

and the less probable are of crucial importance for the understanding of, and response to, music is apparently in direct conflict with the belief that good music can be reheard and re-enjoyed countless times. For if a work has been heard already, we will *know* what is going to happen and, in later hearings, the improbable will become probable, the unexpected will be expected, and all predictions will be confirmed. According to the kinetic-syntactic view, later hearings of a work should, therefore, yield less information—and consequently less enjoyment—than earlier ones.

But is not precisely the opposite the case? The better we know a work—the more often we have heard it—the more we enjoy it and the more meaningful it is. If this is so, then those who contend that the kinetic mode of signification is the crucial one for musical communication must be mistaken.

The matter is not, however, so simple. For without weakening the logical position of these theorists, cogent reasons can be advanced explaining not only why it is possible to enjoy a piece of music after repeated hearings, but also why later hearings of a work often yield more enjoyment than earlier ones.

1. Understanding music is not merely a matter of perceiving separate sounds. It involves relating sounds to one another in such a way that they form patterns (musical events). Furthermore, smaller patterns combine with one another to form larger, more extensive ones—patterns on higher architectonic levels. These in turn influence the further development of patterns on both lower and higher levels. Thus the implications of patterns on the several architectonic levels exist simultaneously and interact with one another.

Because listening to music is a complex art involving sensitivity of apprehension, intellect, and memory, many of the implications of an event are missed on first hearing. For to comprehend the implications of a musical event fully, it is necessary to understand the event itself clearly and to remember it accurately. Hence it is only *after* we come to know and remember the basic, axiomatic events of a work—its motives, themes, and so on—that we begin to appreciate the richness of their implications. It is partly for these reasons that a good piece of music can be reheard and that, at least at first, enjoyment increases with familiarity.

2. Memory is not a mechanical device for the immutable registration of stimuli. It is an active force which, obeying the psychological “law of good shape,” organizes, modifies, and adjusts the impressions left by perception. In so doing, it tends either to “improve” (regularize) irregu-

lar but well-structured patterns or to “forget” poorly structured ones.¹⁰ For instance, themes or parts of themes, which are strongly structured, are generally remembered quite accurately and easily, while transition sections and developments, which are weakly structured (less expected and predictable), are often forgotten, or are remembered as being more highly structured (more predictable) than they actually are. Because they tend to be forgotten or regularized in memory, the less well-structured parts of a work often remain unpredicted and unexpected through a number of hearings.¹¹ Consequently musical experience maintains its vitality longer than would otherwise be the case.

3. Though not wholly determined by the frequency with which a particular syntactic relationship has previously been heard,¹² prediction (expectation) is nonetheless significantly dependent upon the listener’s learned habit responses, which are a product of his past musical experience. Hence each musical experience—whether of a work heard before or not—modifies, though perhaps only slightly, the internalized probability system (the habit responses) upon which prediction depends.¹³

As T. S. Eliot has pointed out, this process of modification is ahistorical.¹⁴ Not only does hearing or rehearing a work, say, by Schubert, by modifying our internalized probability system, change our experience of the work of later composers (say, Stravinsky); it also changes our experience of the music of earlier composers—for instance, Bach.

The extent to which habit responses are altered by hearing a particular work depends both upon the breadth of the listener’s musical experience and upon the stylistic novelty of the work. Generally speaking, the greater the number of works already experienced by a listener and the greater the number of styles with which he is familiar, the less hearing any particular work will modify his internalized probability system. Works in an unfamiliar style will effect more substantial modifications

¹⁰ See Kurt Koffka, *Principles of Gestalt Psychology*, pp. 499–500, 507–8. The words “weak” or “strong,” as used here, are terms of description, not valuation. Weak shapes perform an important function in molding kinetic process.

¹¹ The distinction between “recognition” and “recall” is important here. One may *recognize* that an unexpected consequent event is one experienced in a previous hearing without being able to *recall* (predict) it when one hears the antecedent event. In the former case, one frequently says, “Ah, now I remember.”

¹² See n. 7, above.

¹³ The formation of internalized probability systems is discussed in Meyer, *Emotion and Meaning in Music*, pp. 56–59, and in chap. 11, below.

