# *Emotion and Meaning in Music*

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*By* LEONARD B. MEYER



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*To the memory of my father*

ARTHUR S. MEYER

His life was gentle, and the elements
So mixed in him that Nature might stand up
And say to all the world, "This was a man."

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# Preface

The diversity and complexity of twentieth-century modes of thought, together with the clear and pressing need for a more sensitive and comprehensive understanding of how the exchange of attitudes, information, and ideas takes place, has made the analysis of meanings and an examination of the processes by which they are communicated an important focus of interest for many nominally disparate fields of inquiry. Philosophy, psychology, sociology, and anthropology, to name some of those most directly involved, have all become concerned with the problem of meaning: the variety of meanings, their significance and epistemological status, their interrelationships, and manner of communication. Other fields, such as economics, political science, various branches of the humanities, and even the natural sciences, have likewise directed attention to these problems.

The problem of musical meaning and its communication is of particular interest for several reasons. Not only does music use no linguistic signs but, on one level at least, it operates as a closed system, that is, it employs no signs or symbols referring to the non-musical world of objects, concepts, and human desires. Thus the meanings which it imparts differ in important ways from those conveyed by literature, painting, biology, or physics. Unlike a closed, non-referential mathematical system, music is said to communicate emotional and aesthetic meanings as well as purely intellectual ones. This puzzling combination of abstractness with concrete emotional and aesthetic experience can, if understood correctly, perhaps yield useful insights into more general prob-

lems of meaning and communication, especially those involving aesthetic experience.

However, before the relationship of music to other kinds of meaning and other modes of communication can be considered, a detailed examination of the meanings of music and the processes by which they are communicated must be made. Thus although it is hoped that the relevance of this study to the larger problems of meaning and communication will be apparent, these matters are not explicitly considered. No attempt, for example, is made to deal with the general logical philosophical status of music—to decide whether music is a language or whether musical stimuli are signs or symbols.

The relationship between music and other realms of aesthetic experience is likewise left for the reader to determine. Where reference has been made to other modes of aesthetic experience, it has been done in order to clarify or bring into sharper relief some point in connection with musical processes rather than to establish a general aesthetic system. On the other hand, one can hardly fail to become aware of the striking similarity of some aspects of musical experience to other types of aesthetic experience, particularly those evoked by literature.

The subject of the present study, though perhaps of more than passing interest from the general viewpoints discussed above, is of vital and paramount importance in the field of music itself.

For if the aesthetics and criticism of music are ever to move out of the realms of whim, fancy, and prejudice, and if the analysis of music is ever to go beyond description which employs a special jargon, then some account of the meaning, content, and communication of music more adequate than at present available must be given. As I. A. Richards puts it, "The two pillars upon which a theory of criticism must rest are an account of value and an account of communication" [1]—and included in an account of

1. I. A. Richards, *Principles of Literary Criticism* (New York: Harcourt Brace & Co., 1928), p. 25. Although value judgments are unavoidably implied throughout, the present study is primarily concerned with presenting an account of meaning and communication.

communication is obviously an account of the meanings communicated.

Meaning and communication cannot be separated from the cultural context in which they arise. Apart from the social situation there can be neither meaning nor communication. An understanding of the cultural and stylistic presuppositions of a piece of music is absolutely essential to the analysis of its meaning. It should, however, be noted that the converse of this proposition is also true: namely, that an understanding of the general nature of musical meaning and its communication is essential to an adequate analysis of style and hence to the study of music history and the investigations of comparative musicology as well.

The arguments and debates of aestheticians, the experiments and theories of psychologists, and the speculations of musicologists and composers still continue and are ample indication that the problems of musical meaning and communication are with us today. In fact, the inclusion of music as part of liberal education, the unpatronizing and serious consideration given to non-Western music, and the attempts to include the art of music in studies dealing with cultural history have made the problems even more pressing. It is because of these needs, as well as the more specifically musical ones mentioned earlier, that the author has the temerity to attempt another study in this field.

The book is divided into three main parts. Chapter i considers, first, the nature of emotional and intellectual meanings, their interrelationship, and the conditions which give rise to them, and, second, how in general these conditions are fulfilled in the response to musical stimuli. Chapters ii–v are devoted to a fairly detailed examination of the social and psychological conditions under which meaning arises and communication takes place in response to music. And chapters vi–vii present evidence of various kinds, taken from several cultures and several cultural levels, to support the central hypothesis of the study.

Because this study draws so freely upon work in many diverse fields, it is perhaps important to emphasize that the basic theoreti-

cal formulations advanced in it were derived from a study of music rather than, for instance, from a study of aesthetics or psychology. Other fields often furnished exciting and encouraging confirmation for conclusions originally reached through a careful consideration of music and musical processes. Fields outside music have also served to refine concepts or have led to more general formulations. But music was throughout the controlling guide in the formulation of the theory presented here.

The debt which this book owes to other scholars is both so manifest and so vast that only a few of the most important ones can be mentioned. In the field of philosophy the work of Henry D. Aiken, John Dewey, Susanne Langer, and George Mead has been a source of insight and understanding. In the field of psychology I have obviously leaned heavily upon the works of K. Koffka, J. T. MacCurdy, and James Mursell. Though contributing little or nothing to the theoretical formulations made, the work of musicians and musicologists, particularly those working in comparative musicology, has been an important source for most of the evidence presented in the later portions of this book.

Throughout the preparation and writing of this book, I have received valuable advice and encouragement from my colleagues and students. In particular I am indebted to Grosvenor Cooper for his sympathetic understanding of the viewpoint of this study and his many excellent suggestions; to Charles Morris for his cogent criticisms and his precise analysis of many of the problems discussed in the course of this work; to Knox C. Hill, who helped me to edit and cut the text; and to Otto Gombosi, who gave so freely of his wisdom and erudition.

Last but (as tradition hath it) by no means least, I wish to acknowledge the debt I owe to my wife. For it was she who encouraged me when I was depressed; prodded me when I was lazy; ran the household so that I had a maximum of peace and quiet; and at the same time managed to put up with my many moods and perversities.

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# I

# Theory

## *Past Positions as to the Nature of Musical Experience*

Composers and performers of all cultures, theorists of diverse schools and styles, aestheticians and critics of many different persuasions are all agreed that music has meaning and that this meaning is somehow communicated to both participants and listeners. This much, at least, we may take for granted. But what constitutes musical meaning and by what processes it is communicated has been the subject of numerous and often heated debates.

The first main difference of opinion exists between those who insist that musical meaning lies exclusively within the context of the work itself, in the perception of the relationships set forth within the musical work of art, and those who contend that, in addition to these abstract, intellectual meanings, music also communicates meanings which in some way refer to the extramusical world of concepts, actions, emotional states, and character. Let us call the former group the "absolutists" and the latter group the "referentialists."

In spite of the persistent wrangling of these two groups, it seems obvious that absolute meanings and referential meanings are not mutually exclusive: that they can and do coexist in one and the same piece of music, just as they do in a poem or a painting. In short, the arguments are the result of a tendency toward philosophical monism rather than a product of any logical opposition between types of meaning.

