows three staves with various annotations including letters and dynamic markings like 'ff'. Example 5, 'By reduction', shows one staff with annotations. At the bottom of the page, there is a note: '5 missing - 7 on back of 1'. A circled number '7' is in the top right corner.

EXAMPLE 4: VARYING THE OPENING OF BEETHOVEN'S STRING QUARTET, OP. 18, NO. 1

TREATMENT AND UTILIZATION OF THE MOTIVE

A motive is used by repetition. There are different kinds of repetition: ^{exact, modified} strict, altered and developed.

~~Strict~~ ^{exact} repetitions repeat, ~~without~~ ^{if} in the same or another octave, without any ~~a~~ change.

Transpositions to another degree can also be considered ~~strict~~ ^{are strict} repetitions; they are called sequences. ~~Altered~~ ^{Modified} repetitions are such as do not

change ~~in~~ ^{preserving the rhythm} important features, but merely accommodate to change of the harmony. ~~Developed~~ ^{often} repetitions are based on variation.

They serve sometimes only for variety, but more characteristically for producing ^{new material, for} the elements of melodies or themes.

Some varied repetitions ^{however} are merely "variants" ~~or modifications~~, and serve minor purposes. ^{and} They have little or no influence on the continuation.

mention and
analyse ex 23a b
as prominent

inversion
retrograde
dim.
augm.

Zusammenhang (Coherence, 1917)

One can distinguish **two kinds of varying** [*Arten von Variierung*] a motive.

With the first, usually the changes [*Veränderungen*] virtually seem to have nothing more than an **ornamental** [*ornamental*] purpose; they appear in order to create variety and often disappear without a trace. (seldom without the second method!!)

The second can be termed **developing variation** [*entwickelnde Variation*]. The changes proceed more or less directly toward the goal of allowing new ideas to arise.

EMC draft 2 (1939), plus annotations

TREATMENT & UTILIZATION OF THE MOTIVE

A motive is used by repetition. There are different kinds of repetition: **strict exact**, **altered modified** and **developed**.

Strict Exact repetitions repeat, in the same or another octave, without any change. *If* transpositions to another degree ~~can also be considered strict~~ *are strict* repetitions: they are called sequences.
inversion | retrograde | dim. | augm

Altered Modified repetitions are such as do not change important features, but merely accommodate to change of the harmony *preserving the rhythms*.

Some varied repetitions *however* are merely “variants,” ~~or modifications,~~ ~~and~~ serve minor purposes *and* ~~They~~ have little or no influence on the continuation.

Developed repetitions are based on variation. They serve sometimes only for variety, but more characteristically for producing ~~the elements of~~ new material for melodies or themes.

EXAMPLE 6: TABULAR COMPARISON OF *ZUSAMMENHANG* AND *EMC*

What Schoenberg has constructed, then, is a continuum. The three kinds of repetition documented in *FMC*—exact, modified, and developed—are not to be understood as discrete, hermetically sealed categories; instead, they are points along a continuum. That he recognizes the fluidity between them is apparent from the revisions and annotations made to draft 2 of *FMC* (see Example 5). Whereas the typescript refers to “exact” repetitions, the handwritten edits differentiate between “exact” and “strict”: the former depicts a repetition that is identical, “without any change,” apart from the octave transposition, whereas transposition to another degree—a sequence—is labeled “strict” but not “exact.”²⁹ He makes a similar edit for the next kind of repetition, replacing “altered” with “modified,”³⁰ and while “altered” depicts a greater degree of change than “modified,” which presumes that the change is not thoroughgoing, the edit in this case does not result in the distinction as it did between “exact” and “strict.”³¹ The marginal annotation referring to inversion, retrograde, diminution, and augmentation suggests that they, along with sequences, are to be understood as examples of the first kind of repetition, something reflected in subsequent drafts and in the final version of *FMC*: “*Exact repetitions* preserve all features and relationships. Transpositions to a different degree, inversions, retrogrades, diminutions and augmentations are exact repetitions if they preserve strictly the features and note relations.” This is not to say that “exact” is an absolute or rigid category, for Schoenberg construed inversion, retrograde, augmentation, and diminution as “an intermediate thing [*Mittelding*] between simple [*einfacher*] repetition (which they are in principle) and variation (which they are in effect),”³² while identifying sequences as “an intermediate form [*Mittelform*] of repetitions,” as “faithful [*getreue*] repetitions on a different scale degree.”³³

In commenting on these “intermediate” forms, Schoenberg calls attention to repetition that can be described as “simple” [*einfach*] or as “faithful” (or “true”) [*getreu*]. While he equated “simple, completely unchanged [and] faithful repetition” [*die einfache, vollkommen unveränderte, getreue Wiederholung*],³⁴ he recognized “exact repetition [*genaue Wiederholung*] as an effective artistic form,”³⁵ opting initially in the manuscript of that essay (1931) for the word “literal” [*wörtlich*] and then “faithful” (or “true”) [*getreu*] before settling on the adjectival “exact” [*genau*].³⁶ These descriptors, together with the distinction between “exact” and “strict” outlined above, provide a context for understanding the repetition of the two-measure unit in the construction of the theme, as sketched in draft 1 of *FMC*:

If the half sentence is divided in two parts:

The two parts are of the same length (2 plus 2) and may behave follows:

1. The second part is an unchanged rep[etition] in the same or another octave.
2. The repetition is done on the same harmony using other tones of the chords.
3. A true repetition is based on a different harmony.
4. The harmony is changed in one of the ways shown in connection with phrases (I—V; V—I etc.) and the melody accommodates itself to the harmony.
5. The second two bars bring a more or less varied or developed form, including a change of the harmony.³⁷

Points 1 through 3 can be understood as “exact repetitions,” as they are defined in the published *FMC*, but given the distinction drawn between “exact” and “strict,” the categories could be refined as follows: point 1, “an unchanged repetition,” is “exact”; point 3, perhaps more clearly expressed as “a faithful repetition, based on a different harmony” (altering the translation of *getreu*), is a sequence, an example of “strict” repetition; and point 2 lies somewhere between “exact” and “strict.” Point 4 clearly corresponds to “modified repetitions” (the melody accommodates to the harmony), while the repetition that is documented in point 5 encompasses both modified and developed forms, moving toward the latter.

Both modified and developed repetitions are premised on variation, a process that entails change (Schoenberg approved of the statement in his philosophical dictionary that “development is continual change”),³⁸ though the extent and nature of that change must be judicious:

Variation means change, but change of every feature would not preserve the basic form, but produce something incoherent, foreign, illogical. Accordingly, variation will change some of the features, but preserve others. It will change the less important features, and preserve the more important ones.³⁹

That precept informs the treatment of the motive, phrase, or any repeated unit, determining whether something is “modified” or “developed.” He highlights these differences in *FMC*, amplifying the points he had made in 1917. Whereas the changes in the developed category create “consequences,” those in modified repetitions are “of a subordinate meaning” (“~~Altered~~ Modified repetitions are such as do not change important features”).⁴⁰ They serve “an ornamental purpose” (1917) and are classified as “variants”:

Repetitions in which only very little is varied, are variants.⁴¹

Generally variation produces consequences, and so far one can call homophonic composition the style of “developing variations.” But there appear also changes of a subordinate meaning, without special consequences, which have only the local effect of an embellishment. Such changes had better be called “variants.”⁴²

The changes, however extensive, operate in the context of repetition. The question is whether they are applied to features deemed “more important” or “less important.”

In contemplating how the listener might discern repetition in its manifold guises, Schoenberg enumerates not just kinds of repetition but also degrees of emphasis, criteria for which include the number, significance, and conspicuousness of what is repeated:

One can distinguish between:

1. Ideas that have many and significant [*bedeutende*] common features, which are conspicuously [*auffällig*] presented.
2. Ideas that have few but significant common features, which are conspicuously presented.
3. Those having numerous, partly significant, partly insignificant [*unbedeutende*] common features, which are conspicuously presented.
4. Those that have many but insignificant common features, which are conspicuously presented.
5. Those that have few and insignificant common features, which are conspicuously presented.
- 6.7.8.9.10. The same ideas, but in an inconspicuous [*unauffälliger*] presentation of what they have in common.⁴³

Given the proviso that “two ideas cohere if one of them contains a part of the other” and that “the coherence is stronger . . . the more important [*wichtigere*] (more essential) [*(wesentlichere)*] the parts that are held in common [and] the more and possibly essential parts that are held in common,”⁴⁴ we could conclude that this list documents “degrees of coherence” [*Die Grade des Zusammenhanges*], to which he alludes in his “Notes for coherence” in 1917.⁴⁵ “Comprehensibility” [*Fasslichkeit*], he tells us, “depends on the degree [*Grade*] to which the essential [*wesentlich*] or inessential common features are conspicuously [*auffällig*] or inconspicuously used or worked out.”⁴⁶ Though he offers no examples to accompany this list (or these observations), we can attend to his choice of words: common features are designated important [*wichtig*] (or unimportant), essential [*wesentlich*] (or inessential), and significant [*bedeutend*] (or insignificant), and described both by their number and the extent to which they are rendered conspicuous [*auffällig*] or striking (since *auffallen* means to stand out or attract attention).

Schoenberg's language thus draws attention to the gradations that exist between repetitions that are exact or inexact. We find in his German writings a host of terms depicting the resulting repetition—*Variante* (variant), *Veränderung* (change), *Variation* (variation), *Umgestalten* (reshaping), *Umformung* (re-forming), *Verwandlung* (transformation), *Neubildung* (new formation), and even *Gegensatz* (contrast).⁴⁷ The degree of change is captured as *wenig verändert* (slightly changed), *wenig variiert* (slightly varied), *reicher variiert* (richly varied), and *weitgehend variiert* (extensively varied) as well as *weitgehende Variation* (extensive or far-reaching variation) and *weitgehende Veränderungen* (extensive or far-reaching changes),⁴⁸ expressions for which Schoenberg provides his own translations in the earliest drafts for *FMC*.