¹⁴ T. S. Eliot, *Selected Essays*, p. 15. Also see Max J. Friedländer, *On Art and Connoisseurship*, pp. 155–56. * Ahistoricism—the relationship of the past to the present—is discussed throughout Part II, but particularly in chapters 8 and 9.

particular process by which the event came into being. In like manner, the referential character of an event influences our judgments (inferences) of how an event will progress kinetically. Conversely, the kinetic development of the music—whether it is continuous or interrupted, expected or surprising—performs an important function in characterizing gesture, mood, and connotation.

Musical communication, like that of literature and the plastic arts, depends upon the simultaneous interaction of all three modes of signification. This does not, however, mean that the modes play equally important roles in such communication.⁵ And though the kinetic-syntactic position has always had champions, asserting that this mode is the central and crucial one for musical communication, their number and influence has been steadily growing since the end of the nineteenth century.⁶

As long as the kinetic position was stated in more or less general, philosophical terms it seemed unobjectionable. But in recent years there has been an increasing tendency for music theorists and aestheticians, using psychological concepts or those of information theory, to specify as precisely as possible the particular way in which the kinetic processes of music become significant communication. These specifications of the kinetic position have important implications for the problem of rehearing music.

The kinetic position, thus specified, can be crudely summarized as follows: the significance of a musical event—be it a tone, a motive, a phrase, or a section—lies in the fact that it leads the practiced listener to expect, consciously or unconsciously, the arrival of a subsequent event or one of a number of alternative subsequent events. Such expectations (or “subjective predictions”) are entertained with varying degrees of certainty, depending upon what is *felt* to be the probability of any particu-

⁵ Nor is the relative importance of the three modes of signification the same for all the arts. Moreover, within the stylistic history of one of the arts the amount of relative dependence upon any one of the modes may change. Debussy's style, for instance, places more emphasis upon referential significance and less upon syntactic process than does the style of the earlier Romantic composers.

⁶ This is, of course, in part a reflection of the growing influence of this viewpoint in other disciplines. In philosophy, it is apparent in Whitehead's emphasis upon “process” and in Dewey's insistence upon the “dynamic” character of experience. In psychology, it appears in the Freudian notion of psychic “drives” and in the Gestalt analysis of perception in terms of “forces and tension.” In literature, it has been implicit in the studies of Empson. In music theory, the work of Heinrich Schenker has perhaps been the most important single influence fostering the growth of the kinetic viewpoint.

lar event in a specific set of musical circumstances.⁷ Or, viewed objectively, because of the way the human mind perceives patterns and because of the listener's learned stylistic habits, one musical event implies subsequent musical events with particular degrees of probability.

Musical significance is a function of the degree of probability that a particular musical event is felt to have; such probability depends not only upon the character of the event itself, but also upon the nature and probability of all the events that have gone before. Looked at in another way, the significance of an event is inseparable from the means employed in reaching it. The greater the probability of the relationship between an event and the means employed in reaching it, the less the significance of the event. Thus less expected routes toward “probable” events and less probable events reached in a more or less expected fashion (or some combination of these) will be more meaningful than predictable events that arrive in probable ways. Total probability of both means and ends amounts to tautology. Also, the more ambiguous the antecedent event (and hence the less certain our expectations as to what will follow), the greater the significance of the particular consequent that does arrive.

Stated in terms of information theory, which many of these writers have employed in their analyses: “It is the flux of information created by progression from event to event in a pattern of events that constitutes the reality of experience.”⁸ “The informedness of each new event in a pattern depends upon the predictions that the pattern of events has led us to formulate to the moment. The new event may confirm these predictions or it may fail to confirm them. . . . Information will be a measure of the degree to which a single prediction or an array of predictions is ‘nonconfirmed’ by the present event.”⁹

A theory of communication in which the unexpected, the ambiguous,

⁷ In part the listener's sense of *felt* probability is a product of the frequency with which a particular musical relationship has been experienced. In part, however, it is the result of the nature of human mental processes. See chap. 1 and also John Cohen, “Subjective Probability.” *These matters are also discussed in chapter 11, particularly in the sections dealing with learning.

⁸ Edgar Coons and David Kraehenbuehl, “Information as a Measure of Structure in Music,” p. 145.

⁹ *Ibid.*, p. 129. Also see Fred Attneave, “Stochastic Composition Processes”; Lejaren A. Hiller and Leonard M. Isaacson, *Experimental Music*; David Kraehenbuehl and Edgar Coons, “Information as a Measure of the Experience of Music”; A. Moles, “Informationstheorie der Musik”; and Joseph E. Youngblood, “Style as Information.”

and the less probable are of crucial importance for the understanding of, and response to, music is apparently in direct conflict with the belief that good music can be reheard and re-enjoyed countless times. For if a work has been heard already, we will *know* what is going to happen and, in later hearings, the improbable will become probable, the unexpected will be expected, and all predictions will be confirmed. According to the kinetic-syntactic view, later hearings of a work should, therefore, yield less information—and consequently less enjoyment—than earlier ones.