Because this study deals primarily with those meanings which

lie within the closed context of the musical work itself, it is necessary to emphasize that the prominence given to this aspect of musical meaning does not imply that other kinds of meaning do not exist or are not important.

On the contrary, the musical theory and practice of many different cultures in many different epochs indicates that music can and does convey referential meaning. The musical cosmologies of the Orient in which tempi, pitches, rhythms, and modes are linked to and express concepts, emotions, and moral qualities; the musical symbolisms depicting actions, character and emotion, utilized by many Western composers since the Middle Ages; and evidence furnished by testing listeners who have learned to understand Western music—all these indicate that music can communicate referential meanings.

Some of those who have doubted that referential meanings are "real" have based their skepticism upon the fact that such meanings are not "natural" and universal. Of course, such meanings depend upon learning. But so, too, do purely musical meanings—a fact that will become very clear in the course of this study.

Others have found the fact that referential meanings are not specific in their denotation a great difficulty in granting status to such meanings. Yet such precision is not a characteristic of the non-musical arts either. The many levels of connotation play a vital role in our understanding of the meanings communicated by the literary and plastic arts.

Both the importance of such referential musical meanings and the difficulties encountered in attempting to base an adequate aesthetic upon them are discussed in chapter viii. For the present we must set them aside and simply state that it is not this aspect of meaning which will primarily concern us in the course of this study. For an adequate analysis of the problems involved in the meaning and communication of the referential content of music would require a separate study of its own.

Let us now make a second point clear, namely, that the distinction just drawn between absolute and referential meanings is not the same as the distinction between the aesthetic positions which are commonly called "formalist" and "expressionist." Both

the formalist and the expressionist may be absolutists; that is, both may see the meaning of music as being essentially intramusical (non-referential); but the formalist would contend that the meaning of music lies in the perception and understanding of the musical relationships set forth in the work of art and that meaning in music is primarily intellectual, while the expressionist would argue that these same relationships are in some sense capable of exciting feelings and emotions in the listener.

This point is important because the expressionist position has often been confused with that of the referentialist. For although almost all referentialists are expressionists, believing that music communicates emotional meanings, not all expressionists are referentialists. Thus when formalists, such as Hanslick or Stravinsky, reacting against what they feel to be an overemphasis upon referential meaning, have denied the possibility or relevance of any emotional response to music, they have adopted an untenable position partly because they have confused expressionism and referentialism.

One might, in other words, divide expressionists into two groups: absolute expressionists and referential expressionists. The former group believe that expressive emotional meanings arise in response to music and that these exist without reference to the extramusical world of concepts, actions, and human emotional states, while the latter group would assert that emotional expression is dependent upon an understanding of the referential content of music.

## THE PRESENT POSITION AND CRITICISM OF PAST ASSUMPTIONS

The present study is concerned with an examination and analysis of those aspects of meaning which result from the understanding of and response to relationships inherent in the musical progress rather than with any relationships between the musical organization and the extramusical world of concepts, actions, characters, and situations. The position adopted admits both formalist and absolute expressionist viewpoints. For though the referential expressionists and the formalists are concerned with genuinely different aspects of musical experience, the absolute expressionists and the formalists are actually considering the same musical processes and similar human

experiences from different, but not incompatible, viewpoints (see p. 39).

Broadly speaking, then, the present investigation seeks to present an analysis of musical meaning and experience in which both the expressionist and the formalist positions will be accounted for and in which the relationship between them will become clear.

Past accounts given by the proponents of each of these positions have suffered from certain important weaknesses. The chief difficulty of those who have adopted the absolutist expressionist position is that they have been unable to account for the processes by which perceived sound patterns become experienced as feelings and emotions. In fact, strange as it may seem, they have generally avoided any discussion of emotional responses whatsoever. These shortcomings have led to a general lack of precision both in their account of musical experience and in their discussions of musical perception.

But, at least, the expressionists have recognized the existence of problems in their position. The formalists, on the other hand, have either found no problems to recognize or have simply turned the other way, seeking to divert attention from their difficulties by attacking referentialism whenever possible. Yet the formalists are faced with a problem very similar to that confronting the expressionists: namely, the difficulty and necessity of explaining the manner in which an abstract, non-referential succession of tones becomes meaningful. In failing to explain in what sense such musical patterns can be said to have meaning, they have also found themselves unable to show the relation of musical meaning to meaning in general.

Finally, this failure to explain the processes by which feelings are aroused and meanings communicated has prevented both groups from seeing that their positions should make them allies rather than opponents. For the same musical processes and similar psychological behavior give rise to both types of meaning; and both must be analyzed if the variety made possible by this aspect of musical experience is to be understood.

Readers familiar with past studies in the aesthetics and psychology of music will perhaps note that much of the earlier work in these fields is not discussed in this study and that many traditional prob-

lems are ignored. This neglect stems from the conviction that the assumptions and orientation of this literature have proved sterile and are today untenable. Since this literature has been explicitly and cogently criticized by such writers as Cazden,[1] Farnsworth,[2] and Langer,[3] only a brief comment on these earlier assumptions seems necessary here, in the hope that the position of this book will thereby be clarified.

The psychology of music has, since its beginnings, been plagued by three interrelated errors: hedonism, atomism, and universalism. Hedonism is the confusion of aesthetic experience with the sensuously pleasing. As Susanne Langer writes:

> Helmholtz, Wundt, Stumpf, and other psychologists . . . based their inquiries on the assumption that music was a form of *pleasurable sensation*. . . . This gave rise to an aesthetic based on liking and disliking, a hunt for a sensationist definition of beauty. . . . But beyond a description of tested pleasure-displeasure reactions to simple sounds or elementary sound complexes . . . this approach has not taken us. . . .[4]

The attempt to explain and understand music as a succession of separable, discrete sounds and sound complexes is the error of atomism. Even the meager achievement which Mrs. Langer allows to studies of this kind must be still further depreciated. For the tested pleasure-displeasure reactions are not what most of the psychologists tacitly assumed them to be: they are not universals (good for all times and all places) but products of learning and experience.

This is the third error, the error of universalism: the belief that the responses obtained by experiment or otherwise are universal, natural, and necessary. This universalist approach is also related to the time-honored search for a physical, quasi-acoustical explanation of musical experience—the attempt, that is, to account for musical communication in terms of vibrations, ratios of intervals, and the like.

These same errors have also plagued music theory. Attempts to explain the effect of the minor mode of Western music, to cite but one example, in terms of consonance and dissonance or in terms of the harmonic series have resulted in uncontrolled speculations and untenable theories. Even those not thus haunted by the ghost of Pythagoras have contributed little to our understanding of musical

meaning and its communication. For, on the whole, music theorists have concerned themselves with the grammar and syntax of music rather than with its meaning or the affective experiences to which it gives rise.

Today we are, I think, able to take a somewhat more enlightened view of these matters. The easy access which almost all individuals have to great music makes it quite apparent that a Beethoven symphony is not a kind of musical banana split, a matter of purely sensuous enjoyment. The work of the Gestalt psychologists has shown beyond a doubt that understanding is not a matter of perceiving single stimuli, or simple sound combinations in isolation, but is rather a matter of grouping stimuli into patterns and relating these patterns to one another. And finally, the studies of comparative musicologists, bringing to our attention the music of other cultures, have made us increasingly aware that the particular organization developed in Western music is not universal, natural, or God-given.