The indices for drafts 1 and 2, transcribed in Examples 7a and 7b, reveal the keywords that Schoenberg associated with repetition(s) and, in the case of draft 1, variation.⁴⁹ In draft 1, repetition is “partial,” “unchanged,” or “true”; and “strict,” “altered,” and “developed” are listed as “kinds of” repetition. Draft 2 is more detailed, referencing not only the kinds of repetition but also the different parts that are repeated (the subentries include: “of basic motive,” “of basic features of the dux,” “of the half-sentence,” “of sections”), reminding us that repetition takes place at a variety of levels, both small and large. It also calls attention to the extent to which something is repeated (see the subentries: “amount of variation in,” “unvaried,” “slightly varied,” “partial,” “variation of unvaried”). Likewise, in the “Variation” entry, Schoenberg documents the “degree (or amount) of [variation],” providing English equivalents for *wenig*, *reich*, and *weitgehend*: “lesser varied” or “slight,” on the one hand, and “far reaching,” “far leading,” and “more developed,” on the other.

Repetition

- partial
- unchanged
- kinds of
 - strict
 - altered
 - developed
- unifying effect of the
- of the motive of accompaniment
- of chords (degrees)
- disturbing
- true
- different ways of

Variation

- of the motive
 - lesser varied (motive) forms
 - far reaching, far leading
- of the harmony
- degree (or amount) of
 - a) lesser (slight)
 - b) more developed (far-reaching)
- developing of the harmony
 - rhythm
 - interval

Variant (modification)

- harmonic

EXAMPLE 7A: *FMC* DRAFT 1,
“REPETITION,” “VARIATION,” AND “VARIANT” INDEX ENTRIES

Repetition(s)

- partial
- general meaning of
- simple
- kinds of
- variation of unvaried
- transposition of
- of parts
- of sections
- continuous, of basic motive
- amount of variation in
- slightly varied
- of basic features of the dux
- unvaried
- of the half-sentence
- causality effective between r[epetition] and intelligibility
- raising danger of monotony
- of segment of beginning phrase
- of motive
- of rhythm
- hidden by remote variation
- of one rhythmical figure
- sequence-like
- sequential

The overlap between the entries for “Repetition(s)” and “Variation” reflects the fact that variation is a “kind of” or “form of repetition”:

Variation is that kind of repetition of a definite form (motive, phrase, sentence, part, etc.).⁵⁰

Variation, therefore, is that form of repetition in which a number of the constituents are repeated without change [*unverändert wiederholt*], while a number of others are omitted and possibly replaced by different components.⁵¹

To recognize a variation, we must recognize the repetition: it is only in the context of the repetition that the varied, the altered, or the changed can be recognized: “variation . . . must allow the unchanged, the repeated, to be recognized in the changed.”⁵² In writing about what is changed [*Veränderte*] or unchanged [*Unveränderte*], Schoenberg plays on words related to *verändern* (to change): “Changing [*Verändern*] thus means repeating, but repeating only in part.”⁵³ Crucially, he draws a distinction between a change [*eine Veränderung*] and something that is different [*ein Anderes*], and in so doing, underscores the fact that changing—and variation—is based on repetition: “In a change, that which is to be changed is partially contained, otherwise it would be something different and not a change.”⁵⁴ (We could of course substitute the word “alter” and its related words—altered, unaltered, alteration—for “change.”)

Just as variation is underpinned by repetition, so too is contrast. For Schoenberg conceives of contrast [*Gegensatz*] as the counterpart to coherence [*Zusammenhang*]:

Coherence comes into being when parts that are partly alike, partly unlike, are connected in such a way that those parts that are alike stand out.

Contrast (richer in relationships) is likewise based on coherence insofar as the same parts as mentioned above are connected, but so that the unlike parts predominantly attract attention.⁵⁵

By contraposing coherence and contrast, he underlines their kinship: both feature parts that are alike [*gleich*] and unlike [*ungleich*]. The alike parts that are emphasized in coherence are de-emphasized in contrast, where the unlike parts appear more conspicuous (the verb Schoenberg uses is *auffallen*, related to *auffällig/unauffällig*). If contrast abounds in relationships, it is necessarily grounded in coherence, a point he makes unambiguously in *FMC* (draft 2) when describing the contrasting middle section of a ternary form:

The accent here lies on contrast.

Contrast is based on coherence. Without coherence it would be only “difference,” difference as between music and, for instance, forestry or agriculture or any other object foreign to music.⁵⁶

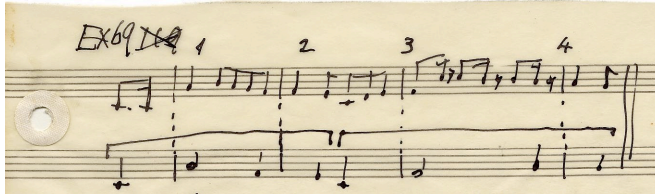
Editing the draft by hand, Schoenberg alters this slightly. The expression in all subsequent drafts of *FMC*, including the published version, reads: “Contrast presupposes coherence.”⁵⁷

To understand what Schoenberg means by contrast, we could imagine a normative eight-measure theme, where mm. 3–4 are deemed a “modified repetition” in the sentence but “a coherent contrast” with “more remote (contrasting) motive-forms” in the period.⁵⁸ Caplin characterizes the relationship between the opening two-measure units in the period in terms of “basic idea” and “contrasting idea.” “Contrasting” here, we are told, means “the sense of its being ‘*not-a-repetition*,’” since it “introduces motives *distinctly different* from those of the basic idea.”⁵⁹ For Schoenberg, however, the motive-forms in mm. 3–4 are “varied more extensively,” and understood as “more far-reaching varied motive-forms,” “more remotely varied motive-forms,” and finally as “more remote (contrasting) motive-forms” (Example 8).⁶⁰ In an example not published in *FMC*, he draws attention to the underlying coherence in the opening measures of Beethoven’s Op. 2, No. 1, ii (Example 9):

Comparing meas. 3/4 with the initial phrase 1/2, the student will at first see no connection. But . . . in the lower stave, the melody is reduced to the basic facts and shows in how far 3/4 is a variation of 1/2.⁶¹

	mm. 1–2	mm. 3–4
Caplin	“basic idea”	<p>“contrasting idea”</p> <p>“the sense of its being ‘not-a-repetition’”</p> <p>“introduces motives distinctly different from those of the basic idea”</p>
Schoenberg	“phrase”	<p>“a coherent contrast”</p> <p>“varied more extensively”</p> <p>“more far-reaching varied motive-forms”</p> <p>“more remotely varied motive-forms”</p> <p>“more remote (contrasting) motive-forms”</p>

EXAMPLE 8: RELATIONSHIP BETWEEN MM. 1–2 AND 3–4
IN THE ANTECEDENT OF THE PERIOD



4th meas. on \mathbb{V} . Comparing meas. $\frac{3}{4}$ ~~xxxxxx~~ with the initial phrase $\frac{1}{2}$, the student will at first see no connection. But, in Ex. 119, in the lower staff, the melody is reduced to basic facts and shows in how far $\frac{3}{4}$ is a variation of $\frac{1}{2}$. Although ~~xxxxxxx~~ the feminine

EXAMPLES 9: SCHOENBERG'S ANALYSIS OF
BEETHOVEN'S OP. 2, NO. 1, II, MM. 1-4

In its demonstration of how mm. 3-4 are derived from mm. 1-2, Schoenberg emphasizes that contrast is predicated not on difference but rather on coherence, albeit one that is “veiled.”⁶²

The range of terms and descriptors in Schoenberg's writings reflects a desire to capture the manifold expressions of repetition. Not confined to the theoretical realm, the gradations informed how he taught, both in Europe and in the United States. Strang's list from 1935 (“Construction of Themes” class at University of Southern California) is one such example, charting the progression from “exact” or “real repetition” through to “changed repetition” which includes “sequence[s]” and “varied forms” such as “local variations” and “developing variations” (Example 10a).⁶³ A similar list, this time describing imitations, appears in Strang's classroom notes of 1936 (Counterpoint II [122A] at University of California, Los Angeles): Schoenberg evidently discussed “degrees of repetition,” categorizing them as “strict” or “less strict” (Example 10b), a list corresponding closely to that in his counterpoint textbook where imitations are described as (a) strict, (b) semi-strict, (c) free, (d) in augmentation, (e) in diminution, and (f) inverted.⁶⁴ Strang's notes bear witness to the fact that Schoenberg sought to impart to his students the principles that we find in his writings: for example, when teaching three-part song form as part of the Elementary Composition class (108A, 1936 summer session at USC), he explained the middle part as a “contrast (different but related),” while in the Construction of Themes class, he encouraged students to differentiate between a variant and a variation, a “variant,” Strang records, “has only local value.”

12/3/35

<u>Repetition</u>	1. Exact Real rep.	Perfect Those which change no essential. (Change of register, of subordinate parts)
	2. Changed rep.	
	a. Sequence: at another pitch.	1. All parts transposed (including har) 2. Chief parts transposed (harmony varied) 3. Fugato
	b. Varied forms	1. Local variations { Same notes, different har. 2. Developing variation

EXAMPLE 10A: STRANG'S CLASSROOM NOTES,
CONSTRUCTION OF THEMES, USC

11/6/36Imitations: First step toward motive work

Ultimate aim (in Fugue) to write work entirely motival, thematic

"Imitation" superficial term referring to effect (that successive parts begin alike)

A repetition (one type). Hence, important, since rep. is basis of musical structure.

<u>Degrees of Rep.:</u>	<u>Strict</u>	Exact Octave Same intervals on other tone (often impossible without accidental)
	<u>Less strict</u>	Intervals repeated (according to names only) +3,-3; +2,-2, etc. interchangeable
	Strict or Less strict	{ Augmentation, diminution Inversions Combined forms

EXAMPLE 10B: STRANG'S CLASSROOM NOTES, COUNTERPOINT II, UCLA

Olga Novakovic, ca. 1920
(Schoenberg's annotations given in italics)

Warren Langlie, 1947

IV. Transformationen des Themas

1. regelmäßige a) nach den Gesetzen
b) Umkehr., Krebs u. dgl.
c) Vergrößer. Verkleiner.
2. unregelmäßige a) nach d. Interv. durch den doppelt.
Kontrp. sich ergebende
b) Paralleltonarttranspos.
c) sonst Verschiedenh. in d.
Interv. u. zw. Freiheiten od.
Variationen.