But is not precisely the opposite the case? The better we know a work—the more often we have heard it—the more we enjoy it and the more meaningful it is. If this is so, then those who contend that the kinetic mode of signification is the crucial one for musical communication must be mistaken.

The matter is not, however, so simple. For without weakening the logical position of these theorists, cogent reasons can be advanced explaining not only why it is possible to enjoy a piece of music after repeated hearings, but also why later hearings of a work often yield more enjoyment than earlier ones.

1. Understanding music is not merely a matter of perceiving separate sounds. It involves relating sounds to one another in such a way that they form patterns (musical events). Furthermore, smaller patterns combine with one another to form larger, more extensive ones—patterns on higher architectonic levels. These in turn influence the further development of patterns on both lower and higher levels. Thus the implications of patterns on the several architectonic levels exist simultaneously and interact with one another.

Because listening to music is a complex art involving sensitivity of apprehension, intellect, and memory, many of the implications of an event are missed on first hearing. For to comprehend the implications of a musical event fully, it is necessary to understand the event itself clearly and to remember it accurately. Hence it is only *after* we come to know and remember the basic, axiomatic events of a work—its motives, themes, and so on—that we begin to appreciate the richness of their implications. It is partly for these reasons that a good piece of music can be reheard and that, at least at first, enjoyment increases with familiarity.

2. Memory is not a mechanical device for the immutable registration of stimuli. It is an active force which, obeying the psychological “law of good shape,” organizes, modifies, and adjusts the impressions left by perception. In so doing, it tends either to “improve” (regularize) irregu-

lar but well-structured patterns or to “forget” poorly structured ones.¹⁰ For instance, themes or parts of themes, which are strongly structured, are generally remembered quite accurately and easily, while transition sections and developments, which are weakly structured (less expected and predictable), are often forgotten, or are remembered as being more highly structured (more predictable) than they actually are. Because they tend to be forgotten or regularized in memory, the less well-structured parts of a work often remain unpredicted and unexpected through a number of hearings.¹¹ Consequently musical experience maintains its vitality longer than would otherwise be the case.

3. Though not wholly determined by the frequency with which a particular syntactic relationship has previously been heard,¹² prediction (expectation) is nonetheless significantly dependent upon the listener’s learned habit responses, which are a product of his past musical experience. Hence each musical experience—whether of a work heard before or not—modifies, though perhaps only slightly, the internalized probability system (the habit responses) upon which prediction depends.¹³

As T. S. Eliot has pointed out, this process of modification is ahistorical.¹⁴ Not only does hearing or rehearing a work, say, by Schubert, by modifying our internalized probability system, change our experience of the work of later composers (say, Stravinsky); it also changes our experience of the music of earlier composers—for instance, Bach.

The extent to which habit responses are altered by hearing a particular work depends both upon the breadth of the listener’s musical experience and upon the stylistic novelty of the work. Generally speaking, the greater the number of works already experienced by a listener and the greater the number of styles with which he is familiar, the less hearing any particular work will modify his internalized probability system. Works in an unfamiliar style will effect more substantial modifications

¹⁰ See Kurt Koffka, *Principles of Gestalt Psychology*, pp. 499–500, 507–8. The words “weak” or “strong,” as used here, are terms of description, not valuation. Weak shapes perform an important function in molding kinetic process.

¹¹ The distinction between “recognition” and “recall” is important here. One may *recognize* that an unexpected consequent event is one experienced in a previous hearing without being able to *recall* (predict) it when one hears the antecedent event. In the former case, one frequently says, “Ah, now I remember.”

¹² See n. 7, above.

¹³ The formation of internalized probability systems is discussed in Meyer, *Emotion and Meaning in Music*, pp. 56–59, and in chap. 11, below.

¹⁴ T. S. Eliot, *Selected Essays*, p. 15. Also see Max J. Friedländer, *On Art and Connoisseurship*, pp. 155–56. * Ahistoricism—the relationship of the past to the present—is discussed throughout Part II, but particularly in chapters 8 and 9.