## *Evidence as to the Nature and Existence of the Emotional Response to Music*

Any discussion of the emotional response to music is faced at the very outset with the fact that very little is known about this response and its relation to the stimulus. Evidence that it exists at all is based largely upon the introspective reports of listeners and the testimony of composers, performers, and critics. Other evidence of the existence of emotional responses to music is based upon the behavior of performers and audiences and upon the physiological changes that accompany musical perception. Although the volume and intercultural character of this evidence compels us to believe that an emotional response to music does take place, it tells us almost nothing about the nature of the response or about the causal connection between the musical stimulus and the affective response it evokes in listeners.

### SUBJECTIVE EVIDENCE

From Plato down to the most recent discussions of aesthetics and the meaning of music, philosophers and critics have, with few ex-

ceptions, affirmed their belief in the ability of music to evoke emotional responses in listeners. Most of the treatises on musical composition and performance stress the importance of the communication of feeling and emotion. Composers have demonstrated in their writings and by the expression marks used in their musical scores their faith in the affective power of music. And finally, listeners, past and present, have reported with remarkable consistency that music does arouse feelings and emotions in them.

The first difficulty with this evidence is that, taken at its face value, without benefit of a general theory of emotions as a basis for interpretation, it yields no precise knowledge of the stimulus which created the emotional response. Because music flows through time, listeners and critics have generally been unable to pinpoint the particular musical process which evoked the affective response which they describe. They have been prone, therefore, to characterize a whole passage, section, or composition. In such cases the response must have been made to those elements of the musical organization which tend to be constant, e.g., tempo, general range, dynamic level, instrumentation, and texture. What these elements characterize are those aspects of mental life which are also relatively stable and persistent, namely, moods and associations, rather than the changing and developing affective responses with which this study is concerned.

Much confusion has resulted from the failure to distinguish between emotion felt (or affect) and mood. Few psychologists dealing with music have been as accurate on this point as Weld, who notes that: "The emotional experiences which our observers reported are to be characterized rather as moods than as emotions in the ordinary sense of the term. . . . The emotion is temporary and evanescent; the mood is relatively permanent and stable." [5] As a matter of fact, most of the supposed studies of emotion in music are actually concerned with mood and association.

Taken at face value the introspective data under consideration not only fail to provide accurate knowledge of the stimulus (music) but they cannot even furnish clear and unequivocal information about the responses reported. For several reasons the verbalizations

of emotions, particularly those evoked by music, are usually deceptive and misleading.

Emotions are named and distinguished from one another largely in terms of the external circumstances in which the response takes place. Since, aside from the often fortuitous associations which may be aroused, music presents no external circumstances, descriptions of emotions felt while listening to music are usually apocryphal and misleading. If they are to be used at all, they must be analyzed and considered in the light of a general theory of the relation of musical stimuli to emotional responses.

Second, a clear distinction must be maintained between the emotions felt by the composer, listener, or critic—the emotional response itself—and the emotional states denoted by different aspects of the musical stimulus. The depiction of musical moods in conjunction with conventional melodic or harmonic formulas, perhaps specified by the presence of a text, can become signs which designate human emotional states (see pp. 267 f.). Motives of grief or joy, anger or despair, found in the works of baroque composers or the affective and moral qualities attributed to special modes or *rāgas* in Arabian or Indian music are examples of such conventional denotative signs. And it may well be that when a listener reports that he felt this or that emotion, he is describing the emotion which he believes the passage is supposed to indicate, not anything which he himself has experienced.

Finally, even where the report given is of a genuine emotional experience, it is liable to become garbled and perverted in the process of verbalization. For emotional states are much more subtle and varied than are the few crude and standardized words which we use to denote them.

In this connection it would seem that many of the introspections supplied by subjects in the studies made by Vernon Lee, C. S. Myers, Max Schoen, and others contain a large amount of what psychiatrists call "distortion." For example, when a subject in an experiment by Myers reports that while listening to a particular musical selection she had "a restful feeling throughout . . . like one of going downstream while swimming," [6] she is obviously translating unspeakable feelings into symbolic form. The interpretation of such

symbols is the task of the psychiatrist, not the music critic. To the music critic such introspections show only that some response, not necessarily a specifically musical one, was present. For it is always possible that the thoughts and reveries thus revealed are without any relation to musical experience. The musical stimuli may have functioned merely as a kind of catalytic agent, enabling the response to take place but playing no controlling part in shaping or determining the experience and figuring nowhere in the end result, except perhaps negatively (see chap. viii).

### OBJECTIVE EVIDENCE: BEHAVIOR

The responses of listeners can also be observed and studied objectively. Two general categories of observable responses can be distinguished: (*a*) those responses which take the form of overt changes in behavior and (*b*) those responses which take the form of less readily observable physiological changes. Such objective evidence, though it undoubtedly avoids the difficulties of the verbalization of subjective feelings and emotions, presents other difficulties no less perplexing.

In the first place, emotional responses need not result in overt, observable behavior. As Henry Aiken points out,[7] one of the special characteristics of our responses to aesthetic objects is the very fact that, due to our beliefs as to the nature of aesthetic experience, we tend to suppress overt behavior. Furthermore, as an important adjunct to this point, it should be noted that emotion-felt or affect is most intense precisely in those cases where feeling does not result in or take the form of overt behavior or mental fantasy (see p. 14). This is clear as soon as one considers the tendency of human beings to "work off" or relieve emotional tension in physical effort and bodily behavior. In short, the absence of overt emotional behavior, particularly in response to aesthetic stimuli, is no indication as to either the presence or force of emotional responses.

However, even where overt behavior is present, its interpretation is difficult and problematical. When, on the one hand, overt behavior is the product of particularly powerful emotional tensions, it tends to be diffuse, generalized, or chaotic. Extreme conflict, for example, may result in either motionless rigidity or frenzied activity;

weeping may be the product of either profound grief or extreme joy. Unless we have accurate knowledge of the stimulus situation beforehand, such behavior can tell us little or nothing as to the significance of the response or of its relation to the stimulus.

On the other hand, when emotional behavior does become differentiated it tends to be standardized—to become part of more general patterns of social behavior. Thus although the philosophical aspect of the stimulus situation, the fact that an aesthetic object is being considered, tends toward the suppression of overt behavior, the social aspect of the stimulus situation permits and at times indeed encourages certain standardized types of emotional behavior. This is apparent in the conduct of performers and audiences alike. The jazz performer and his audience, for example, have one mode of socially sanctioned emotional behavior; the concert performer and his audience have another. The difference between the two is more a matter of conventionally determined behavior patterns than it is a matter of musical differences (see p. 21).

Such behavior must be regarded at least in part as a means of communication rather than as a set of natural, reflex reactions. It indicates and designates not only appropriate mental sets but also the proper (i.e., socially acceptable) modes of response. Once this sort of behavior becomes habitual, and it does so very early in life, then it may be activated by the social aspects of the stimulus situation alone, without regard for the stimulus itself. In short, given no theory as to the relation of musical stimuli to affective responses, observed behavior can provide little information as to either the nature of the stimulus, the significance of the response, or the relation between them. For conduct which might to an observer appear to indicate the presence of an emotional response might in point of fact be the result of the subject's day dreams, his observation and imitation of the behavior of others, or his beliefs as to the kind of behavior appropriate and expected in the given social situation.