IV Transformations of the theme

- (1) regularly
- (a) according to the rules, such as 5-1 and 1-5
(b) inv. and retro.
(c) aug. dim. Mirror forms
- (2) irregularly
- (a) size of the intervals (such as, minor 3rd for a major, sometimes accidentals)
(b) transposition to the relative major and minor
(c) other differences of the intervals and licences, or variation

VI. Material u. Bau d. Nebenstimmen bei den Themeneinsätzen

Vorfrage: Geht dieses Material irgendwie aus den Themen od. deren Umkehrungen zuvor? (Hier ist niemals nein zu sagen, sondern höchstens die Frage als unaufgeklärt anzuseh'n.

VI Material [and] the construction of subordinate voices (its derivation).

Does it derive in any manner from the theme or its inversion (you should never say "no," but consider rather the problem as unresolved.)

Verhältnis zu den Themen, resp. Motiven
1. Verwendung der Motivinhalte

- a) als genaue und sehr ähnliche
- b) als ungenaue u. wenig ähnliche
- c) als Varianten*
Modifikationen**
Transformationen*** (Umbildungen)
- d) als Variationen****
- e) [als] freie od. unaufklärbare Gestalten

*Verzierungen u. Verbindungstöne; kl. Zusätze u. Vereinfachungen im ganzen ohne Bedeutung

** sind Anpassungen d. Gestalten zu momentanen Zwecken
Abwechslung

*** sind ~~Modifikationen~~ *Änderungen* u. Varianten von bleibenderer Gestalt z.B. Antwortform

**** arbeiten Eigentümlichkeiten des Thema's aus, werden insbesondere als solche bezeichnet, wenn sich etwas neues aus ihnen entwickelt

How is it related to the theme:

(1) use of the contents of the motives (this is a good word, for the motive itself might not be recognizable—ornamented, circumscribed)

- (a) exact
- (b) inexact, little similarity
- (c) variants (this means ornamentation and connecting tones—passing notes, free suspension—little addition and simplification without more than local significance.)

Modifications (these are adaptations [of] configurations for temporary purposes.)

transformations (changes and variants for permanent purposes, as for instance dux forms and comes forms)

(d) variations (elaborat[e] particularities of the themes, and are to be considered as variations if something new grows out of them.)

(e) free, or inexplicable

More revealing still is an outline for studying fugue that Schoenberg used in his teaching both in Vienna and Los Angeles. Found in his copy of *The Art of Fugue*, the outline shown in Example 11, dating from *ca.* 1920, is in the hand of Olga Novakovic and contains Schoenberg's annotations.⁶⁵ Warren Langlie's notes reveal that Schoenberg returned to it in his private teaching in Los Angeles in 1947: according to Langlie, "[Schoenberg] went in his library to get a Bach work [and] he found in it a[n] outline he had made for a class of his in Europe for the study of the Art of the Fugue."⁶⁶ It would appear that Schoenberg and Langlie read through the document together, Schoenberg expanding on some of the parenthetical comments, and that Langlie transcribed the outline in English translation. Relevant for the present discussion are points 4 and 6 (of a total 8) of the outline, and Example 11 juxtaposes transcriptions of these passages from Novokovic's handwritten document and Langlie's typewritten text.⁶⁷ In point 4, the transformations of the theme can be regular or irregular, the former embracing so-called mirror forms (an expression that appears in Langlie) of inversion, retrograde, augmentation and diminution. Point 6 concerns the material and construction of the subordinate voices and how they relate to the theme in terms of motivic content (Langlie writes "material of the construction" but the German original states "material and construction"). However familiar the categories (exact, inexact, variants, variations), the gradations are instructive, especially in (c), where variants, modifications, and transformations (and reshufflings [*Umbildungen*]) are particularized to capture the degree of change: variants result from ornamentation and connecting tones; modifications from adaptations; and changes (not modifications; see Schoenberg's correction of Novakovic's text) of the kind that characterizes the relationship between *dux* and *comes* arise from transformations. Variations, in (d), are distinguished by the growth—or development (the verb in Novakovic's key is *entwickeln*)—of something new.

Not surprisingly, this thinking informs the writings of the Viennese School. The so-called "principle of repetition" [*das Prinzip der Wiederholung*] is emphasized in the writings of Webern, Erwin Ratz, and Josef Rufer, to mention just a few.⁶⁸ Ratz, in his preface to the analysis of Bach's inventions, emphasized "the principle of repetition (literal and varied repetition, sequence, answer)" in the construction of homophonic form, describing the "answer" [*Beantwortung*] as the repetition of an idea that responds to I to V with V to I, something he deems as "a higher form of repetition."⁶⁹ The terminological overlap with fugue is deliberate: in his lectures on form, Webern designated as

the *Beantwortung* both the relationship between antecedent and consequent in the period and that between the opening two-measure unit and its repetition in the sentence, indicating in both cases that the model is the fugue.⁷⁰ Schoenberg cited the same example, as Strang's notes from 1936 reveal:

Op. 2 #3 - C [major] Allegro = har. relation: I V | V I. Meaning: same material in another manner (or on another degree). Here complimentary [*sic*]. This type of answer, perhaps, corresponds to fugue entries.⁷¹

When Schoenberg refers to the answering repetition as *dux* and *comes* (tonic form and dominant form), as he does in *FMC*,⁷² he underscores the fact that the same principles underlie homophonic and contrapuntal forms.

The writings of the School reinforce the conception of repetition as that which underpins variation, development, and even contrast: Webern proclaimed “development” as “a kind of repetition,”⁷³ while Erwin Stein wrote that “there is no identical repetition in music (or, for that matter, anywhere); everywhere repetition is, in some way, a variation,” something that “implies two complementary principles: repetition and contrast.”⁷⁴ He referenced the “antithesis” as that which “contains similar and diverse elements,”⁷⁵ just as Rufer called attention to (what is translated as) the “connected antithesis” [*der “zusammenhangsvolle Gegensatz”*]: “Connected, because they are derived from [the main idea] and from its basic shape; antithesis, because they introduce new shapes or characters which are contrasted with it.”⁷⁶ That Rufer regarded it as one of the central tenets is clear from the descriptions he assigns to the different sections of his chapter, “The Antecedents of Twelve-Note Music in the Compositional Technique of Classical and Pre-Classical (Polyphonic) Music”:

The principle of repetition and the principle of variation as a means of creating shape and form—The “connected antithesis” [*Der “zusammenhangsvolle Gegensatz”*]⁷⁷

Although Rufer's comments date from 1952 (the date of the first edition), they correspond with those of his teacher: *zusammenhangsvolle Gegensatz* reminds us that “contrast presupposes coherence” (*FMC*) and it suggests a closer relationship still to Schoenberg's comments of 1917: “Contrast (richer in relationships) is likewise based on coherence” [*Gegensatz (beziehungsvoller) beruht ebenfalls auf Zusammenhang*].

However clumsy, it is perhaps helpful to think of Rufer's "connected antithesis" as a "coherence-full contrast," thereby enabling us to make connections within and across a wide range of texts.

The ability to discern a repetition, and to recognize the degree of change, was a skill Schoenberg encouraged the student of composition to acquire through close and careful analysis. That task is premised on understanding [*verstehen*]:

Understanding = Recognition of Similarity

To understand a thing, it is necessary to recognize that in many (or, if possible, in all) of its parts, it may be similar or even identical to things or parts that are familiar.⁷⁸

The recognition of similarity is in turn based on the "the capacity of memory":⁷⁹

The comprehension of music is obstructed through the difficulty to keep in mind what has occurred previously and passes so fast, and consequently the danger arises that one fails to seize hold of the coherence between original and derivative forms, between the basic motive or phrase and their variations.⁸⁰

When one truly *seizes hold of* or grasps the interrelationships,⁸¹ the coherence can be felt as well as being audible and visible [*fühlbar, hörbar, sichtbar*]:

it is necessary in basic structures to put together shapes, phrases, half-sentences, and sentences from elements that are only partly alike, yet to shape coherences that can always at the very least be felt [*fühlbar*] but if possible also be audible [*hörbar*] and visible [*sichtbar*]. The process by which this comes about can be traced back ultimately to that form of repetition called variation.⁸²

Acknowledging the different modalities of the sensory experience, Schoenberg considers how the "material object" can be perceived:

just as in the material space the perception of a material object is independent of the situation of such an object. So that you recognize for example a watch, a bottle, a flower, a knife in every position you bring it.⁸³

His marginalia shed further light on the perception of the object. When reading Riemann's *Musik-Lexikon*, he annotates the entry on "imitation" [*Nachahmung (Imitation)*], taking issue with the claim that the listener cannot recognize the crab canon [*Krebscanon*]. Schoenberg responds with a marginal note: "the listener does not recognize the tone succession as such but he feels the coherence [*er fühlt den Zusammenhang*] and thus also recognizes it in a way."⁸⁴ For Schoenberg, retrograde and inversion represent "the retention of the same sequence but seen from a different point of view," whether from the "front, the back, above, or below."⁸⁵ This notion of a "mirror image" [*Spiegelbild*], where "the mirror is held horizontally one time, vertically, another,"⁸⁶ was something he invoked in his early writings. By the 1930s, however, he seemed to be thinking about mirrors more broadly, using a range of expressions to depict the relationship, as evidenced in the 1934 *Gedanke* manuscript: "mirror(ing) methods" [*Spiegelmethoden*], "mirror forms" [*Spiegelformen*], "mirror principles" [*Spiegelprinzipien*], and "symmetrical (or mirror) transformations [*die sym[metrischen (oder Spiegel)-Umbildungen*]."⁸⁷ What is more, the expressions refer to relationships that exist in an array of contexts, whether contrapuntal or homophonic, and tonal or post-tonal.

