Thematic and motivic analysis

JO N A TH A N D U N S B Y

Western music, with its origins in liturgical chant, can be said to be inherently melodic: the word "theme" was in use in the seventeenth century, and "motif" (later, "motive") became a common term in art, literature, and music criticism two centuries ago.¹ In the nineteenth century the common English translation of the German word Motiv was "figure," and the definition of this in 1906 (Parry, at a time when recognizable music theory might be said to have become clearly underway) was comprehensive and pre-scient:

It is in fact the shortest complete idea in music; and in subdividing works into their constituent portions, as separate movements, sections, periods, phrases, the units are the figures, and any subdivision below them will leave only expressionless single notes, as unmeaning as the separate letters of a word.²

This definition is almost as all-embracing as was to be Bent's definition some seventy years later of "analysis" itself (see p. 913 below), and this indicates that "motive" has been a critical element of the whole modern music-analytical enterprise. The definition also captures, and anticipates, a central impetus in music theorizing as a language analogy.³ The subject of this chapter has been, then, overtly or implicitly universal in Western music-theoretical writings. Its treatment here will be constrained by the dual aims of concision and plenitude. The conceptual and compositional background will be restricted sharply to recent centuries, and the invocation of "theme" and "motive" will be examined in just three readily identifiable areas: developing variation, set theory, and the one which needs least detailed exposure but perhaps greater critique, semiotics. However, these areas – rooted respectively in the ideology of Romantic organicism, the would-be scientific method of logical positivism and the structural anthropology of twentieth-century linguistics – offer a broad conspectus which may represent something not only of the pith but

¹ For an extensive inventory of the term in music-theoretical literature, see the entry "Motiv" in Hmt.
² Parry, "Figure," p. 36.
³ Etymologically, "theme" passed from Greek, through Latin to early English with the consistent conceptual sense of a proposition or a topic, and in music theory has always represented the view of music as a kind of discourse. In rhetoric, "figure" was some special kind of expression of a "theme;" as in "metaphor," "hyperbole," and the like. If the term "figure" was anchored in the idea of discourse, it nevertheless became a special term in nineteenth-century art criticism and referred more to design than to discourse, a parallel of obvious interest to musicians.
also of the extent of musicians’ pre-occupation with the phenomenon of the musical “line.”

**Conceptual and compositional background**

The human being comes to life equipped with a natural ability to vocalize, and vocalization, but for such a special effect as “harmonic” singing, is monodic. Traditionally it has been held that song must have been the earliest form of human music, hence for example Reaney’s throwaway first line: “the history of song is obviously as old as the history of mankind.” In fact it is now thought that this genealogy of human song is unfounded:

> From current paleobiological points of view, the idea is far from being merely a random speculation that instrumental production of intentional sounds or pre-forms of music had its origin in the same or earlier periods when mankind is believed to have begun singing and speaking. Consequently, the fabrication of acoustical artifacts in the form of instrumentally produced signals and gestures does not necessarily represent a later or more advanced level of human evolution and culture than vocal calls and melodies.

Even if we were to speculate that from its earliest manifestation human music was communal and even multiphonic, this does not alter the underlying physiological fact that human sound production is of a single line, equated uniquely with language, and specifically with phonology by Roman Jakobson, or uniquely with the string of conceptual “meaning” in general, notably by Claude Lévi-Strauss. Thus we must bear in mind constantly the distinction between communication theory that considers a single “string” of information (and a piece of music in all its multivalent parameters may be considered to be such a single string of information) and, within music theory, the concepts “theme” and “motive” which apply to individual lines of music. Although the term “communication theory” carries specifically twentieth-century resonances, the image of music as being a string of information goes back deep into the history of musical aesthetics and rhetoric, and in a technical analytical sense was contemporaneous with the early manifestations of post-Baroque theories of form. Bent for instance mentions Bernard Lacépède’s 1785 publication *Le Poétique de la musique*, in which sonata form is likened “to the three overarching phrases of a drama: presentation—complication—resolution.” Later here we shall encounter in Schoenberg’s concept of “developing variation” highly evolved thinking of this kind, and indeed Bent elsewhere notes the commonly perceived links throughout eighteenth-

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5 Wallin, *Biomusicology*, p. 349.  
6 For a specialist but gratefully written account of key aspects of Jakobson’s thinking and its impact see Culler, *Structuralist Poetics*, especially pp. 55–74.  
7 Lévi-Strauss’s most widely known work in this respect is perhaps *The Raw and the Cooked*, which specifically equates the narratives of music with the narratives of mythology.  
8 MANC, vol. 1, p. 128.
nineteenth-, and twentieth-century theorizing about the general qualities of musical continuity, or line.\footnote{Bent, \textit{Music Theory in the Age of Romanticism}, p. xii.}