### OBJECTIVE EVIDENCE: PHYSIOLOGICAL RESPONSES

On the physiological level music evokes definite and impressive responses. It "has a marked effect on pulse, respiration and external

blood pressure. . . . [It] delays the onset of muscular fatigue . . . [and] has a marked effect upon the psychogalvanic reflex. . . ." [8] In spite of the fact that these changes are the very ones which normally accompany emotional experience, the significance of these data is not completely clear. Two principal difficulties are involved.

To begin with, no relation can be found between the character or pattern of the musical selection evoking the response and the particular physiological changes which take place. These changes appear to be completely independent of any particular style, form, medium, or general character. The same responses will take place whether the music is fast or slow, exciting or soothing, instrumental or vocal, classical or jazz.

Because tonal stimulation is a constant factor of all musical stimuli, Mursell is led to conclude that the power of "tone as such" must be the cause of the physiological changes observed.[9]

There is, however, another constant involved in the perception of music; namely, the mental attitude of the audience. The listener brings to the act of perception definite beliefs in the affective power of music. Even before the first sound is heard, these beliefs activate dispositions to respond in an emotional way, bringing expectant ideo-motor sets into play. And it seems more reasonable to suppose that the physiological changes observed are a response to the listener's mental set rather than to assume that tone as such can, in some mysterious and unexplained way, bring these changes about directly. For while the relationship between mental sets and physiological changes has been demonstrated beyond doubt, the effect of "tone as such" has not (see pp. 74 f.).

This does not imply that the presence of a physiological environment, which is a necessary condition for the arousal of emotion, is not a significant fact. The existence of this necessary condition increases the likelihood that emotional responses do take place—a fact which some critics have sought to deny. What this analysis indicates is that not only are these physiological adjustments pre-emotional, as Mursell would admit, but they are also pre-musical.

Furthermore, even the conclusions just reached about the significance of the physiological data are probably an exaggeration, if not

from a psychological point of view, at least, from a logical one. For such adjustments not only accompany affective responses, but they are also concomitants of clearly non-emotional responses.

In the light of present knowledge it seems clear that though physiological adjustments are probably necessary adjuncts of affective responses they cannot be shown to be sufficient causes for such responses and have, in fact, been able to throw very little light upon the relationship between affective responses and the stimuli which produce them. The situation is concisely summarized by Rapaport:

> (*a*) On the basis of the material surveyed nothing can be definitely stated as to the relation to "emotion felt" of physiological processes concomitant with emotions. Proof has not been offered to show that the usually described physiological processes are *always* present when emotion is felt. (*b*) Nothing is known about the physiological processes *underlying* emotional experience. However, sufficient proof has been adduced that neither the James-Lange theory nor the hypothalmic theory explains the origin of "emotion felt." (*c*) The investigations into the physiology and the neural correlates of emotional expression are of importance; their relation to the psychic process designated as "emotion felt" is the crucial point of every theory of emotions. However, the knowledge concerning this relation is so scant that investigations into the influence of emotions on other physiological processes will have to be based rather on what is known about the psychology of emotions.[10]

There is one basic problem with all the objective data discussed: namely, that even when affective experiences result in objective adjustments, whether behavioral or physiological, what can be observed is not the emotion-felt, the affect, but only its adjuncts and concomitants, which in the case of behavior tend to become standardized and in the case of physiological changes are not specific to emotion. What we wish to consider, however, is that which is most vital and essential in emotional experience: the feeling-tone accompanying emotional experience, that is, the affect.

Here we face a dilemma. On the one hand, the response with which we are concerned is profoundly and permanently subjective and hence of necessity concealed from the scrutiny of even the most scrupulous observers; and, on the other hand, we have found that the subjective data available, taken by themselves, provide no definite and unequivocal information about the musical stimulus, the

affective response, or the relation between them. This difficulty can be resolved only if the subjective data available, including the responses of the readers and the author of this study, can be examined, sifted, and studied in the light of a general hypothesis as to the nature of affective experience and the processes by which musical stimuli might arouse such experience.

Such a hypothesis is provided by the psychological theory of emotions. For although much work undoubtedly remains to be done in the field of emotional theory, there appears to be general agreement among psychologists and psychiatrists at least as to the conditions under which emotional responses arise and as to the relationship between the affective stimulus and the affective response.

## *The Psychological Theory of Emotions*

Since the physiological changes which accompany emotional experience, whatever their importance, do not provide a basis for differentiating affective from non-affective states, the differentia must be sought in the realm of mental activity.

However, not all mental responses are affective. We speak of dispassionate observation, calm deliberation, and cool calculation. These are non-emotional states of mind.

If we then ask what distinguishes non-emotional states from emotional ones, it is clear that the difference does not lie in the stimulus alone. The same stimulus may excite emotion in one person but not in another. Nor does the difference lie in the responding individual. The same individual may respond emotionally to a given stimulus in one situation but not in another. The difference lies in the relationship between the stimulus and the responding individual.

This relationship must first of all be such that the stimulus produces a tendency in the organism to think or act in a particular way. An object or situation which evokes no tendency, to which the organism is indifferent, can only result in a non-emotional state of mind.

But even when a tendency is aroused, emotion may not result. If, for example, a habitual smoker wants a cigarette and, reaching into his pocket, finds one, there will be no affective response. If the

tendency is satisfied without delay, no emotional response will take place. If, however, the man finds no cigarette in his pocket, discovers that there are none in the house, and then remembers that the stores are closed and he cannot purchase any, he will very likely begin to respond in an emotional way. He will feel restless, excited, then irritated, and finally angry.

This brings us to the central thesis of the psychological theory of emotions. Namely: Emotion or affect is aroused when a tendency to respond is arrested or inhibited.

### SUPPORTING THEORIES

In 1894 John Dewey set forth what has since become known as the conflict theory of emotions.[11]

In an article entitled "The Conflict Theory of Emotion," [12] Angier shows that this general position has been adopted, in more or less modified form, by many psychologists of widely different viewpoints. For instance, the behaviorists, who emphasize the excitement and confusion which disrupt behavior as important characteristics of emotional conduct, would seem to be describing objectively what others view as the result of inner conflict. But the difficulty with examining emotions from the point of view of behaviorism is that, as we have seen, emotion may be felt without becoming manifest as overt behavior.

MacCurdy, whose own attitude is psychoanalytical, points out that it is precisely "when instinctive reactions are stimulated that do not gain expression either in conduct, emotional expression, or fantasy, that affect is most intense. It is the prevention of the expression of instinct either in behavior or conscious thought that leads to intense affect. In other words the energy of the organism, activating an instinct process, must be blocked by repression before poignant feeling is excited." [13] MacCurdy's analysis involves three separate phases: (*a*) the arousal of nervous energy in connection with the instinct or tendency; [14] (*b*) the propensity for this energy to become manifest as behavior or conscious thought once the tendency is blocked; and (*c*) the manifestation of the energy as emotion-felt or affect if behavior and conscious thought are also inhibited. Of

course, if the stimulation is so powerful that the total energy cannot be absorbed by either behavior or affect alone, both will result.[15]

It is obvious that a shift of emphasis has taken place in the statement of the theory of emotions. Dewey and his followers tended to stress the conflict or opposition of tendencies as being the cause of emotional response. MacCurdy and most of the more recent workers in the field believe that it is the blocking or inhibiting of a tendency which arouses affect. Actually the concept of conflict through the opposition of simultaneously aroused conflicting tendencies may be regarded as a special and more complicated case of the arrest of tendency.