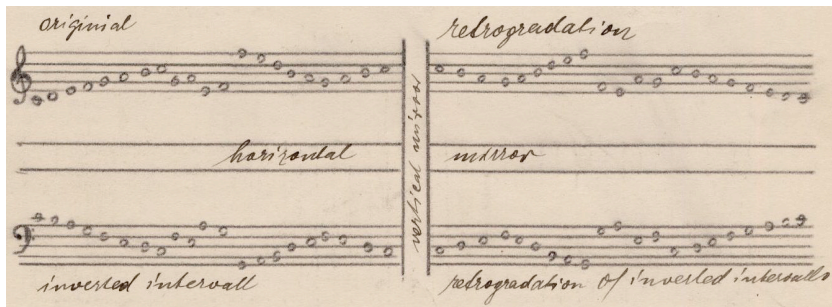
In the 1932 lecture on his Op. 22 songs, Schoenberg spoke of "shapes" [*Gestalten*] that are "situated as in a cabinet of mirrors [*Spiegelkabinett*] and can continually be seen simultaneously from all sides and display relationships in all directions."⁸⁸ Whereas that passage pertains to the repetition and transformation of the motive (in this case, from his second orchestral song), his comments in the 1931 lecture on the Orchestral Variations refer to "mirror forms" [*Spiegelformen*] of the twelve-tone row,⁸⁹ something he reiterated in his "Composition with Twelve Tones" essay ("the basic set is used in mirror forms")⁹⁰ and that was intimately bound up with his perception of musical space:

The employment of inversions and retrograde forms is justified by the principle of the absolute perception of the musical space. According to that it is explained why the musical intellect is able to recognize each of these forms as identical with the original form.⁹¹

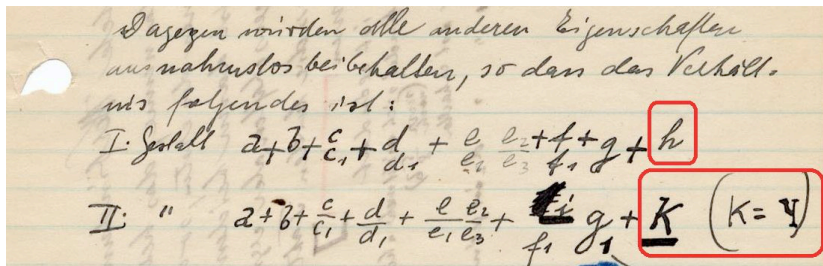
Even though the forms to which he alludes here (in an early version of his twelve-tone lecture) are those of the row or basic set (to use Schoenberg's own label), the musical object should be conceived broadly—as any succession or constellation of tones that is refracted and viewed from multiple perspectives. This conception is neatly

encapsulated in a diagram created in 1936 for his book on counterpoint (Example 12), where the object is reflected across the x and y axes, the “horizontal mirror” yielding the inversion, the “vertical mirror” producing the retrograde (here the retrogradation).⁹²

That Schoenberg conceived of such repetitions in both contrapuntal and homophonic settings is confirmed from the way he expresses the complementary repetition of the opening two-measure unit in Beethoven’s Op. 2, No. 3, i. After cataloging the various characteristics of this *Gestalt* (I. *Gestalt* = mm. 1–2), the harmonic progression is designated by the letter “h” and illustrated in the repetition (II. *Gestalt* = mm. 3–4) by the letter “K”—“K” meaning *Krebs* or retrograde (see Example 13). That is, I–V is answered by V–I, which he explains in the parenthetical note: “K” is equated with an upside-down “h,” a visual representation of his “mirror principle” [*Spiegelprinzip*].



EXAMPLE 12: COUNTERPOINT BOOK, DIAGRAM (1936)



EXAMPLE 13: CATALOG OF CHARACTERISTICS,
BEETHOVEN’S OP. 2, NO. 3, I, MM. 1–2 VS MM. 3–4

Rasch (♩ = ca. 192)

(5)

(ohne ritardando!)

(10)

rit. tempo mp poco rit.

EXAMPLE 14: SCHOENBERG, *SUITE FOR PIANO*, GIGUE, MM. 1–13

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I turn now to one of Schoenberg's compositions—the Gigue from the *Suite für Klavier*, Op. 25—to explore some of the resonances between the theoretical and the musical. The remarks that follow are not intended to be comprehensive: given the Gigue's role as the culmination of the *Suite*, such an analysis would necessarily have to reference the previous movements. What follows, then, is a series of snapshots to illustrate repetition in its different guises.

The most conspicuous elements in m. 1 are the boundary pitches, E and B \flat , picked out by articulation and, subsequently, repetition (see Example 14). They enclose a stream of flexibly grouped eighths, yielding the following sequence: a pair of slurred eighths (interval class 1), a fixed dyad G/D \flat (ic6), a single pitch (on the fourth eighth), three dyads on successive eighths (7, 3, and 9 semitones), and finally a single pitch. Following the re-striking of the B \flat at the beginning of m. 2, this pattern is repeated, preserving the G/D \flat dyad while varying the remaining pitch classes. The boundary pitches suggest m. 2 as an answering repetition of m. 1 (E–B \flat , B \flat –E), the pair forming a phrase. The link between the two measures is emphasized by the extended beam from m. 1 into m. 2.⁹³ The varied repetition of mm. 1–2 in mm. 3–4 is also brought about by the boundary pitches (see Example 15). While m. 3 incorporates slight changes, the pattern is decisively altered in m. 4: on the fourth eighth, the single pitch is replaced with the 9-semitone dyad, and the expected 5 on the fifth eighth gives way to a second 6, A \flat /D, which proceeds semitonally from the fixed G/D \flat . This extra ic6 undermines the unique status of the G/D \flat dyad, disturbs the rhythmic grouping, and with the extended E at the end of the measure, brings about a sense of closure. The concluding F–E in the lowest register—a product of the variation—may be heard as both a complement to the opening E–F and a preparation for the beginning of m. 5.⁹⁴

The succeeding four measures present a varied repetition of mm. 1–4 (seen most clearly in the left hand), the two four-measure groups exhibiting an antecedent-consequent relationship. Measure 5 retains the following characteristics: the E–F from m. 1, now as a struck dyad prefacing the lone F; the 7 dyad (B/F \sharp); and the boundary pitches E



EXAMPLE 15: GIGUE, BOUNDARY PITCHES IN MM. 1–4

and B \flat . Its rhythmic grouping, 3+3+2, is borrowed from its predecessor (m. 4) but displaced by one eighth. The repetitions of m. 5, unlike those of m. 1, are striking for their fidelity to the new model, both in pitch and rhythm: one might call mm. 6, 7 and 8 sequential repetitions of m. 5, the final two by inversion. This time, the two-measure phrases, whose relationship is enhanced by their registral expansion (mm. 5–6) and contraction (mm. 7–8), display complementary boundary pitches rather than mere repetition: E–B \flat is answered, as before, by B \flat –F \flat (=E), but then B \flat –E is answered by E–B \flat , thereby concluding the unit on B \flat rather than E (see Example 16). The right hand, dynamically subservient to the left, presents in ascending triplet eighths a horizontalization of the tritone dyads from m. 4. Replete with repetitions, a characteristic of the boundary pitches, it establishes a figure that becomes increasingly important as the Gigue unfolds (making its final appearance in mm. 71–72). Because of the extra demands this makes on the listener's cognitive capacity, the principal voice in the left hand (marked *ff*) becomes more regular. Measure 9, starting from the same high G as in m. 8, is comprised solely of the triplet pattern from the previous measures but bereft of the characteristic repeated notes, making it the most remote point thus far (although there is a residue of the repeated notes with the retention of the staccato on the third of the triplet eighths). Through its figuration, m. 9 articulates three quarters and serves as a punctuating measure to conclude the theme.

To review: the transparency of the opening allows the characteristics of these measures to impinge upon the listener. While fast, the repetitions in mm. 1–4 enable us to become accustomed to the limited dyadic content, and although we are not registering every detail, certain sonic qualities are sufficiently regular, rhythmically speaking, that we are not fazed when the intervals are inverted. The boundary pitches are initially very blatant, because of the *sforzandi* and repetitions. The dyads, by contrast, are less conspicuous, more subliminal, although consistency of placement and pitch-class content accords the first (ic6) some prominence. The object, in sum, contains a concatenation of properties, some

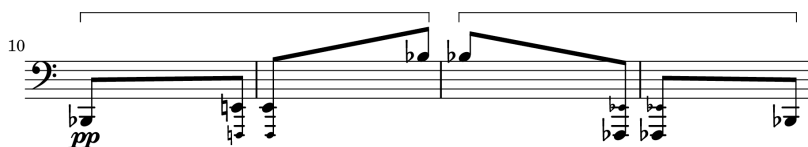


EXAMPLE 16: GIGUE, BOUNDARY PITCHES IN MM. 5–8

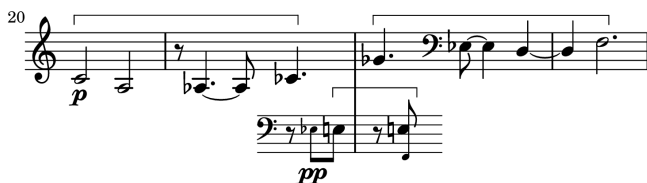
of which are conspicuous—e.g., the boundary pitches—and some less so—e.g., the 7/5 and 9/3 dyads and slurs. As the piece proceeds, we observe that what was conspicuous at the opening becomes less so later and what was initially subliminal becomes more and more striking.

That process begins in mm. 10–13. Although the thematic material is moved out of its home register and the dynamic changed suddenly to *pp*, sufficient elements are retained to maintain a connection with what has been heard, enabling us to recognize it as a repetition. Specifically, the boundary pitches continue to function as a framing device, incorporating aspects of both antecedent (single notes) and consequent (dyads): the result is that while B \flat is rendered clear as a single note marking the beginning, midpoint, and end of the four-measure group, E (or F \flat) is somewhat muddled by being combined within a dyad with F and then E \flat (see Example 17). The registral placement of the repeated B \flat pitch classes—low, high, low—makes for a symmetrical and thus self-contained four-measure group, the juncture between the two two-measure phrases marked for the first time by a rit. The four-measure group is then compressed into two (mm. 14–15) followed by a punctuating unit (m. 16, itself defined by contrary motion and rhythmic consistency), and all three measures are then repeated in a varied manner (mm. 17–19).