From the earliest stage of modern music theory there has been a consistent interaction between these two conceptions of line. Early analysts of motive did not have the intention merely of breaking music into its smallest components, but of examining how those components were used (poetically) to form musical structure and perceived (esthetically) as structuring. This interplay of part and whole, and of composition and appreciation, is illustrated delightfully by Czerny's glowing account some five years after Beethoven's death of the first movement of the "Waldstein" sonata. Czerny offers five aspects of the "remarkable unity and symmetry of the whole of this movement," of which two are relevant here: "it is not overlaid with too many different melodies; for it consists only of four ideas"; and "the ideas, which are judiciously chosen, are always beautifully connected with each other."\footnote{MANC, vol. 1, p. 196.} It is reasonable to see Beethoven's music as the creative source of a new nineteenth-century consciousness of how musical ideas can be connected. Hoffmann's 1810 review of the Fifth Symphony is often cited as the first torch in this phalanx of critical illumination deriving from Goethean organicism and marching on to this day.\footnote{On Hoffmann's review, see Bent, \textit{Music Theory in the Age of Romanticism}, pp. 115-19; and see Burnham's \textit{Beethoven Hero} for some account, speculative rather than forensic, of the impact of Beethoven's music -- in this case, the \textit{Eroica} Symphony -- on subsequent music theory. DeNora argues in \textit{Beethoven and the Construction of Genius} that Beethoven's special identity was evident in musicological discourse during the decade before the \textit{Eroica} and the \textit{Fifth} (see esp. pp. 179-85); thus for example it is likely that the opinions of such as the precocious Czerny (1791-1857) were forming ahead of Hoffmann's influence.} The concentration on the "ideas" of a piece and how they are "connected" was shortly to be radically theorized in Hanslick's \textit{Vom Musikalisch-Schönen} of 1854.\footnote{There are two English versions of this title. \textit{The Beautiful in Music} is the more familiar, if only because Cohen's translation appeared as long ago as 1891. In this writer's opinion, Cohen's translation is linguistically vastly superior to Payzant's of 1986 entitled \textit{On the Musically Beautiful}; yet the Payzant publication is valuable for its footnotes and perhaps above all for its detailed index, and thus it is used here.} Hanslick's main intention was to show that musical "meaning" resides purely in the life of "tones." This prototypically structuralist, post-Kantian venture offered a pan-thematic view of music that can be regarded as the aesthetic bedrock of the next century and a half of theorizing.\footnote{See Grey's "Metaphorical Modes" for an example of recent discussion of the place of Hanslick.} Though often characterized as the ultimate formalist in music theory, Hanslick was also -- and, it might be thought, not as a strictly necessary consequence of his philosophical formalism -- the ultimate "thematicist," of which the following quotation gives some impression:

The independent, aesthetically not further reducible unit of musical thought in every composition is the theme. The ultimate determinations which one ascribes to music as such must always be manifest in the theme, the musical microcosm ... Since the composition follows formal laws of beauty, it does not improvise itself in haphazard ramblings but develops itself in organically distinct gradations, like sumptuous blossoming from a bud. This bud is the principal theme, the actual material and content (in the sense
of subject matter) of the whole tonal structure. Everything in the structure is a spontaneous continuation and consequence of the theme, conditioned and shaped by it, controlled and fulfilled by it . . . The composer puts the theme, like the principal character in a novel, into different situations and surroundings, in varying occurrences and moods - these and all the rest, no matter how sharply contrasted, are thought and shaped with reference to it.14

If we can thus trace back some of the concerns of thematic and motivic analysis in modern theory to the organicism and formalism of the nineteenth century, another important cultural force, the dissolution of tonality, also feeds back into this kind of analytical practice. That Second Viennese composers solved the crisis of atonality by resorting to serial composition is too obvious to state, except that we need to be aware of a particular inflection of this development, an inflection perceived acutely by Webern, whose music has appeared as the object of theorizing so often since the middle of the twentieth century, but whose critical insight too was of the finest. In Webern's *The Path to the New Music* it is argued that the “form” of the twelve-note row along with its levels of transposition “occupy a position akin to that of the ‘main key’ in earlier music . . . This analogy with earlier formal construction is quite consciously fostered; here we find the path that will lead us again to extended forms.”15 In other words, tonality had been replaced as a method of extended composition, in Webern’s view, by the dodecaphonic approach of which it would be perverse to deny that it is in some sense “thematic,” that is, characterized by an ordered series of intervals. Indeed in Webern’s own typical use of the row in either three- or four-note self-referential partitions, the “motive” is the substrate of the “theme” – and if one were to add “just as in Beethoven,” no-one might have assented more vigorously than Webern himself.16

If a purview such as the above can justifiably be stretched across recent music-theoretical history – “recent” meaning roughly in the period from Beethoven onwards – the justification must rely to some extent on the support of a contextual understanding of music:17 there must always be a place for hermeneutical “interpretation” of musical continuity, or so became the credo of the nineteenth century in the writings of such as Berlioz, Kretzschmar, and Schumann; still a force in nineteenth-century analysis was the tradition of rhetoric, too, where we find in thinkers such as Koch and Marx a retrieval in hermeneutical garb of basic human psychology and especially human language; and no theory of musical “line” could ever be expected to float free of concepts of “form,” which had a totalizing grip on musical thought from Romanticism.

15 Webern, p. 54. This quotation will be well known to those familiar with the secondary literature on Second Viennese issues. Among recent citations it is to be found in Wason’s “Signpost,” the first three pages of which offer an admirable overview of the point at issue here.
16 Bailey’s *The Twelve-note Music of Anton Webern* was the first - and as a definitive publication may be the last – thorough technical study of the composer’s row usage.
17 In a decidedly programmatic statement, Lerdahl and Jackendoff, writing of “themes, motives, and other musical ideas,” assert in *A Generative Theory* that “it would be pointless to discuss them without a theory of the structures in which they are embedded” (p. 286).
onwards. Scheibe and Reiche often take a particularly prominent role in accounts of the relatively modern history of form, yet only a few decades ago nineteenth-century formal theory was seen to be anchored in eighteenth-century, Enlightenment theorizing whose explanatory power in truth may not have been subsequently equalled: Allen wrote tellingly in *Philosophies of Music History* of how “the Nature-philosophy of Rousseau” meets “the Nature-philosophy of his contemporary Rameau” who “managed to fix eighteenth-century concepts of natural harmony and natural form in theory teaching for a century and a half.” All such factors – interpretation, rhetoric, form or, as Allen repeatedly calls it, “persistence” – were part of the tool-kit needed to assimilate Western music in a way that Adorno perhaps uniquely laid bare:

Analysis retaliates against musical works of art by pointing out that they are truly “composed,” assembled from components, the illusion they generate – that of an absolutely integrated being, of the necessary sequence of the whole and its flow – offsets their own constituent parts. Analysis, being the destruction of that illusion, is critical. Enemies of analysis are well aware of that. They want nothing to do with it, fearing that in forfeiting the illusion of the absolute meaningfulness of the whole they will be robbed of some secret within the artwork which they think they hold and must protect, but which is largely synonymous with that illusion.”