This point was made in Paulhan's brilliant work, which in 1887, almost ten years before Dewey's formulation, set forth a highly sophisticated theory of emotions. "If we ascend in the hierarchy of human needs and deal with desires of a higher order, we still find that they only give rise to affective phenomena when the tendency awakened undergoes inhibition." [16]

However, more complex phenomena are possible as the result of "the simultaneous or almost simultaneous coming into play of systems which tend toward opposite or different actions and which cannot both culminate in action at the same time; always provided that the psychical systems brought into play do not differ too widely in intensity. . . ." [17] Such a situation results, according to Paulhan, in an emotion or affect characterized by confusion and lack of clarity.

In other words, in one case a tendency is inhibited not by another opposed tendency but simply by the fact that for some reason, whether physical or mental, it cannot reach completion. This is the situation of the inveterate smoker in the example given earlier. In the other case two tendencies which cannot both reach fruition at the same time are brought into play almost simultaneously. If they are about equal in strength, each tendency will block the completion of the other. The result is not only affect, as a product of inhibition, but doubt, confusion, and uncertainty as well.

These latter concomitants of conflict are of importance because they may themselves become the basis for further tendencies. For to the human mind such states of doubt and confusion are abhorrent;

and, when confronted with them, the mind attempts to resolve them into clarity and certainty, even if this means abandoning all other previously activated tendencies.

Thus confusion and lack of clarity, growing out of conflicting tendencies, may themselves become stimuli producing further tendencies—tendencies toward clarification—which may become independent of the originally conflicting tendencies. Such tendencies need not be definite in the sense that the ultimate resolution of the doubt and confusion is specified. Some resolution of the confusion may be more important than this or that particular solution, assuming that the final result is not in conflict with other aspects of the stimulus situation or other mental sets.

Furthermore, it should be noted that uncertainty and lack of clarity may be products not only of conflicting tendencies but also of a situation which itself is structurally confused and ambiguous. This is of capital importance because it indicates that a situation which is structurally weak and doubtful in organization may directly create tendencies toward clarification. Delay in such a generalized tendency toward clarification may also give rise to affect.

Although the main tenets of the psychological theory of emotions have been widely accepted, there have, needless to say, been criticisms of the theory. In the main these have come from those who have sought, as yet without success, to account for, describe, and distinguish emotions in purely physiological terms. The theory of emotions, it is objected, does not tell us what an emotion is; it does not tell us precisely what takes place in the body to make us feel.

This objection, though valid, is irrelevant for our purposes. For just as the physicist long defined magnetism in terms of the laws of its operation and was able to deal with the phenomena without knowing the nature of the magnetic states so, too, the psychologist can define emotion in terms of the laws governing its operation, without stipulating precisely what, in physiological terms, constitutes feeling—what makes affect felt.

### THE DIFFERENTIATION OF AFFECT

Thus far we have considered emotion as though it were a general, undifferentiated response, a feeling whose character and quality

were always more or less the same. While there is a good deal of evidence for this view, it is nevertheless clear that in common speech and everyday experience we do recognize a variety of emotional states—love, fear, anger, jealousy, and the like.[18] The whole problem of whether undifferentiated feelings, affects per se, exist, of their relation to differentiated emotional experience, and of the basis for such differentiation is of importance in the present study. For while music theorists and aestheticians have found it difficult to explain how music designates particular emotions, they have found it almost impossible to account for the existence of less specific affective experience.

Were the evidence to show that each affect or type of affect had its own peculiar physiological composition, then obviously undifferentiated feeling would be out of the question. However, Woodworth's summary of the work in this field makes it clear that this is not the case.[19]

The evidence in the case of "emotional (affective) behavior" (the term which will henceforth be used to designate the overt and observable aspects of emotional conduct) is more complex. Much emotional behavior, though habitual and hence seemingly automatic and natural, is actually learned. Because this aspect of behavior serves in the main as a means of communication, it will be called "designative (denotative) behavior." To this category belong most of the postural sets, facial expressions, and motor responses accompanying emotional behavior. Though designative behavior is definitely and clearly differentiated, the differentiation is not a necessary one and indicates nothing as to the possible differentiation of the affect itself.

Other aspects of affective behavior, such as skeletal and muscular adjustments, have been said to be automatic, natural concomitants of the affective response. These will be called "emotional reactions." Supposing that such automatic reactions do exist, a fact that has been debated, it has not been definitely shown that they are differentiated as between types of affective experience.

However, even if it were demonstrated that emotional reactions were differentiated, this would not necessarily prove or even indicate that the affects which they accompany are also differentiated. For

the reaction is a response made to the total emotion-provoking situation and not necessarily a product of affect itself. In other words, it may well be that such automatic behavior is called forth by the peculiar nature of the objective situation rather than by the operation of the law of affect itself. Were this the case, such a reaction would be independent of affect and might indeed take place, as does designative emotional behavior, in the absence of affect.

The suppositions that behavior reactions are essentially undifferentiated, becoming characteristic only in certain stimulus situations, and that affect itself is basically undifferentiated are given added plausibility when one considers the following:

*a*) The more intense emotional behavior is, and presumably therefore the more intense the affective stimulation, the less the control exerted by the ego over behavior and the greater the probability that the behavior is automatic and natural.

*b*) The more intense affective behavior is, the less differentiated such behavior tends to be. In general, the total inhibition of powerful tendencies produces diffuse and characterless activity. For example, extreme conflict may result in either complete immobility or in frenzied activity, while weeping may accompany deepest grief, tremendous joy, or probably any particularly intense emotion.

*c*) Thus the more automatic affective behavior is, the less differentiated it tends to be.

It seems reasonable then to conclude that automatic reflex reactions not only fail to provide reasons for believing that affect itself is differentiated but the evidence seems to point to just the opposite conclusion.

Finally, our own introspective experience and the reports of the experiences of others testify to the existence of undifferentiated emotions. It is affect as such which Cassirer is discussing when he writes that "Art gives us the motions of the human soul in all their depth and variety. But the form, the measure and rhythm, of these motions is not comparable to any single state of emotion. What we feel in art is not a simple or single emotional quality. It is the dynamic process of life itself." [20]

The conclusion that affect itself is undifferentiated does not mean

that affective experience is a kind of disembodied generality. For the affective experience, as distinguished from affect per se, includes an awareness and cognition of a stimulus situation which always involves particular responding individuals and specific stimuli.