The process culminates in mm. 20–23 with the restoration of the four-measure group and the establishment of a new figure drawn from the opening. Note the faint echo of the boundary pitches in the almost hidden repeated Es from m. 21 into m. 22 (see Example 18). Although the repeated-note idea still functions to connect the two-measure phrases (mm. 20–21 and mm. 22–23), it is inconspicuous here. What *is* conspicuous, however, is ic3 which featured subliminally as a dyad in the opening four measures. In mm. 20–21, that ic3 comes to the fore: defined by long notes and marked *piano* as opposed to *pp* of the surrounding voices moving in eighths (not shown in the reduction), a falling C to A in m. 20 is answered by a rising A \flat to C \flat in m. 21. Durational differentiation, eschewed at the opening, enables us to pick out this figure and recognize how contrast has been teased out of



EXAMPLE 17: GIGUE, BOUNDARY PITCHES IN MM. 10–13



EXAMPLE 18: GIGUE, IC3 IN MM. 20–23 (TEXTURE INCOMPLETE)

the initial building block by horizontalizing the 3 dyad. That falling and rising ic3 could also be viewed as a variation of the answering relationship manifested by the boundary pitches in mm. 1–2 (E–B \flat , B \flat –E).

That ic3 also features prominently in the repetition of the four-measure group at mm. 29–32. As in m. 20, it is brought out in m. 29 by the long bass notes (F–D), which are again marked out dynamically (*mp* against the ticking *ppp* eighths) (see Example 19). Instead of answering symmetrically with a rising 3 (as in m. 21), however, E \flat is pushed an octave higher, producing an interval of nine semitones with G \flat and thereby recalling, by horizontalizing, two of the dyads from the opening—3 and 9.⁹⁵ In weakening the symmetrical quality of mm. 20–21, mm. 29–30 are brought back into the orbit of the opening. The linking Es, which were inconspicuous in mm. 20–23, are now conspicuous in mm. 29–32 (marked *forte* and unobscured by other voices), serving as a further reminder of mm. 1–4. In reasserting the characteristics of the initial four-measure group, mm. 29–32 relate more closely to the opening than do mm. 20–23 (something corroborated by the succeeding four measures, as the reintroduction in mm. 33–36 of some but not the full repertoire of characteristics from mm. 1–4 gives rise to a veiled coherence). Any independence gained by the ic3 figure is subtly undermined and the relationship of mm. 20–23 to the opening is revealed as a far-reaching repetition.



EXAMPLE 19: GIGUE, IC3 IN MM. 29–32 (TEXTURE INCOMPLETE)

The repetition that follows mm. 20–23, in mm. 24–25, is carefully conjoined (see Example 20). The beamed eighth notes between the hands in m. 23 reprise the ic5 and ic6 (G–F \sharp) of the triplet figuration, while also preparing the chord that marks the start of the next group at the end of the measure: the C steps up to D \flat and the F \sharp to G, the semitonal movement connecting the chord to the preceding eighths. What follows (mm. 24–25) is a repetition of mm. 5–6, but a violent squashing thereof (the unit now comprises six rather than eight eighths). Instead of having two sets of triplets in the right hand, the content of the first (D \flat , G, D) is verticalized, beginning on the final eighth of m. 23. The left hand, meanwhile, begins with the E–F dyad, as it did in m. 5, though now horizontalized. In the compression that this repetition enacts, m. 6’s material begins not in m. 25 but two eighths earlier, again by verticalizing the melodic triplet (G, D \flat , A \flat) as three chordal eighths and horizontalizing the dyad (B \flat –C \flat [B]). The compression is further emphasized in the right hand by the elision on the downbeat of m. 25 of the third verticalized eighth with the first of the triplets. The repetition also features ic6—in its registral extremes, between the second high E \flat in 24 and the A underneath, and again in 25 between the high A and the E \flat below. Schoenberg is therefore varying what he called the tempo of presentation,⁹⁶ while ensuring that characteristic elements are kept in play.

The image displays two systems of musical notation for a piano piece. The first system covers measures 22 and 23. The right hand (treble clef) features a complex rhythmic pattern with beamed eighth notes and triplets. The left hand (bass clef) has a more rhythmic accompaniment. Dynamics include *f*. The second system covers measures 24 and 25. The right hand continues with complex rhythmic patterns, including triplets and a final triplet in measure 25. The left hand has a more rhythmic accompaniment. Dynamics include *ff*. The piece concludes with a double bar line.

EXAMPLE 20: GIGUE, MM. 22–25

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To conclude this series of analytical snapshots, I turn briefly to a passage from later in the movement—the reprise beginning at m. 43.⁹⁷ Measures 43–44, shown in Example 21, can be understood as a repetition, albeit significantly rewritten (*reicher variiert*), of the consequent. In m. 43, the right hand recalls the material of the left hand in m. 5, repeating the dyads F/E and F \sharp /B, while the melodic C and A from m. 5 are now squeezed together as a dyad, leaving B \flat on its own. Likewise, the ascending triplets in the left hand are drawn from the right hand in m. 5 (the gradual re-emergence of this figure can be traced through m. 28 and m. 39). The second half of m. 43 is similarly organized but with the hands reversed in a style of an invention. The left hand now reproduces what the right hand did but using material from m. 8 rather than m. 6. The boundary pitches are present though not conspicuously so (note E–B \flat in the right hand in the first half of m. 43, and F \flat –B \flat in the left hand in second half of m. 43). Measure 43 is thus composed of two non-contiguous measures—mm. 5 and 8—and represents an even greater compression than that which we observed in mm. 24–25. Here, four $\frac{2}{2}$ measures (mm. 5–8) are compressed into two $\frac{6}{4}$ measures (mm. 43–44), giving rise to an exceedingly quick tempo of presentation and concomitant textural density. Measure 44 completes the reprise of the consequent, reshaping mm. 6 and 7 in a similar fashion.

Their selectivity notwithstanding, these examples illustrate the different kinds of repetition: exact (e.g., how the boundary pitches in mm. 1–2 are repeated in mm. 3–4), modified (e.g., how the intervallic

EXAMPLE 21: GIGUE, MM. 42–45

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succession 7, 3, 9 in mm. 1 and 2 is altered in m. 3 to 5, 9, 3), and developed (e.g., how the new melodic idea, characterized by ic3, emerges in mm. 20–23). They also demonstrate how repetition takes place at different levels: the repetition of the opening constellation of features (m. 1) to build the phrase (mm. 1–2); the repetition of the phrase to form the antecedent (mm. 1–4); and the endless reshaping of that four-measure group which allows the object to be viewed from multiple angles. When we acknowledge the different kinds and levels of repetition, as well as the speed with which they can occur (as a result of compression or condensation, for example), we come closer to understanding Schoenberg's compositional philosophy and have a context for his response to claims that his music is "difficult to understand":

I vary continuously [*ich variiere ununterbrochen*], hardly ever repeat anything unaltered [*unverändert*], jump quickly to the remoter stages of development, and I take for granted that the educated listener is able to discover the intervening stages for himself.⁹⁸

Schoenberg addressed this issue in his writings, in the aptly entitled "Why new melodies are difficult to understand" [*Warum neue Melodien schwerverständlich sein*] of 1913,⁹⁹ as well in "New Music – My Music" [*Neue Musik – Meine Musik*] (ca. 1928–30) where he attributes the difficulty to the following factors:

1. Substantially, I say something only once, i.e. repeat little or nothing.
2. With me, variation almost completely takes the place of repetition.¹⁰⁰

Erwin Stein made a similar point when describing his music ("In Schoenberg's works almost every repetition amounts to a variation; and shapes are regarded as similar which in a different context might appear only remotely related"),¹⁰¹ as did Adolph Weiss, the American composer who studied with Schoenberg in Berlin, when he spoke of the challenge that this posed for analysis:

Well, I found it at first rather difficult to really fall in line with what he had to offer and say, because everything that he did had to be referred . . . to a form of variation of the motive . . . and that was so far reaching that I could not often see the relationship between the variation and the motive.¹⁰²

Schoenberg's aesthetic, then, is not so much one of non-repetition but rather one where repetition always brings some degree of change or variation.¹⁰³

Much of Schoenberg's theorizing is concerned with the interrelationship, and interaction, of repetition and variation, while his pedagogy is concerned with acquiring the ability to recognize—and achieve—the balance between the two. If we survey his writings, we observe that repetition appears alongside its correlate—variation, change, variety. In the *Harmonielehre* of 1911, he speaks of “two impulses” [*Triebe*] that “struggle” within us: “the demand for repetition” and “the need for variety [*Abwechslung*], for change [*Veränderung*], for new stimuli.”¹⁰⁴ Repetition, he tells us later in that book, ensures “coherence, sense, [and] system” [*Zusammenhang, Sinn, System*], whereas variety gives rise to diversity [*Mannigfaltigkeit*].¹⁰⁵ When writing on coherence in 1917, “repetition” and “change (variety)” [*Veränderung (Abwechslung)*] are designated “form-creating principles” [*formbildende Prinzipien*], alongside those of development and contrast.¹⁰⁶ By the time his *Gedanke* project is underway in the 1920s, the broader goal is comprehensibility [*Faßlichkeit*], and “repetition, variation, and contrast” [*Wiederholung, Variation, Gegensatz*] are cited as the “most important devices for satisfying the requirements of comprehensibility and diversity.”¹⁰⁷ Since “contrast presents itself as a modified form of variation,” and since variation “presents itself as a form of repetition,” these principles are united “under the same concept of repetition” [*Begriff der Wiederholung*].¹⁰⁸ In the extended *Gedanke* manuscript of 1934, he likewise acknowledges variation as a “form of repetition,”¹⁰⁹ and in *FMC*, casts it as one of several “kinds of repetition.” What we observe in his writings, then, is a shift toward the unifying concept of repetition as a way of gathering the various principles of form creation.