Developing variation

Had Adorno left his comments at that, they would amount to no more than the familiar shadow cast on the heady structuralist optimism of 1960s cultural theory by the then-enduring, inherited counter-culture of idealism, positivism, rationalism, and similar critical positions whose adherents were unwilling to subscribe to the notion of the “death of the author” and could not see any alternative in dialectics. Nevertheless, Adorno clearly is espousing a dialectical approach since to the forlorn thesis above he immediately opposes the antithesis that promises a music-theoretical synthesis:

This does not mean, as prejudice would have it, that less analysis is needed, but rather more, a second reflection. It is not enough to establish analytically the constituent elements, nor even the most concrete primary cells, the so-called “inspired ideas.” Above all it is necessary to reconstruct what happens to those ideas, or to use Schoenberg’s phrase, to write the “history of a theme.”

The metaphor, if that is what we choose to call it, of modern Western music telling a kind of thematic story was crystallized above all in Schoenberg’s concept of “developing variation,” which drew together the strands of Goethean organicism and

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20 Barthes’s famous essay “The Death of the Author” was first published in French in 1968 (in the journal *Mélanges*), it is available in English in, for example, Barthes’s *Image–Music–Text*, pp. 142–48.
Hanslick's insistence on the "self-subsistent" status of musical ideas;\textsuperscript{22} music is seen
by Schoenberg as having a "life;" but a life that requires a "second reflection" (see
Adorno, above) in which the purely musical relationships are somehow understood in
and of themselves.\textsuperscript{23} "Variation" grounds musical meaning in a kind of living identity,
since obviously something varied is by definition something also recognized; "devel-
opment," on the other hand, implies the avoidance of literal repetition - such avoid-
ance being an aspect of musical composition that Schoenberg equated clearly and
continually in a lifetime of music-theoretical writing with "higher" musical value, all
the more ripe for deeper musical meaning and, of course, ripe for the need of deeper
understanding including "reflection."
Composers, Schoenberg insisted, should be
"connecting ideas through developing variation, thus showing consequences derived
from the basic idea and remaining within the boundaries of human thinking and its
demands of logic."

Schoenberg aimed at developing variation in his own composition, and found it
everywhere in the compositions of the past that he considered worthy of study and
influence. Despite his reverence of J. S. Bach, and his awareness of the profundity
found in "early music" by those of his contemporaries whose opinions he valued,
found for example in Isaac by his pupil Webern, Schoenberg's main canon of com-
positional masterpieces began with Haydn and Mozart, and there is no doubt that he saw
the music of Brahms as the crowning achievement of the First Viennese School in
which he found all the validation he needed for the aesthetics of his own kind of mod-
ernism. It is no accident that to date the most extensive study of developing variation
is largely devoted to Brahms's compositional manner (Frisch, \textit{Brahms and the Principle
of Developing Variation}), and in fact Schoenberg's analysis of Brahms's song "O Tod,"
the third of the Four Serious Songs, Op. 121 (\textit{Style and Idea}, pp. 431-35), is not only
discussed by Frisch (pp. 151-56) but is emblematic of the entire Schoenbergen project
to demonstrate at the level of theme and motive a maximal balance of unity and divers-
ity (a project taken up by the Schoenberg-influenced critic Hans Keller throughout
the latter's extensive writings; see below, pp. 913-14).\textsuperscript{25} The aetiology of this kind of

\textsuperscript{22} Hanslick, \textit{On the Musically Beautiful}, p. 28.
\textsuperscript{23} Thus Schoenberg is partaking of the tradition of structural interpretation which can be traced back
above all to Momigny (see \textit{Bent, Analysis}, pp. 20-25) but from which the linguistic and indeed poetic
tropes are expressly excluded, which without doubt paves the way for unheralded degrees of theoretical
abstraction in Forte and Nattiez as discussed below.\textsuperscript{24} Schoenberg, "Criteria," p. 130.
\textsuperscript{25} There is no need to repeat here the arguments conducted in the musicological literature since the
1950s bemoaning the lack of focus in Second Viennese theorizing: it is true for example that there is no
single source to which one can point as a repository of Schoenberg's explanation of musical structure,
in the way that one can invite students of Schenkerian methods to study the latter's \textit{Free Composition} (cf.
the remarks in Chapter 19, pp. 699-10); nevertheless, Schoenberg's \textit{Fundamentals} is recommended as a
most concentrated yet elaborate - and musically satisfying - compendium of illustrated argument, of
which Part I, "Construction of Themes" (pp. 1-118), provides a great deal of flesh for the bones picked
here. The Brahms Op. 121 songs are discussed in analytical detail, including comments on Schoenberg's
approach, in Whitlall's \"The \textit{Vier ernste Gesänge.}" Schoenberg's large, but inchoate, would-be treatise
was eventually published as \textit{The Musical Idea}, despite doubts expressed for many years by Schoenberg
thinking in Wagner's *Leitmotiv* technique, and its twentieth-century flowering in a
dodecaphonic context, provide us with some sense of the historical sweep of the line
of thought. In this context, what is perhaps most striking is that we see in the twenti-
eth-century assimilation of First Viennese practice, and Second Viennese self-aware-
ness, a fixation on the thematic, on melody as the true voice of modern Western music
under theoretical scrutiny. This is well, if perhaps incidentally, expressed in Boss's
summary ("Schoenberg's Op. 22 Radio Talk") of what developing variation meant in a
tonal context:

Developing variation affects various kinds of motives, as well as phrases. Specific vari-
ations change intervallic and rhythmic features of a motive or phrase such as pitch suc-
cession, harmonic succession, tonal context, duration succession, or metrical context.
Along with the feature, each variation changes aspects of the feature, and the number
of aspects changed serves as an index of remoteness from the original motive. Two con-
siderations govern the successions of motive-forms produced by variation: later forms
should fulfill the implications of earlier forms, and the succession should delimit a
segment of the musical form and enable that segment to perform its function within the
form. (p. 130)

Evidently, "a contextual understanding of music" as mentioned above is at a
premium in Boss's encapsulation, which introduces the "harmonic" early on and ends
with "form"; but from the viewpoint of developing variation it is the motive that is charac-
terized as the life-blood of music, and this is an authentically Schoenbergenic
position.