Not only do we become aware of and know our own emotions in terms of a particular stimulus situation but we interpret and characterize the behavior of others in these terms. "When an organism is in a situation which results in a disturbed or wrought-up condition, then the situation plus the reaction gives us the name or word which characterizes the whole as a specific emotion. The reaction itself is not sufficient to differentiate the emotion, the character of the situation is involved in this differentiation." [21]

Thus while affects and emotions are in themselves undifferentiated, affective experience is differentiated because it involves awareness and cognition of a stimulus situation which itself is necessarily differentiated. The affective states for which we have names are grouped and named because of similarities of the stimulus situation, not because the affects of different groups are per se different. Love and fear are not different affects, but they are different affective experiences.

Awareness of the nature of the stimulus situation also seems to be the real basis for the distinction which Hebb draws between "pleasant" and "unpleasant" emotions. According to the present analysis, there are no pleasant or unpleasant emotions. There are only pleasant or unpleasant emotional experiences. This is of importance in understanding the distinction made by Hebb.

According to Hebb, the difference between pleasant and unpleasant emotions lies in the fact that pleasant emotions (or, in our terminology, pleasant emotional experiences) are always resolved. They depend "on first arousing apprehension, then dispelling it." [22] But were this actually the case we could only know whether an emotion were pleasant or unpleasant after it was over. Yet, surely, we know more than this while we are experiencing affect. The pleasantness of an emotion seems to lie not so much in the fact of resolution itself as in the belief in resolution—the knowledge, whether true or false, that there will be a resolution. It is not, as Hebb seems to assert when he cites as pleasurable the "mildly frustrating or the

mildly fear-provoking," [23] the control actually exercised over a situation which distinguishes pleasant from unpleasant emotions. It is the control which is believed to exist over the situation.

The sensation of falling through space, unconditioned by any belief or knowledge as to the ultimate outcome, will, for instance, arouse highly unpleasant emotions. Yet a similar fall experienced as a parachute jump in an amusement park may, because of our belief in the presence of control and in the nature of the resolution, prove most pleasurable.

The foregoing analysis is of genuine importance in the present study because it explains and accounts for the existence and nature of the intangible, non-referential affective states experienced in response to music. For in so far as the stimulus situation, the music, is non-referential (in the sense that it pictures, describes, or symbolizes none of the actions, persons, passions, and concepts ordinarily associated with human experience), there is no reason to expect that our emotional experience of it should be referential. The affective experience made in response to music is specific and differentiated, but it is so in terms of the musical stimulus situation rather than in terms of extramusical stimuli.[24]

In the light of this discussion it is evident that, though it is wrong to assert, as some have done, that emotions exist which are *sui generis* musical or aesthetic, it is possible to contend that there are emotional experiences which are so.[25] By the same token, however, any number of emotional experiences can be grouped together so long as their stimulus situations are in some respects similar. Musical affective experiences, for example, might be differentiated into operatic, orchestral, baroque, and so forth. But the most significant distinction would still lie in the fact that musical stimuli, and hence musical affective experiences, are non-referential.

### EMOTIONAL DESIGNATION

Although emotional behavior is frequently characterless and diffuse, often it is differentiated and intelligible. Even without knowledge of the stimulus situation, motor behavior, facial expression, tone of voice, and manner of speaking can tell us not only that an individual is responding in an emotional way but also some-

thing of the character of his feelings or, more accurately, of the character of his affective experience.

Differentiated behavior, as we have seen, is not an automatic or a necessary concomitant of affect itself or even of affective experience. The more automatic behavior is, the less likely it is to be differentiated. Differentiation involves control, and control implies purpose.

The purpose of emotionally differentiated behavior is communication. The individual responding, having an affective experience or simulating one, seeks to make others aware of his experience through a series of non-verbal behavioral signs. Because the gestures and signs which differentiate such behavior are purposeful, this mode of behavior will be called "emotional designation" or "designative behavior." [26]

Such signs not only act as cues for appropriate behavior in the social situation but are probably, at least in part, aimed at making other individuals respond in an empathetic way. As the saying goes: Misery loves company. And so do other emotional states. Not only do we dislike physical isolation, but we want to share our emotional life with others. And, indeed, such sharing does take place. For an observer, recalling a situation in his own experience similar to the one signified by the behavior of another, may respond to the remembered situation in an affective way. Though designative affective behavior may, through constant use, become habitual and automatic so that it is almost invariably called up as part of the total emotional response, it is not basically a necessary concomitant of the response but one brought into play as a result of a desire to communicate.

Designative behavior is differentiated largely by custom and tradition. It varies from culture to culture and among different groups within a single culture. This does not mean that there are no features of such behavior which are natural and widespread. In all probability there are. However, three points should be kept in mind: (1) There is no real evidence to show that there is only one single natural mode of behavior relevant to a given stimulus situation. When alternative modes of behavior are possible, cultural selection probably determines the composition of any particular pattern of affective designation. (2) Whatever natural tendencies

toward a particular pattern of behavior exist may be altered or suppressed by the demands of the larger behavior patterns of the culture. (3) Even where natural behavior is retained in the pattern of emotional behavior, it inevitably becomes codified and standardized for the sake of more efficient communication.

Above all, we understand and make appropriate responses to designative behavior as a total behavior pattern, not just to some features of it, whether natural or otherwise. As a total pattern designative behavior is a cultural phenomenon, not a natural one. It is, in the final analysis, learned.

This is important as it takes most of the sting out of the criticism that music which attempts to designate emotional states depends for its effect upon the learning of conventional signs and symbols. For this fact is not peculiar to music but is characteristic of all emotional designation. If one excludes such designation as a legitimate means of musical communication, one must by the same token exclude it as a means of human communication in general.[27]

## *The Theory of Emotions Related to Musical Experience*

### AN ASSUMPTION

An examination of the psychological theory of emotions was made because the evidence furnished by the introspections of musicians, aestheticians, and listeners and the objective data gathered from the observation of behavior and the study of the physiological responses to musical stimuli did not yield reliable information about the musical stimulus or the affective responses made to it. Implicit in this examination was an assumption which must now be made explicit: Though the stimulus situation may vary indefinitely, the conditions which evoke affect are general and are, therefore, applicable to music. In other words, it was assumed that the law of affect, which states that emotion is evoked when a tendency to respond is inhibited, is a general proposition relevant to human psychology in all realms of experience.

This assumption does not, however, imply or stipulate that musical

affective experiences are the same as the affective experiences made in response to other stimulus situations. Musical experience differs from non-musical or, more specifically, non-aesthetic experience in three important ways.

First, as we have seen, affective experience includes an awareness and knowledge of the stimulus situation. This being so, the affective experience of music will differ from other types of affective experience, particularly in so far as musical stimuli are non-referential.

Second, in everyday experience the tensions created by the inhibition of tendencies often go unresolved. They are merely dissipated in the press of irrelevant events. In this sense daily experience is meaningless and accidental. In art inhibition of tendency becomes meaningful because the relationship between the tendency and its necessary resolution is made explicit and apparent. Tendencies do not simply cease to exist: they are resolved, they conclude.[28]

Third, in life the factors which keep a tendency from reaching completion may be different in kind from those which activated the tendency in the first place. The stimulus activating a tendency may, for example, be a physical or psychic need of the organism, while the inhibiting factors may simply be a series of external circumstances which keep the organism from satisfying the need. This is the situation in the case of the habitual smoker who can find no cigarette. Or the situation may be reversed; that is, a tendency activated by an external stimulus may be inhibited by the psychic processes of the organism.