When repetition encompasses variation (when variation is “a form of repetition”), we can appreciate the spectrum from exact through to the production of the new via “lesser (slight) variations” and “more developed (far-reaching) variations,” to quote from one of his first pages for *FMC*. The array of descriptors, whether in German or English, is not inconsistent but intended to reflect gradations and the degree to which something is altered, be it “near” [*nabe*] or “far” [*fern*], “closely related,” “far-reaching,” “remote,” or even “contrasting.” Thinking about repetition in Schoenbergian terms involves not just tracking the presence or absence of something but rather discerning the extent to which it is rendered noticeable—palpable, audible, visible. His language is concerned with how information is brought to the fore, how characteristics are brought into view, how they come into and out of focus, and how they are rendered conspicuous or even vivid.¹¹⁰

To envision form through the lens of repetition is not to espouse a superficial understanding of musical organization. Its purpose is less about documenting similitude than about providing a basis upon which the differences of degree can be assessed: while repetition is the bedrock, it is the question of degree that differentiates the various repetitions. It is only by interrogating Schoenberg's writings that we can reconstruct his thinking on repetition. In so doing, we acknowledge that he was not so much "resistant to traditional ways" as he was receptive to them.¹¹¹ His understanding of repetition was couched in tradition, shaped by, and formulated as a response to, his engagement with the music of his predecessors: as we have seen, the *Gigue* demonstrates the same fidelity to the principles that underpin his theoretical and pedagogical writings, rooted as these are in the music of the past. Ultimately, Schoenberg's reflections on how "the motive reproduces itself" invite us to rethink repetition: considered in its broadest and most specific terms, his concept of repetition provides us with a framework and lexicon, guiding composer and analyst alike.

NOTES

1. John Rahn, "Repetition," *Contemporary Music Review* 7 (1993): 49–57; reprinted in John Rahn, *Music Inside Out: Going Too Far in Musical Essays* (Amsterdam: Gordon and Breach, 2001), 7–19. This essay has influenced music-theoretical studies of repetition. See, for example, Dora A. Hanninen, "A Theory of Recontextualization in Music: Analyzing Phenomenal Transformations of Repetition," *Music Theory Spectrum* 25/1 (Spring 2003): 59–97; and Elizabeth Hellmuth Margulis, *On Repeat: How Music Plays the Mind* (Oxford and New York: Oxford University Press, 2014). John's essay accompanied me when I traveled to Seattle for interview, prior to my becoming his colleague at the University of Washington in 2006.
2. Rahn is referring here to Alexandre Koyré, *Études d'histoire de la pensée philosophique*, Cahiers des Annales 19 (Paris: A. Colin, 1961). The expression *Sichselbstgleichheit* appears in Koyré's essay "Hegel à Iéna" (first published in 1934 in *Revue d'histoire de la philosophie religieuses*), 135–74. The translation, "equality-to-itself," appears in the Glossary of *Hegel: The Phenomenology of Spirit*, trans. Michael Inwood (Oxford and New York: Oxford University Press, 2018), 325.
3. See Keith Salley, "On Duration and Developing Variation: The Intersecting Ideologies of Henri Bergson and Arnold Schoenberg," *Music Theory Online* 21/4 (December 2015).
4. Schoenberg's personal library is housed in the Arnold Schönberg Center in Vienna (hereafter ASC). It includes Bergson's *Das Lachen* [*Le rire*] (B33, ASC); *Zeit und Freiheit: Eine Abhandlung über die unmittelbaren Bewusstseinstatsachen* [*Essai sur les données immédiates de la conscience*] (B36, ASC); *Einführung in die Metaphysik* [*Introduction à la métaphysique*] (B32, ASC); *Materie und Gedächtnis* [*Matière et mémoire*] (B34, ASC); and *Schöpferische Entwicklung* [*L'évolution créatrice*] (B35, ASC).
5. Henri Bergson, *Schöpferische Entwicklung*, trans. Gertrud Kantorowicz (Jena: Eugen Diederichs, 1912), 51 ("Und alles Handwerken, so rudimentär es sei, lebt . . . von gleichförmigkeiten und Wiederholungen"); Henri Bergson, *L'évolution créatrice* (Paris: Les Presses universitaires de France, 1907), 36 ("Et toute fabrication, si rudimentaire soit-elle, vit sur des similitudes et des répétitions"); Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (New York: Holt, 1911), 45.

6. Arnold Schoenberg, *The Musical Idea and the Logic, Technique, and Art of Its Presentation (Der musikalische Gedanke und die Logik, Technik und Kunst seiner Darstellung)*, ed. and trans. Patricia Carpenter and Severine Neff (New York: Columbia University Press, 1995), 144–45.
7. Schoenberg, *Coherence, Counterpoint, Instrumentation, Instruction in Form (Zusammenhang, Kontrapunkt, Instrumentation, Formenlehre)*, ed. Severine Neff, trans. Charlotte M. Cross and Severine Neff (Lincoln: University of Nebraska Press, 1994), 10–11 (translation modified). All new and revised translations have been prepared by Michael Graubart.
8. Schoenberg, *Fundamentals of Musical Composition*, ed. Gerald Strang with the collaboration of Leonard Stein (London: Faber and Faber, 1967), 9.
9. Schoenberg, *Coherence*, 36–37 (translation modified). Original German: “Das Motiv pflanzt sich fort, indem es sich wiederholt, und aus sich neue Gestalten hervorbringt.”
10. Schoenberg, “Linear Counterpoint” [*Der Lineare Kontrapunkt*] (1931), in *Style and Idea: Selected Writings of Arnold Schoenberg*, ed. Leonard Stein, trans. Leo Black (London and Boston: Faber and Faber, 1975), 290. Original German: “Alles Geschehen in einem Musikstück ist nichts anderes, als ein ewiges Umgestalten einer Grundgestalt” (T35.22, ASC).
11. Schoenberg, “For a Treatise on Composition” (1931), in *Style and Idea*, 266; “Zur Kompositionslehre,” in *Stil und Gedanke: Aufsätze zur Musik*, ed. Ivan Vojtěch (Frankfurt am Main: S. Fischer, 1976), 284. Original German: “In der Musik aber zeigt die Wiederholung (insbesondere in Verbindung mit Variation), daß aus Einem Verschiedenes entstehen kann, indem es sich entwickelt, indem es musikalische Schicksale erlebt, indem es aus sich neue Gestalten erzeugt, wie dies allerdings erst in den höheren Kunstformen in überzeugender Weise der Fall ist.”
12. Schoenberg, “Die Lehre vom Zusammenhang” (ca. 1921; T37.08_II, ASC). Original German: “Die Vorstellung, dass alles was erscheint auf die Keimzelle zurückgeht, und umgekehrt nichts erscheinen kann, was nicht in ihr enthalten war, ist sehr befriedigend erklärt aber nur das Ganze und gar nicht die Einzelheiten, somit also nichts und steht auch sonst vielfach in Widerspruch mit den Ereignissen.”

13. Schoenberg, *The Musical Idea*, 150–51 (with slight modification). Schoenberg made similar points in other texts. In the *Harmonielehre*, he wrote: “I therefore do not believe . . . that a motive, regarded as the germ of the whole, would have permitted this one, single form of execution.” Original German: “Ich glaube also nicht daran . . . daß ein Motiv, als Keim des Ganzen betrachtet, diese eine, einzige Ausführungsform nur zugelassen hätte.” See *Theory of Harmony*, trans. Roy E. Carter (London: Faber and Faber, 1978), 127 (translation modified); *Harmonielehre* (Vienna: Universal Edition, 1922), 155. In *Fundamentals of Musical Composition*, 8, he wrote that “the basic motive is often considered the ‘germ’ of the idea. . . . However, everything depends on its use. Whether a motive be simple or complex, whether it consists of few or many features, the final impression of the piece is not determined by its primary form. Everything depends on its treatment and development.”
14. Schoenberg, “Why New Melodies Are Difficult to Understand” [*Warum neue Melodien schwerverständlich sind*] (1913), in Bryan R. Simms, “New Documents in the Schoenberg-Schenker Polemic,” *Perspectives of New Music* 16/1 (Fall–Winter, 1977): 115. Original German: “Jede Melodie kommt durch Wiederholung eines mehr oder weniger variierten Grundmotivs zustande.”
15. Schoenberg, radio talk on the *Orchestral Variations*, Op. 31 (Frankfurt Radio, 1931). Original German: “Sie sehen, es ist meine Absicht Ihnen immer zu zeigen, daß die einzelnen Phrasen immer nichts anderes sind als mehr oder weniger variierte Wiederholungen einer Grundgestalt.” This sentence was transcribed from the audio recording. It is absent from the typescript and therefore from the published versions; see “Vortrag über Op. 31,” in *Stil und Gedanke*, 255–71, and “The *Orchestral Variations*, Op. 31: A Radio Talk,” *The Score* 27 (July 1960): 27–40.
16. Schoenberg, *Fundamentals of Musical Composition*, 29.
17. *Ibid.*, 123.
18. See Schoenberg, *Coherence*, 24–25 and 28–29.
19. Schoenberg, *FMC*, 9. His Ex. 14 (*FMC*, 11) illustrates inversion, retrograde, retrograde inversion, diminution, and augmentation.
20. *FMC* sources: draft 5, pages 9–10; and draft 6, page 8 (Leonard Stein Collection, folders 23 and 24, ASC). Manuscript materials are reproduced by kind permission of Lawrence A. Schoenberg and Belmont Music Publishers.