What has been said so far about the role of theme and motive in the context of devel-
oping variation may give the impression that such patterns of musical invention are
audible or visible for all in a musical surface, and that analysis is merely a freely avail-
able process of dissection. This impression is fostered by Bent's now-famous defini-
tion of music analysis in general: "The resolution of a musical structure into relatively
simpler constituent elements, and the investigation of the functions of those elements
within that structure." Yet we have already encountered Adorno's assertion that
analysis requires a "second reflection," and Cook dramatizes the issue starkly and
without apology: "Music as it appears to the listener and music as it appears to the
analyst may not necessarily be quite the same thing. The relationship between the two
is one of the most problematic issues in the whole business of musical analysis." Much
more subtly, but also decisively, Keller provided a psychological grounding for

scholars, for example in Goehr's "Schoenberg's 'Gedanke' Manuscript" (1977), about the validity of
finalizing material on Schoenberg's behalf. An apparently modest but most significant document about
the early development of Schoenberg's concepts was published and discussed in Cross's "Schoenberg's
Earliest Thoughts" — here we first see his desire to forge a new, modern account of "the purpose of the
motive" (p. 127). For relatively recent applied research in this area, see Collisson, "Grundgestalt,
Developing Variation."

26 See the discussions of developing variation in Haimo, *Schoenberg's Serial Odyssey*, especially pp.
Schoenbergian “thematicism” (see above, p. 912) and many believe that the definitive Kellerian statements and exemplifications are to be found in his essay on Mozart’s chamber music, which begins with a series of confident premises indicating not only the object of thematic analysis – above all, that of developing variation – but the actual work that this will always require:

What usually goes by the name of analysis is nothing of the sort. Most critics have never grasped the essential difference between analysis and description. Description gives a verbal account of what you hear and is essentially unnecessary. Can anyone seriously suggest that a music-lover has to be told that a contrasting theme is a contrasting theme?

Verbal or symbolic analysis shows, on the other hand, the elements of what you hear. In a great piece, these are always the elements of unity, not of diversity, because a great piece grows from an all-embracing idea. Great music diversifies a unity; mere good music unites diverse elements. As soon as you have analysed the unity of a great work, its variety explains itself, whereas when you describe its, or indeed any work’s, diversity, nothing is explained at all . . . It will be the latent basic motifs, and generally the unitive forces behind the manifest music, on which my analytic observations will concentrate. The most uncomfortable questions, hardly ever as much as touched upon, will clamour for an answer: why or how does the contrasting second subject necessarily belong to the first? why is a particular movement an integral part of a particular work and of no other? and so forth.39

Inevitably the work of analysis of the general kind being discussed here has been seen as heuristic, and it is in the nature of discovery procedures to be capable of being taken to extremes. This is just how the work of Rudolph Réti has been characterized (see Figure 29.1), critics having often preferred to see him as obsessed with “latent” thematic unity rather than as the discoverer of real, if hidden compositional secrets. That those secrets appear to be “real” and are of abiding fascination justifies Réti’s place in the history of theory – thus for example Cook devotes more than thirty pages to the exposition of Réti’s ideas about the underlying thematic patterns in Beethoven.30 It is perhaps Réti in particular, however, who can stimulate us to take a step back from exposition at this point and ask whether there is any serious flaw in what may be broadly termed Schoenbergian thematicism (see n. 23). If there is a flaw, the consensus seems to find it in the very resistance of diversity, of variation itself, to codification, posing a question which must end by asking what are the limits of music theory.31

29 “The Chamber Music,” pp. 90–91. In this essay Keller offers dozens of actual musical examples of thematic relationships which selective quotation here would misrepresent, not least because part of the conviction of Keller’s argument lies in his accumulation and marshalling of evidence. In this respect Keller’s essay is a forerunner of Frisch’s more extensive, though hardly more insightful exposition in Brahms and the Principle of Developing Variation.

30 Cook, A Guide, pp. 89–115. There is also some review of Réti’s analytical work in Bent’s Analysis: see in particular pp. 87–88. A fascinating but today little-known precursor to Réti’s style of motivic analysis is found in Cassirer, Beethoven und die Gestalt.

31 Street’s “Superior Myths” is an iconoclastic meditation on the limits of modern music-analytical practice; see also Dunsby, “Criteria of Correctness.”
thematicism, there is no nicer relevant position than that taken by Leonard Meyer in a paper that originated as a keynote address to the Society for Music Theory in 1988:

It is indisputable that a succession of motivic variants often occurs in, say, the exposition sections of nineteenth-century sonata-form movements. The nature and order of such changes can as a rule be readily explained in relation to typical sonata-form procedures. But the theorists and critics who use the term "developing variation" seem to be making a much stronger claim—though it is seldom explicitly formulated. The implicit claim is that the process of change makes musical sense in and of itself—that developing variation is not merely a set of techniques for motivic manipulation, but a specific and independent structural/processive principle. But I have not, thus far, been able to find any discussion of the constraints that govern the nature of the succession of variants, although such a theory would appear to be a sine qua non of an adequate account of diachronic motivic change—of development and variation.  