Furthermore, in everyday experience the resolutions of the tensions brought into play by inhibition may be irrelevant to the tendencies themselves. Tensions arising from psychic needs may be "worked off" in sheer physical activity which is without meaningful relation to the original stimulus or to the tendency itself.

In music, on the other hand, the same stimulus, the music, activates tendencies, inhibits them, and provides meaningful and relevant resolutions.

### TENDENCY AND EXPECTATION IN MUSIC

The assumption that the same basic psychological processes underlie all affective responses, whether the stimulus be musical or of

some other kind, has been implicit in much musical theory and in the speculations of many aestheticians. But this does not in itself increase our understanding of the nature of musical experience and of the musical processes which form it. It does not explain the nature of the relationships which exist between the stimulus, the listener's perceptions and mental processes, and his responses. To do this it is necessary to demonstrate precisely how musical stimuli do, in fact, arouse and inhibit tendencies and thereby give rise to emotions.

What is meant by a tendency to respond? A "tendency" or, as MacCurdy uses the term, an "instinct" "is a pattern reaction that operates, or tends to operate, when activated, in an automatic way." [29] A pattern reaction consists of a set or series of regularly coincident mental or motor responses which, once brought into play as part of the response to a given stimulus, follow a previously ordered course, unless inhibited or blocked in some way. The order established by a pattern reaction is both temporal and structural; that is, the series involves not only the relation of the parts of the total pattern to each other but also their timing. Thus a series may be disturbed either because the succession of the parts of the pattern is upset or because the timing of the series is upset or both.

The term "tendency," as used in this study, comprises all automatic response patterns, whether natural or learned. Since habit is "a mechanism of action, physiologically ingrained, which operates spontaneously and automatically," [30] the term "tendency" also "includes habit reactions and, inevitably, acquired concepts and meanings." [31]

The tendency to respond may be either conscious or unconscious. If the pattern reaction runs its normal course to completion, then the whole process may be completely unconscious. Countless reaction patterns, of which the responding individual is unaware, are initiated and completed each hour. The more automatic behavior becomes, the less conscious it is. The tendency to respond becomes conscious where inhibition of some sort is present, when the normal course of the reaction pattern is disturbed or its final completion is inhibited. Such conscious and self-conscious tendencies are often thought of and referred to as "expectations."
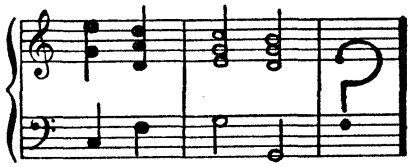
In a broader sense all tendencies, even those which never reach the level of consciousness, are expectations. For since a tendency is a kind of chain reaction in which a present stimulus leads through a series of adjustments to a more or less specified consequent, the consequent is always implied in the tendency, once the tendency has been brought into play. Thus while our conscious minds do not actively expect a consequent unless the pattern reaction is disturbed, our habits and tendencies are expectant in the sense that each seeks out or "expects" the consequents relevant and appropriate to itself. Though he may never become aware of his expectations as he reaches in his pocket for a pack of cigarettes, the behavior of the habitual smoker shows that he does expect or, perhaps more accurately, his habits expect for him.

If tendencies are pattern reactions that are expectant in the broad sense, including unconscious as well as conscious anticipations, then it is not difficult to see how music is able to evoke tendencies. For it has been generally acknowledged that music arouses expectations, some conscious and others unconscious, which may or may not be directly and immediately satisfied.

> . . . the pleasure . . . arises from the perception of the artist's play with forms and conventions which are ingrained as *habits* of perception both in the artist and his audience. Without such habits . . . there would be no awareness whatever of the artist's fulfillment of and subtle departures from established forms. . . . But the pleasure which we derive from style is not an intellectual interest in detecting similarities and differences, but an immediate aesthetic delight in perception which results from the arousal and suspension or fulfillment of expectations which are the products of many previous encounters with works of art.[32]

### EXPECTATION, SUSPENSE, AND THE UNEXPECTED

Sometimes a very specific consequent is expected. In Western music of the eighteenth century, for example, we expect a specific chord, namely, the tonic (C major), to follow this sequence of



EXAMPLE 1

harmonies (see Example 1). Furthermore, the consequent chord is expected to arrive at a particular time, i.e., on the first beat of the next measure.

Of course, the consequent which is actually forthcoming, though it must be possible within the style, need not be the one which was specifically expected. Nor is it necessary that the consequent arrive at the expected time. It may arrive too soon or it may be delayed. But no matter which of these forms the consequent actually takes, the crucial point to be noted is that the ultimate and particular effect of the total pattern is clearly conditioned by the specificity of the original expectation.

At other times expectation is more general; that is, though our expectations may be definite, in the sense of being marked, they are non-specific, in that we are not sure precisely how they will be fulfilled. The antecedent stimulus situation may be such that several consequents may be almost equally probable. For instance, after a melodic fragment has been repeated several times, we begin to expect a change and also the completion of the fragment. A change is expected because we believe that the composer is not so illogical as to repeat the figure indefinitely and because we look forward to the completion of the incomplete figure. But precisely what the change will be or how the completion will be accomplished cannot perhaps be anticipated. The introductions to many movements written in the eighteenth or nineteenth centuries create expectation in this way, e.g., the opening measures of Beethoven's Ninth Symphony or the opening measures of the "March to the Gallows" from Berlioz's *Symphonie Fantastique.*

Expectation may also result because the stimulus situation is doubtful or ambiguous. If the musical patterns are less clear than expected, if there is confusion as to the relationship between melody and accompaniment, or if our expectations are continually mistaken or inhibited, then doubt and uncertainty as to the general significance, function, and outcome of the passage will result. As we have already seen (see pp. 15 ff.), the mind rejects and reacts against such uncomfortable states and, if they are more than momentary, looks forward to and expects a return to the certainty of regularity and clarity. This is particularly striking in the responses made to

works of art where, because of a firm belief in the purposefulness and integrity of the artist, we expect that order will in the end triumph, and precision will replace ambiguity.

However, the manner in which clarification and order will be restored may not be predicted or envisaged. Expectation is not specific; the state is one of suspense. In fact, if doubt and uncertainty are strong enough, almost any resolution, within the realm of probability, which returns us to certainty will be acceptable, though no doubt some resolutions will, given the style, seem more natural than others.

The inclusion of suspense arising out of uncertainty may, at first sight, appear to be an extension and amplification of the concept of arrest and inhibition of a tendency. But when the matter is considered more carefully, it will be seen that every inhibition or delay creates uncertainty or suspense, if only briefly, because in the moment of delay we become aware of the possibility of alternative modes of continuation. The difference is one of scale and duration, not of kind. Both arouse uncertainties and anxieties as to coming events.

Suspense is essentially a product of ignorance as to the future course of events. This ignorance may arise either because the present course of events, though in a sense understandable in itself, presents several alternative and equally probable consequents or because the present course of events is itself so unusual and upsetting that, since it cannot be understood, no predictions as to the future can be made.