21. *FMC* draft 1, page 1 (Tbk 1, folder 13, ASC). Even though the German translation of *FMC* was not published until 1979, it is based not on the published book but on the typescript prepared by Strang in the early 1950s at the request of Gertrud Schoenberg following her husband's death. The passage is therefore correct in the German version in describing three kinds of repetition: *genaue Wiederholungen*, *modifizierte Wiederholungen*, and *entwickelnde Wiederholungen*. See Arnold Schönberg, *Die Grundlagen der musikalischen Komposition*, trans. Rudolf Kolisch, ed. Rudolf Stephan (Vienna: Universal Edition, 1979), 16. Neil Boynton acknowledges the discrepancy between the English and German editions, but without consulting sources, he is unable to offer an explanation for it. See Anton Webern, *Über musikalische Formen: Aus den Vortragsmitschriften von Ludwig Zenk, Siegfried Oehlgieser, Rudolf Schopf und Erna Apostel*, ed. Neil Boynton (Mainz: Schott, 2002), 180, note 441; and Neil Boynton, "‘And two times two equals four in every climate’: Die Formenlehre der Wiener Schule als internationales Projekt," in *Musiktheoretisches Denken und kultureller Kontext*, ed. Dörte Schmidt (Schliengen: Edition Argus, 2005), 220–21.
22. The page shown here is in Strang's hand (Gerald Strang Collection, folder 12, ASC). The sequence of examples follows the list given in the text, with the exception of the first which is omitted: "1. Transposing to other degrees; 2. Changing Intervals; 3. Transposing + changing intervals; 4. Changing rh[ythm] by addition; 5. [Changing rhythm] by reduction." The following pages contain examples of the other rhythmic changes (points numbered 6 through 10) before proceeding to the harmonic changes. In draft 2, the order is reversed, with rhythm placed before intervals: A. Variation of the rhythm; B. Variation of intervals; C. Variation of the harmony (draft 2, pages 15–16). This order is retained in all subsequent drafts, including the published text; see *FMC*, 10.
23. *FMC* draft 2, page 15 (Tbk 1, folder 13, ASC).
24. This is something he makes explicit in draft 3, when he notates "variants" alongside the passage on "modified repetitions." *FMC* draft 3, page 11 (Tbk 1, folder 3, ASC).
25. Schoenberg, *Coherence*, 38–39 (translation slightly modified).
26. Schoenberg, *Coherence*, 38–39 (underlined text in the table follows that in the source: T37.17, ASC); and *FMC* draft 2, page

- 15 (handwritten annotations, likely made in preparation for draft 3, are rendered in italics). Bold typeface is used for emphasis.
27. *FMC* draft 2, page 15.
 28. Schoenberg, *Coherence*, 36–37.
 29. It is noteworthy that the entry for *genau* in Schoenberg's personal dictionary, which he used extensively, refers to both "exact" and "strict." See H. Baumann and E. Klatt, *Muret-Sanders Enzyklopädisches englisch-deutsches und deutsch-englisches Wörterbuch, mit Angabe der Aussprache nach dem phonetischen System der Methode Toussaint-Langenscheidt*, 16th ed. with supplement (1931) (Berlin-Schöneberg: Langenscheidt, 1910), 427 (Book M56 v.2, ASC).
 30. When preparing the translation of *FMC*, Kolisch considered *abgeändert* and *verändert* before settling on *modifiziert*. The draft materials for *Die Grundlagen der musikalischen Komposition* are housed in the Houghton Library at Harvard University (Rudolf Kolisch papers, MS Mus 195).
 31. He conflates this distinction somewhat in the typescript of draft 3: "Exact repetitions repeat, in the same or another octave, without any change. Transpositions to another degree, called sequences, as well as inversions, retrogrades, diminutions, and augmentations, are exact repetitions because they preserve strictly the features and tone relations." *FMC* draft 3, page 11 (Tbk 1, folder 3, ASC).
 32. Schoenberg, "Der musikalische Gedanke, seine Darstellung und Durchführung" (1925; T37.08_I, ASC). Original German: "Ein Mittelding zwischen einfacher Wiederholung (sie sind es dem Prinzip nach) und Variation (der Wirkung nach) sind die Umkehrungen und der Krebsgang (auch Vergrößerung und Verkleinerung)."
 33. Schoenberg, *The Musical Idea*, 156–57.
 34. *Ibid.*, 152–53.
 35. Schoenberg, "For a Treatise on Composition," 265; "Zur Kompositionslehre," 283.
 36. Schoenberg, "Zur Kompositionslehre" (T21.24, ASC).
 37. *FMC* draft 1, page 10 (Tbk 1, folder 13, ASC; typescript, handwritten annotations not transcribed). The "half sentence" refers to mm. 1–4 in an eight-measure theme.

38. Schmidt, Heinrich, *Philosophisches Wörterbuch* (Leipzig: Alfred Kröner, 1922), 294 (Book S22, ASC). This sentence appears in the entry for *Veränderung* (change): “Veränderung . . . Entwicklung ist stetige V.” It is underlined, and Schoenberg indicates that it is correct (“Das hier ist richtig”). For a transcription of Schmidt’s entry and Schoenberg’s annotations, see Julia Bungardt, “Die Bibliothek Arnold Schönbergs mit einem kommentierten Katalog des nachgelassenen Bestandes sowie einer Edition seiner Glossen in den Büchern” (Ph.D. diss., Universität für Musik und darstellende Kunst, 2014), 188.
39. *FMC* draft 2, page 12 (Tbk 1, folder 13, ASC).
40. *Ibid.*, 15.
41. Schoenberg, *The Musical Idea*, 228–29. Original German: “Wiederholungen bei denen nur sehr wenig verändert wird, sind Varianten.”
42. *FMC* draft 2, page 12 (incorporating handwritten emendations). The clear distinction outlined here is retained in all subsequent versions of *FMC*, including the published book (*FMC*, 8). In the translation of this passage, however, the expression “variants” is erroneously rendered as “Variation” (“solche Veränderungen wollen wir *Variation* nennen”; *Die Grundlagen der musikalischen Komposition*, 15). All versions of Kolisch’s translation give “Varianten” here (Kolisch papers, MS Mus 195, Houghton Library at Harvard University), suggesting that this was an editorial decision.
43. Schoenberg, *Coherence*, 18–19 (translation modified).
44. *Ibid.*, 16–17 (translation modified).
45. *Ibid.*, 10–11.
46. *Ibid.*, 18–19 (translation slightly modified). Original German: “Von dem Grade, in welchem vorhandene wesentliche oder unwesentliche Gemeinsamkeiten auffällig oder unauffällig benutzt oder herausgearbeitet sind, hängt die Fasslichkeit ab.”
47. Most appear in *The Musical Idea*. See also “Der musikalische Gedanke” (1925) and “Linear Counterpoint.”
48. Schoenberg, *The Musical Idea*, 134–35, 136–37, 156–57, 158–59, 180–81, and 182–83.
49. *FMC* indices for drafts 1 and 2 (Tbk 1, folders 14/1 and 14/2, ASC). Page numbers are omitted from the transcriptions.
50. *FMC* draft 1, page 1.

51. Schoenberg, *The Musical Idea*, 154–55.
52. Schoenberg, “Der musikalische Gedanke” (1925). Original German: “. . . dass die Variation im Veränderten das Unveränderte, das Wiederholte erkennen lassen muss[.]”
53. Schoenberg, *The Musical Idea*, 228–29.
54. Ibid., 226–27 (translation modified). Original German: “In einer Veränderung ist das zu Verändernde teilweise enthalten, sonst wäre es ein Anderes und nicht eine Veränderung.”
55. Schoenberg, *Coherence*, 20–21 (translation modified). Original German: “Zshg [Zusammenhang] entsteht, wenn Teile die teils gleich, teils ungleich sind, so verbunden werden, dass die gleichen hervortreten. Gegensatz (beziehungsvoller) beruht ebenfalls auf Zusammenhang insoferne als die selben Teile wie oben aber so verbunden werden, dass die ungleichen überwiegend auffallen.”
56. *FMC* draft 2, page 111 (Tbk 1, folder 4, ASC). The transcription here is based on the typewritten text; it does not include the handwritten annotations.
57. Schoenberg, *FMC*, 119
58. Ibid., 25 and 27. For a fuller discussion of thematic construction, see Áine Heneghan, “Schoenberg’s Sentence,” *Music Theory Spectrum* 40/2 (Fall 2018): 179–207.
59. William E. Caplin, *Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven* (New York: Oxford University Press, 1998), 12 and 49. Emphasis is mine.
60. Schoenberg, *FMC*, 25 and 27; and *FMC* draft 2, page 48 (Tbk 1, folder 13, ASC).
61. *FMC* draft 2, page 52 (Tbk 1, folder 13, ASC); example 119, renumbered 69 (Tbk 1, folder 15, ASC).
62. Schoenberg, *Coherence*, 64–65. He writes that coherence that can be underlined, veiled [*verschleiert*], hidden, or invisible and slowly revealed.
63. Classroom notes, Gerald Strang Collection, ASC.
64. Schoenberg, *Preliminary Exercises in Counterpoint*, ed. Leonard Stein (London: Faber and Faber, 1963), 155–58. He also describes the sequence in a contrapuntal context in similar terms:

“There are perfect, exact, partial, varied, developed, incomplete, semi- and quasi-sequences” (Ibid., 38).

65. This is an insert in Schoenberg’s copy of *Die Kunst der Fuge*, ed. Carl Czerny (Edition Peters 6734; SCO B7, ASC). An accompanying page lists the students who were assigned different topics. The fact that it includes Karl Rankl, Olga Novakovic, Max Deutsch, Josef Travnicek, Hanns Eisler, and Fritz Kaltenborn suggests it dates from the period 1919–1921. Following an examination of handwritten letters, I conclude that the document in question is in the hand of Novakovic (she attended Schoenberg’s composition class at the Schwarzwald School in 1918–19 and was a private student in Vienna, Zandvoort, and Traunkirchen from 1919 to 1921).
66. Copy of typescript, Warren Langlie Collection, ASC.
67. In transcribing these documents, I have made just a few corrections: those in Langlie are indicated with square brackets, and the unnecessary apostrophe in the title of Novakovic’s point IV (“Transformationen des Themas’s”) has been removed. For subpoints c) and d) in VI, Novakovic creates a key at the bottom of the page: she uses a variety of symbols, which I have rendered here as asterisks. These points are incorporated as parenthetical comments in Langlie’s text.
68. See Webern, *Über musikalische Formen*, 211, 212, 268; Webern, *Der Weg zur neuen Musik*, ed. Willi Reich (Vienna: Universal Edition, 1960), 23, 24, 26, 27; Webern, *The Path to the New Music*, ed. Willi Reich, trans. Leo Black (Bryn Mawr, PA: Theodore Presser, 1963), 22, 25; Erwin Ratz, *Einführung in die musikalische Formenlehre*, 3rd ed (Vienna: Universal Edition, 1973), 28, 44, 152, 201; Josef Rufer, *Die Komposition mit zwölf Tönen*, 2nd ed. (Kassel: Bärenreiter, 1966), 28, 29, 39, 94, 151; Rufer, *Composition with Twelve Notes Related Only to One Another*, trans. Humphrey Searle (New York: Macmillan, 1954), 24, 26, 37, 100, 136, 166.
69. Ratz, *Einführung*, 44. Original German: “Weiters tritt in der homophonen Darstellung das Prinzip der Wiederholung (wörtliche und variierte Wiederholung, Sequenz, Beantwortung) in entscheidender Weise in den Dienst des formalen Aufbaues. Unter Beantwortung verstehen wir jenen Vorgang, bei dem ein Gedanke, der sich von der I. zur V. Stufe wendet, so wiederholt wird, daß er nunmehr von der V. Stufe sich zurückwendet zur I. Stufe. . . . Wir

sehen daher in der Beantwortung bereits eine höhere Form der Wiederholung gegenüber den beiden anderen Arten.”