To this it might be objected that, at least as far as tonal masterpieces are concerned, there is certainly some claim among adherents of Schenkerian analysis to be relying on

a theory of "diachronic motivic change," in the sense that musical elaboration which cannot be shown to be organically coherent is not worth the salt.\textsuperscript{33} If that is a polemic to be considered elsewhere, it seems to remain the case that "it was through his ever-deepening awareness of how 'motive' functions in tonal structure that Schenker was encouraged to formulate his theory of organic coherence . . . [An] awareness of the nature and function of motivic connection may be not only the starting-point for a voice-leading analysis, but also one of its most valuable results. Recent literature suggests that the combination of Schenkerian 'organicism' and 'thematicism' in its various forms is a trend for the future."\textsuperscript{34}

**Pitch-class sets**

"The spontaneous expression of the imagination, the melodic idea," writes the composer Alexander Goehr, "does not seem to alter its form significantly through the ages. There is not such a great difference between a fourteenth-century melodic idea and one by Webern."\textsuperscript{35} It was in this spirit that we noted earlier how in serial music (Webern's in particular) motive is the substrate of the theme. "Composers," that is, "have increased the influence of their ideas from foreground relationships to the most trivial aspects of the background."\textsuperscript{36} Most evidently this was the case in the serial organization of musical themes using the same pitch material as in the accompaniment, as in the surrounding counterpoint, or as in a heterophonic texture. Serial composition of this kind, albeit radically misunderstood in many theory and critical sources in the 1920s and 30s, was promulgated from the beginning as a poietic, creative impulse; this caused critical resentment, inevitably,\textsuperscript{37} but what is of more interest theoretically is that music theory became confronted with a first-order challenge. In theorizing about Beethoven the writers of the nineteenth century and beyond were continually exposed to the question of what the purpose might be of a chain of re-scrutiny of canonical music: Wagner writing to explain his own compositional evolution in the white heat of the mid-Romantic discovery of new musical languages, for instance; Tovey explaining music to the ordinary early twentieth-century listener as a legacy of the great democratizing and educating ideals of Victorian Britain; or Schenker, finishing nearly a century after Wagner began, passing on a kind of secret knowledge concerning an essentially lost art – all of them carrying out tasks of, as it were, aeonic separation. Now, however, at the time when Schoenberg was consider-

\textsuperscript{33} Among the wide discussion in recent decades of the coherence of Schenkerian theory, which it is not appropriate to discuss here, there have been a number of striking shifts away from Schenkerian orthodoxy, and these do tend to revert to the "old" questions of thematicism; Cohn's "The Autonomy of Motives" is an outstanding case where it is admitted that "to acknowledge the autonomy of motives is to abandon the proposition . . . that the Ursatz is the sole source of unity" (p. 168).

\textsuperscript{34} Dunsby and Whitall, *Music Analysis*, p. 101.

\textsuperscript{35} Goehr, *Finding the Key*, p. 64.

\textsuperscript{36} Ibid.

\textsuperscript{37} See for example Blom, "How it Started," p. 22.
ing thematic and motivic structure in the music of the past, there was a common currency of theoretical purpose since the questions to be asked of post-tonal and atonal music were by and large similar ones. They still are: “It is when we shift our analytical focus to post-tonal music that the freedom of manoeuvre gained by detaching surface and depth becomes increasingly attractive . . . it is not clear whether this new music even has a single deep structure, let alone one capable of fusing surface gestures into an organic totality.”

The early history of the attempt to understand post-tonal pitch structure, with all the concomitant significances this has for ideas of theme and motive in the new repertoire, was characterized by years of false starts – years dated by Bernard in “Chord, Collection and Set” specifically as 1911 to 1964, and demonstrating “duplicated effort, reinventions of the wheel, and seemingly inexplicable conceptual leaps”; the early days of pitch-class consciousness amounted to a history of failure, driven by artistic fashion rather than intellectual progression, and we must be clear that Allen Forte’s version of pitch-class set theory, first fully codified in 1973, was a matter of specific vision and invention, not the dutiful development of inherited concepts. What emerged in the Forte-inspired literature from the 1970s onwards was a picture of organized sound in which there is an inherent link between theme (and its motives) and harmony, to a degree of coherence that may lead one to understand Goehr’s use of the word “trivial” of fundamental aspects to a compositional background, if trivial refers to a compositional background so deep in the musical fabric that it is no longer of specific artistic interest – although its theoretical interest cannot be doubted. This delving into the ingredients of some canonical twentieth-century music showed that exactly the picture of integration and organicism claimed of the best of earlier music was to be found again even after the massive cultural fracture caused by early twentieth-century musical modernism. Whereas cultural historians and to some extent music theorists have naturally tended to concentrate on explaining this “fracture” largely in terms of the evolution of post-tonal, atonal, and dodecaphonic pitch content and structure, those pursuing analytical work recognized from early on that thematic and motivic matters would perforce be at a premium in this new context. Even if the following diagnosis by Lester amounts to a slight overstatement (doubtless in the interests of pedagogical clarity), it is nevertheless emblematic of a momentous trend in twentieth-century theory: “in nontonal works of the twentieth century . . .

tonal voice leading and harmonies no longer provide a basis for the pitch structure of

40 The Structure of Atonal Music is but one of Forte’s many publications in this area, but it remains the definitive statement of his version of pc set theory. “Pitch-Class Set Genera” was Forte’s next decisive step in this field of research, which is reviewed, amplified and revised in Ayrey’s “Symposium.”
41 The Schenkerian Ursache similarly states the obvious – that all tonal masterpieces are tonal – but has the potential to reveal inexhaustible insights into the way in which individual pieces of music “work” or “go,” bearing in mind Adorno’s call for more analysis (see above, p. 911).
42 And a wider canon, as mentioned in Dunsby’s “Fortenotes,” p. 177.
a piece. In their place, motivic relationship among groups of pitches generate melody and harmony. Analysis of this music entails locating these motives, and understanding the way they are used.”

*The Structure of Atonal Music* took on the huge question of “whether this new music even has a single deep structure” (see above, p. 917). It did so at two levels. First, Forte addressed the question of whether all music which can be understood as using the full range of the twelve-note universe – music, that is, which continually recycles the pitches available in the complete twelve-note total chromatic aggregate – was susceptible to comparison in terms of its pitch content: the crucial issue was whether like could be compared with like, theme with theme, motive with motive, and of course chord with chord (a question which is as inherently semiotic as it is Fortean – see pp. 920–22 below). In order to tame the massive combinatorial potential of the twelve-note universe Forte defined a pitch-class set according to two constraints, one of which is unproblematic, another of which lies at the heart of the theoretical polemics that have been such a fascinating aspect of this kind of theorizing over some four decades. The unproblematic constraint is “transpositional equivalence,” which asserts that the notes, say, C–D–E are the “same” as the notes F–G–A in that the one is a literal transposition of the other (both collections carry the designation “set 3–6”), and anyone familiar with the concept of “scale” in modern Western music is perfectly used to moving around pitch universes in this way, so that for example the melodic minor scale on F – which uses nine of the possible twelve chromatic pitches, with those on the sixth and seventh degrees of the scale being variable depending on the order in which the scale is presented – is understood as being specifically equivalent to the melodic minor scale on, say, B. The other constraint is “inversional equivalence,” which asserts not only that the notes, say, C–D–E are the “same” as the notes F–G–A but that the notes, say, D–E–F are the “same” as the notes E–F–G, in that D–E–F places a semitone (interval class 1 or 1c1) in order after a tone (1c2), as does E–F–G (understood as the succession G–F–E, 1c2 followed by 1c1). One only has to consider set 3–11 (0, 3, 7), which may represent, say, the notes C–E–G (otherwise known as a major triad) or D–F–A (where, if A is “7,” F follows, downwards as it were, at four semitones’ distance as “3,” and D at a further three semitones’ distance as “0” – and otherwise known as a minor triad), to understand the glaringly simple point that many crucial kinds of musical identity familiar in common-practice harmony, where inversional equivalence is not a general property of pitch relations, are necessarily missing in pc set theory where inversional equivalence is assumed by definition. Non-inversional relations – for instance, distinctions between major and minor triads – need to be “missing” in pc set theory so that within reason like can be compared with

43 Lester, *Analytical Approaches*, pp. 9–10. Although dating from the early 1980s, Hast’s “Segmentation and Process” remains one of the most relevant, carefully argued, and musically sensitive accounts of “the division of a musical work into structural components” (p. 54).

44 The set names, which have become a music-theoretical *lingua franca*, were first laid out in *The Structure of Atonal Music*, “Appendix 1: Prime Forms and Vectors of Pitch-Class Sets,” pp. 179–81.
like, as stated above: all possible sets as just defined, from three up to nine elements, amount to a mere 208 items.45

The second level at which The Structure of Atonal Music addressed the question of "deep structure" concerned the systematic relations between pc sets. The analysis of Webern’s Op. 7, No. 3 (see Figure 10.7, p. 293) shows how the set content of an entire piece, albeit in this case a short composition for violin and piano, may be displayed in an inventory of pc sets disposed in such a way as to enable precise specification of the relations between each set and every other set. In summary, where it can be shown that in any particular analysis a piece of music displays an array of pc sets in which all or most sets can be shown to be, in an abstract sense, derived from one or two sets in particular, these particular sets may be considered to be special, "nexus" sets and the pitch structure as a whole may be said to be "connected."46 In order to begin a pc set analysis at all, the music must be "segmented" (reminding us of Bent’s very definition of analysis as the “resolution of musical structure into relatively simpler constituent elements”; see above, p. 913), and much of the controversy surrounding pc set theory in the late twentieth century has centered on what may rightly be thought of as a somewhat uneasy concatenation of analysis and theory: the theory, as will be evident even from the compact account above, is systematic, relatively abstract, "programmatic," or "totalizing" as it might be called, and perhaps fairly characterized as quasi-scientific. The analytical practice on which it depends if it is to have worthwhile outcomes has understandably tended to make applications of the theory seem not so much quasi-scientific as pseudo-scientific, not least perhaps because this practice seems to exclude composers’ intentions.47 Yet in the end, it is argued, music theory of this kind may be

45 Two fairly simple examples of how this theory translates into analytical practice as a system of motivic designation, in Schoenberg’s Piano Piece, Op 19, No. 6 and Webern’s Piece for Violin and Piano, Op. 7, No. 3, are explained in Dunsby and Whittall, Music Analysis, pp. 140-42. A lucid, step-by-step account of the rudiments of pc set analysis is to be found in Cook, A Guide. pp. 124-51: for more detail in a pedagogical context, see Lester, Analytical Approaches, pp. 66-127; for thorough exposition and exemplification see Simms, “A Theory of Pitch-Class Sets.” In 1985 Forte provided a comprehensive review, in “Pitch-Class Set Analysis Today,” of his theory and practice and their critical reception up to that time. Finally, see the brief discussion in Chapter 10, pp. 291-94.

46 See Forte, The Structure of Atonal Music, p. 114. In “Pitch-Class Set Genera” Forte was to put forward a revised theory of connectedness, in which set relations are quantified in relation not to hexachords but to trichords, providing, according to Dunsby in “Fortenotes,” pp. 178-79, “an explanation of the semitonal, or half-step universe that really is a theory, in that it not only frees us from the philosophically distracting world of compositional practice . . . but also frees itself from the statistical spin of the hexachord in theory.”