70. Webern, *Über musikalische Formen*, 225 and 241.
71. Classroom notes, Gerald Strang Collection, ASC.
72. Schoenberg, *FMC*, 21–22.
73. Webern, *The Path to the New Music*, 27. Original German: “Entwickeln bedeutet aber wieder eine Art der Wiederholung” (*Der Weg zur neuen Musik*, 28).
74. Erwin Stein, *Form and Performance* (London: Faber and Faber, 1962), 81 and 86.
75. *Ibid.*, 86.
76. Rufer, *Composition with Twelve Notes*, 29–30. Original German: “Zusammenhangsvoll: weil sie aus ihm, aus seiner Grundgestalt, abgeleitet sind. Gegensatz: weil sie neue, zu ihm kontrastierende Gestalten (Charaktere) darstellen” (*Die Komposition mit zwölf Tönen*, 33).
77. *Ibid.*, 24. Original German: “Das Prinzip der Wiederholung und das Prinzip der Variation als Mittel der Gestalt- und Formbildung —Der ‘zusammenhangsvolle Gegensatz’” (*Die Komposition mit zwölf Tönen*, 28).
78. Schoenberg, *Coherence*, 10–11. Original German: “Verstehen = Erkennen der Ähnlichkeit. Um ein Ding zu verstehen, ist es nötig zu erkennen, dass es in vielen (oder womöglich in allen) seinen Teilen ähnlich oder gar gleich ist, Dingen oder Teilen, die bekannt sind[.]”
79. *Ibid.*, 14–15.
80. *FMC* draft 1, page 9a (Tbk 1, folder 13, ASC). The transcription incorporates the handwritten emendations made to the typescript.
81. This is presumably a translation of *fassen*.
82. Schoenberg, *The Musical Idea*, 154–55 (translation slightly modified).
83. Schoenberg, “Method of composing with 12 tones which are only related with one another” (1934), T18.02 and T18.03, ASC. This is the English typescript that was thought to be missing: see Schoenberg, “Vortrag / 12 T K / Princeton,” ed. and trans.

- Claudio Spies, *Perspectives of New Music* 13/1 (Fall–Winter 1974): 58–136.
84. Annotation in Hugo Riemann, *Musik-Lexikon*, ed. Alfred Einstein, 10th ed. (Berlin: Max Hesse, 1922), 874 (Book R21, ASC). Original German: “Der Hörer erkennt nicht die Tonfolge als solche, aber er fühlt den Zusammenhang und erkennt ihn somit auch in gewisser Hinsicht.” See Bungardt, “Die Bibliothek Arnold Schönbergs,” 155.
 85. Schoenberg, “Der musikalische Gedanke” (1925).
 86. *Ibid.*
 87. Schoenberg, *The Musical Idea*, 110–11, 156–57, 238–39, 298–99. On the subject of symmetry in Schoenberg’s twelve-tone music, see Stephen Peles, “‘Ist Alles Eins’: Schoenberg and Symmetry,” *Music Theory Spectrum* 26/1 (Spring 2004): 57–86.
 88. Translation by Michael Graubart, in Regina Busch, “On the Horizontal and Vertical Presentation of Musical Ideas and on Musical Space,” *Tempo* 154 (September 1985): 10. Original German: “Wie in einem Spiegelkabinett befinden sich dann die Gestalten und sind stetig von allen Seiten gleichzeitig zu sehen und zeigen Beziehungen in allen Richtungen” (*Stil und Gedanke*, 293).
 89. Schoenberg, “The Orchestral Variations, Op. 31,” 35; “Vortrag über Op. 31,” 264.
 90. Schoenberg, “Composition with Twelve Tones” (1941), in *Style and Idea*, 224. The expression “mirror forms” appears several times in this essay (220, 225, 227, 230).
 91. Schoenberg, “Method of composing with 12 tones” (1934), T18.03, ASC. The transcription includes the handwritten annotations made to the typescript.
 92. Schoenberg, “Counterpoint, a textbook, fragment” (1936), T37.12, ASC.
 93. This change is made in Sketchbook V (Sk 476, ASC).
 94. In a recent book, Jack Boss uses “pitch-class maps” to analyze this piece. He writes of the opening: “measures 1–2 balance pitch classes 10–9 with 9–10 and 4–5 with 5–4. In addition, the pitch-class successions <7,6,3,2> and <1,8,11> are carried over in identical order from m. 1 to m. 2.” See Jack Boss, *Schoenberg’s Twelve-Tone Music: Symmetry and the Musical Idea* (Cambridge:

Cambridge University Press, 2014), 90 and 88 (Ex 2.30a). While the dyad palindromes, as Boss calls them, are unexceptionable, the pitch-class successions to which he draws attention are undermined by their rhythmic variance, occurring on four consecutive eighth notes in m. 1 (from the third to the sixth eighths) but not in m. 2 (beginning on the third but then continuing on the fifth eighth). Boss then acknowledges that “measures 3–4 do not contain substantial ordered invariants.” A more plausible reading would focus less on invariants and more on motives. Note the ascending or descending pattern that leads from the tritone dyad to the framing pitch in each of the opening four measures, always in the same rhythmic position (on the third, fifth, seventh and final eighths): G–Ab–A–Bb in m. 1, G–Gb–F–E in m. 2, Db–D–Eb–E in m. 3, and Db–D–Eb–E in m. 4. Apart from the opening G in m. 1, all move by semitone, encouraging us to hear these patterns as melodic lines. Placing them in the same part of the measure makes for rhythmic repetition and therefore a stronger coherence, helping us to hear the pattern in spite of the fast tempo. Finally, the pattern represents a way of connecting the more conspicuous elements—the tritone dyads and the boundary pitches. When discussing the dyads of mm. 1–4, both in his text and in the pitch-class map of Ex. 2.30a, Boss attends to the tritone and the perfect fifth (7), or perfect fourth (5) in m. 3, while ignoring the 3 and 9 dyads on the sixth and seventh eighths.

For other readings of this piece, see Martha M. Hyde, “Musical Form and the Development of Schoenberg’s Twelve-Tone Method,” *Journal of Music Theory* 29/1 (Spring 1985): 123–24; and Ethan Haimo, *Schoenberg’s Serial Odyssey: The Evolution of his Twelve-Tone Method, 1914–1928* (Oxford and London: Clarendon Press, 1990), 102–03. Hyde focuses on “invariant harmonies,” whereas Haimo’s comments pertain to orderings of the twelve tones.

95. Boss draws attention to these figures both here and in mm. 20–23, noting that they constitute an octatonic collection. He does not address the change in the intervallic construction and the implications thereof. See 96–97 and 101–02.
96. Schoenberg, “Der musikalische Gedanke” (1925).
97. Boss regards m. 47, not m. 43, as marking the beginning of the A1 section in a ternary form; see 87 (Example 2.29) and 109.
98. Schoenberg, “The Orchestral Variations, Op. 31,” 30 (translation slightly modified); “Vortrag über Op. 31,” 257.

99. Schoenberg “Why new melodies are difficult to understand” (first published in *Die Konzertwoche* as part of the program book for the Wiener Konzerthaus during the 1913–14 season); see Simms, “New Documents in the Schoenberg-Schenker Polemic,” 115–16. Simms’s article contains an excellent discussion of sources in the Schoenberg archive pertaining to Schenker.
100. Schoenberg, “New Music – My Music” [*Neue Musik – Meine Musik*] (ca. 1928–30), in *Style and Idea*, 102; T26.06, ASC.
101. Stein, *Form and Performance*, 100.
102. Interview with Weiss, in William Bernard George, “Adolph Weiss” (Ph.D. diss., The University of Iowa, 1971), 19.
103. Peles describes his aesthetic as “one of non-repetition and transformation”; see “‘Ist Alles Eins’: Schoenberg and Symmetry,” 60.
104. Schoenberg, *Theory of Harmony*, 48 (*Harmonielehre*, 56).
105. *Ibid.*, 122 (*Harmonielehre*, 148–49).
106. Schoenberg, *Coherence*, 36–37. Original German: “Formbildende Prinzipien: Das Prinzip der Wiederholung, [Das Prinzip] der Veränderung (Abwechslung), [Das Prinzip] der Entwicklung, [Das Prinzip] des Gegensatzes.”
107. Schoenberg, “Der musikalische Gedanke” (1925).
108. *Ibid.*
109. Schoenberg, *The Musical Idea*, 154–55.
110. He uses the word *eindringlich* (“vividly”) in *The Musical Idea*, 252–53.
111. In her recent book-length study on repetition, Margulis writes: “As a composer explicitly concerned with generating a sense of structure in music but resistant to traditional ways of doing so, Arnold Schoenberg admitted, ‘Intelligibility in music seems to be impossible without repetition’ (1967 [*FMC*, 20]).” See Margulis, *On Repeat*, 5.