47 Haimo hopes to persuade us in “Atonality, Analysis, and the Intentional Fallacy” that this particular issue is somehow the main cause of a “bitter debate” (p. 168) surrounding Forte’s ideas on pc-set matters. However, one may surely ask where in the history of music theory any worthwhile debate has been resolved by the discovery and agreement over a composer’s “intention” – intention being such a fundamentally contingent entity that it can hardly be expected to form the bedrock of the musicological interpretation of past works of art. And one may point to the danger of edifying a rather simple if perpetually intractable philosophico-analytical question – whether and how it matters what people such as composers mean by what they do – at the expense of downgrading an inherently complex and, some would say, more urgently necessary inquiry into how intelligent processing actually takes place at all; see Rahn’s “Some Remarks on Network Models of Music” for a recent, intense discussion of such "processing" in a music-theoretical context.
not so much “substituting its own scientific jargon for the personal, living experience of music that had presumably drawn the theorists to it in the first place,” as demonstrating that the theory of music is always likely to be stamped with the fact that it is the theory of an art. In this respect pc set theory may be regarded as one of the most instructive developments in music theory in recent centuries, since it has addressed fundamental issues seriously and thoroughly, beyond the ephemeral world of contemporaneous critical commentary, and demonstrated that the shock of the new may not be so shocking or so new:

The separating out of pitch collections for analysis involves extraction of melodic as much as chordal formations, and indeed mixtures of these two as well as what might better be called “aggregates” or “clusters” of notes. This process is itself one of extreme deliciacy, for the entire analysis rests on its being carried out with musical sensitivity. While phrase marks, rests and the like may offer clues, the task demands much more.

The semiotic perspective

In considering Forte’s heuristics we asked above “whether like could be compared with like, thmc with theme, motive with motive,” and this question lies at the heart of the study of signs, be it called semiotics or semiology. Music semiotics – if not derived from, then certainly inspired by, twentieth-century linguistic science – can be called the study of the thematic process par excellence, a sustained meditation by a goodly number of music theorists on what we called initially “the general qualities of musical continuity, or line.” This thinking rests on criteria that have formed a consistent protocol for semiotic analysis, where “signs” are taken to be the elements of any object (of, say, a written sentence, or a piece of music heard) and semioticians study their interrelations accordingly:

(1) The sign, until scientific research may convince us to the contrary, is regarded as “arbitrary” or “unmotivated,” and what this means in music-theoretical practice is

48 Cook, Music, p. 96. 49 Bent, Analysis, p. 108.
50 One of the most influential books in the intellectual history of the early twentieth century, Saussure’s Course in General Linguistics, has been the epistemological starting point for the study of sign systems throughout the arts and human sciences, as Saussure himself – in all modesty – accurately predicted (pp. 16–17).
51 In Linguistics and Semiotics Monelle offers an informative recent picture of the general semiotic project in music theory; another milestone was Tarasti’s A Theory of Musical Semiotics. Agawu’s article “The Challenge of Semiotics” offers closer and more recent argument, and his earlier book Playing with Signs spread a semiotic perspective over a much larger canvas, without, however, fully convincing such as Treitler (see “Language and the Interpretation of Music,” especially pp. 28–32). It must be noted that semiotics has not found its way into all corners of music theory, or indeed into some of its codifications: thus whereas it figures significantly in, say, Bent’s Analysis and Cook and Everist’s Rethinking Music, the highly influential Hatten and Bernstein Music Theory pursues other agendas entirely, which might be thought a regrettable lack but must also be taken at face value as part of the reality of an ongoing discipline.
that music cannot be examined for any inherent “meaning” in its elements, hence the
inclination to look for structures — perhaps motivic structures or pc-set relations as
outlined above.

(2) Sign relations are always in one aspect “synchronic,” that is, they exist free of the
constraints of time and indeed “place” or any other empirical determinant. Thus for
example it becomes an analytical requirement to explain, not the derivation of a
musical idea (which may be borrowed from earlier art, such as are many of J. S. Bach’s
themes, or which may elicit an established cultural response, hence, say, our tendency
not to walk out after hearing the first theme of a Classical symphony), but its function
within the work of art being examined.

(3) Sign relations are always in another aspect “diachronic,” since every sign has a
history, whether within a work of art, or viewed more widely as part of a culture in time (cf. the parenthetical remark immediately above).

(4) Taking these three criteria together it follows that signification is either “para-
digmatic,” to do with one sign appearing rather than another at a particular point in a
structure, “merely synchronically,” it might be informally said; or “syntagmatic,” to
do with how a sign relates to what came before and what comes after, diachronically,
be it within a few seconds of connected perception, or within a hundred years of
human culture. The paradigmatic tells us about the identity of a sign, and the syntag-
matic tells us about its structural function.

It is a hallmark of such studies that comparisons, that is, music-analytical statements
about similarity and difference, are explicit, so that for example the approximations and
excesses of informal critical language as well as the positivism of “pure” (one might
even say, non-Schenkerian) formal theory are equally shunned, the one because of the
semiotic ideal of precision, the other because of the ideal of consistency.52 The “explicit”
entails not only the metaphors and metalanguages themselves of technical musical
description and explanation, but also their epistemological status: it entails the
attempt at a continuous awareness of what kind of knowledge they are and from what
kind of knowledge they are derived; in the semiotic “tripartitional” analysis of any sig-
ifying process knowledge is regarded as being inevitably some combination of the
poietic, the esthetic, and the “neutral.”53 It is an incidental result of this interrogatory
character of music semiotics that any particular inquiry can necessitate the processing
of relatively large amounts of information.54

How distinct such processing may be from traditional methods has been a topic of

52 When we consider semiotics in such a concise perspective, the question naturally arises whether it
amounts to anything more than what has often been called common sense: the main intention of this
brief section is to indicate that it can and should amount to more.
53 Perhaps the most important tripartitional semiotic manifesto was Molino’s “Musical Fact,” origi-
nally published in Musique en jeu in 1975. Molino’s work in general sociological theory has been a sus-
taining influence on the work of Nattiez from Fondements to Music and Discourse.
54 One classic example of many pages of music-semiotic research devoted to a short piece for solo flute
is Nattiez’s “Varèse’s ‘Density 21.5.’” A more compact, and extremely instructive, example of semiotic
music-analytical research is to be found in Morris’s “A Semiotic Investigation,” p. 926.
long debate since the 1960s. On the one hand, it is certainly true that “the pursuit of melodic similarities by Ruwet and Nattiez as a form of paradigmatic analysis is nothing if not a brand of thematic or motivic analysis”; but there must be some degree of overstatement in Agawu’s basic “challenge” here that “only political or institutional interests, rather than epistemological concerns, would lead one to continue to uphold the autonomy of a field of musical semiotics.” 55  This last claim is unduly insensitive to the heuristic edge in much of the research in applied music semiotics. Right from the foundational work, especially in Ruwet’s “Methods of Analysis,” the sincere attempt was to arrive at results that could not otherwise be achieved, to find otherwise hidden form. 56  In the Geisslerlied analysis presented there for example (see Figure 29.2), and much discussed in the secondary literature, 57 it is vital to bear in mind that the object of analysis, a medieval flagellant song, comes down to us with essentially no poietic or indeed esthetic information, no historical attachments telling us about the compositional intention, the proposed manner of performance, the probable attitude of any listener, and so on. Ruwet was using the instincts of a major linguistic scholar – his main métier – faced with an unknown language, asking how best to make sense of it, to find some key to the beginnings of translation into a known language. In this sense the segmentation he provides, and the methodology that can apply to any similar need for segmentation in other contexts, is designed to be immune from the vagaries of “musical sensibility” (Bent; see above, p. 920) in the interests of a result more akin to, if not scientific truth, then at least linguistic fact – which we may define in specialist terminology as an intersubjective recognition of semantic pertinence, but which may just as well be characterized as the laying bare of meaning, as opposed to its bald assertion. It is especially in ethnomusicology, where typically and often by definition the raw material is effectively “unknown,” that one might expect semiotic analysis of the musical line to be at a premium. Writing about Arom’s African Polyphony, Nattiez claimed that “as one of the most ambitious and successful analytical ventures ever pursued in ethnomusicological research, it could be said to mark ‘the return to analysis in ethnomusicology.’” 58  

**Conспектus**

The “poietic” (creation) and “esthetic” (reception) poles of signification have often been illustrated as boxes surrounding the operational – call it analytical – “neutral” level of observation. To the question, what lies outside these boxes in human experience?, it

55 Agawu, “The Challenge of Semiotics,” pp. 159 and 153 respectively. 56 See n. 52.
57 It must be admitted that Dunsby and Whitall, in *Music Analysis*, commented on the “infuriating banality of studies of early chant” by Ruwet (p. 216); thus the claim here is not that that Agawu’s position is incomprehensible, but rather that the cool light of history may cast matters more positively.
Figure 29.2  Nicolas Ruwet and hidden form. Ruwet’s widely discussed analysis of a medieval flagellant song, originally published in *Langage, musique, poésie* (1972), demonstrates the sharp focus that a semiotically disciplined approach to “signification” may yield. Although the ordered pitches of this music are known, there is no other historical evidence about the articulation of the song, and it is only through rigorous comparison with clear transformation rules that a picture of its inherent internal “form” is possible. Cited in Ruwet, “Methods of Analysis in Musicology” (1987), Example 1a, p. 21

may be that the best answer is to appeal to philosophy and anthropology, with the origin of the poietic amounting to an ontological issue, and the result of the esthetic amounting to a sociological one. Where music comes from, in other words, is probably a less important and interesting question than the question of where human awareness itself comes from; and the role of music in our lives is again one important corner of the underlying challenge to understand the nature and consequences of human activity in general. In attempting to understand something of the place of thematic analysis in this grand human scenario, it has been abundantly clear throughout this investigation that the true measure of one approach compared with another is its epistemological grounding. For example there is no doubt that the way developing variation was discussed by musicians throughout the twentieth century assumed a shared knowledge of a shared body of music, a “canon” as it came to be called in the 1980s. Set theory posited a different form of shared knowledge, since it asserted that there is a chromatic universe that developed from tonal music and that formed the “vocabulary” of important ways of composing in the twentieth century. This composing, especially of “atonic” music,
could nevertheless be “athematic,” and the very notion of “harmonic” is challenged by the fact that many, some would say all, aspects of pc set structure are inaccessible to direct musical experience (which characteristic no more undermines the “reality” of pc set structure than does the fact that when we speak we are unaware of the grammatical structures essential in our making any kind of linguistic sense to others). Even less, as it were, “anchored” epistemologically is the position of semiotics, a critique that proposes no prior knowledge of the structure and “meaning” of particular pieces of music, but on the contrary prefers to suspend any intuitions of such knowledge in order to make a forensic investigation that is, like a scientific theorem, replicable and falsifiable. While different theorists, including of course different readers of this text, will have their own epistemological point of view and suspicion of one or another approach to music analysis, the very fact that this suspicion, in the context of informed debate and artistic openness, is unlikely to be uniform tells us that thematic theory has not been a whimsical trend in music theory, but touches directly on our artistic values. By definition, then, one can hardly say which way thematic theory is heading, the only realistic prediction being that however the musical canon is to develop, musicians are likely to seek to unearth the patterns, correspondences, compositional mechanisms, and perceptual strategies of the future.

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