From the outset ignorance arouses strong mental tendencies toward clarification which are immediately affective. If ignorance persists in spite of all, then the individual is thrown into a state of doubt and uncertainty (see pp. 15–16). He commences to sense his lack of control over the situation, his inability to act on the basis of the knowledge which he supposed that he possessed. In short, he begins to feel apprehensive, even fearful, though there is no object for his fear. Ignorance and its concomitant feelings of impotence breed apprehension and anxiety, even in music. But ignorance also gives rise to more sanguine feelings; for since the outcome cannot be envisaged, it may be pleasant. These feelings are them-

selves tendencies (the avoidance of painful apprehension and the expectation of a propitious conclusion) which become focused upon an expected resolution of the unpleasant stimulus situation.

The longer doubt and uncertainty persist, the greater the feeling of suspense will tend to be. The stimulus situation creating doubt and uncertainty must, of course, be progressively intensified if suspense is to be maintained or increased. For as we become accustomed to a given stimulus situation, even an unpleasant one, its effectiveness tends to diminish. Moreover, without a change in the stimulus situation in the direction of complication and uncertainty, those vital anticipatory feelings (that a break must come, that doubt and perplexity must give way to knowledge) which make us expect (both apprehensively and hopefully) would be lost.

The greater the buildup of suspense, of tension, the greater the emotional release upon resolution. This observation points up the fact that in aesthetic experience emotional pattern must be considered not only in terms of tension itself but also in terms of the progression from tension to release. And the experience of suspense is aesthetically valueless unless it is followed by a release which is understandable in the given context.

Musical experiences of suspense are very similar to those experienced in real life. Both in life and in music the emotions thus arising have essentially the same stimulus situation: the situation of ignorance, the awareness of the individual's impotence and inability to act where the future course of events is unknown. Because these musical experiences are so very similar to those existing in the drama and in life itself, they are often felt to be particularly powerful and effective.

Musical suspense seems to have direct analogies in experience in general; it makes us feel something of the insignificance and powerlessness of man in the face of the inscrutable workings of destiny. The low, foreboding rumble of distant thunder on an oppressive summer afternoon, its growing intensity as it approaches, the crescendo of the gradually rising wind, the ominous darkening of the sky, all give rise to an emotional experience in which expectation is fraught with powerful uncertainty—the primordial and poignant uncertainty of human existence in the face of the inexorable forces

of nature. With mixed feelings of hope and apprehension in the presence of the unknown, we anxiously await the breaking of the storm, the discovery of what unrelenting fate has decreed.

Similarly in music the state of suspense involves an awareness of the powerlessness of man in the face of the unknown.

What is expected in this state of suspense may not be specified, but this does not mean that any consequent is possible. Our expectations are inevitably circumscribed by the possibilities and probabilities of the style of the composition in question. The consequent must, given the circumstances, be possible within what Aiken has called "an ordering system of beliefs and attitudes." [33]

Although the consequent in any musical sequence must, in this sense, be possible, it may nevertheless be unexpected. But the unexpected should not be confused with the surprising. For when expectation is aroused, the unexpected is always considered to be a possibility, and, though it remains the less expected of several alternatives, it is not a complete surprise. Conditions of active expectation (especially general expectation and suspense) are not the most favorable to surprise. For the listener is on guard, anticipating a new and possibly unexpected consequent. Surprise is most intense where no special expectation is active, where, because there has been no inhibition of a tendency, continuity is expected.

As soon as the unexpected, or for that matter the surprising, is experienced, the listener attempts to fit it into the general system of beliefs relevant to the style of the work. This requires a very rapid re-evaluation of either the stimulus situation itself or its cause—the events antecedent to the stimulus. Or it may require a review of the whole system of beliefs that the listener supposed appropriate and relevant to the work. If this mental synthesis does not take place immediately, three things may happen: (1) The mind may suspend judgment, so to speak, trusting that what follows will clarify the meaning of the unexpected consequent. (2) If no clarification takes place, the mind may reject the whole stimulus and irritation will set in.[34] (3) The unexpected consequent may be seen as a purposeful blunder. Whether the listener responds in the first or third manner will depend partly upon the character of the piece, its mood or designative content. The third response might well be made to

music whose character was comic or satirical. Beckmesser's music in Wagner's *Die Meistersinger* would probably elicit this type of interpretive understanding.[35] In a piece whose character admitted no such purposeful blunders, the second response would probably be elicited.

### CONSCIOUS AND UNCONSCIOUS EXPECTATIONS

In the light of these observations it is clear that an expectation is not a blind, unthinking conditioned reflex. Expectation frequently involves a high order of mental activity. The fulfilment of a habit response, in art as well as in daily life, requires judgment and cognition both of the stimulus itself and of the situation in which it acts. The stimulus as a physical thing becomes a stimulus in the world of behavior only in so far as the mind of the perceiver is able to relate it, on the one hand, to the habit responses which the perceiver has developed and, on the other hand, to the particular stimulus situation. This is clear as soon as one considers that the same physical stimulus may call forth different tendencies in different stylistic contexts or in different situations within one and the same stylistic context. For example, a modal cadential progression will arouse one set of expectations in the musical style of the sixteenth century and quite another in the style of the nineteenth century. Likewise the same musical progression will evoke one set of expectations at the beginning of a piece and another at the end.

Expectation then is a product of the habit responses developed in connection with particular musical styles and of the modes of human perception, cognition, and response—the psychological laws of mental life.[36]

The mental activity involved in the perception of and response to music need not, however, be conscious. ". . . the intellectual satisfaction which the listener derives from continually following and anticipating the composer's intentions—now, to see his expectations fulfilled, and now, to see himself agreeably mistaken . . . this intellectual flux and reflux, this perpetual giving and receiving takes place unconsciously, and with the rapidity of lightning flashes." [37] So long as expectations are satisfied without delay, so

long as tendencies are uninhibited, though intelligence is clearly and necessarily involved in the perception and understanding of the stimulus situation, the response will probably remain unconscious.

Mental activity tends to become conscious when reflection and deliberation are involved in the completion of the response pattern, that is, when automatic behavior is disturbed because a tendency has been inhibited. "Impulsion forever boosted on its forward way would run its course thoughtless, and dead to emotion. . . . The only way it can become aware of its nature and its goal is by obstacles surmounted and means employed." [38]

But even when a habit response is inhibited, conscious awareness of the mental activity involved in the perception of and response to the stimulus situation is by no means inevitable. Intellectual experience (the conscious awareness of one's own expectations or, objectively, of the tendencies of the music), as distinguished from intellectual activity, is largely a product of the listener's own attitude toward his responses and hence toward the stimuli and mental activities which bring them into existence. That is to say, some listeners, whether because of training or natural psychological inclination, are disposed to rationalize their responses, to make experience self-conscious; others are not so disposed. If intellectual activity is allowed to remain unconscious, then the mental tensions and the deliberations involved when a tendency is inhibited are experienced as feeling or affect rather than as conscious cognition (see pp. 38 f.).

Having shown that music arouses tendencies and thus fulfils the conditions necessary for the arousal of affect (see p. 22) and having demonstrated how this is accomplished, we can now state one of the basic hypotheses of this study. Namely: Affect or emotion-felt is aroused when an expectation—a tendency to respond—activated by the musical stimulus situation, is temporarily inhibited or permanently blocked.

As noted earlier (see pp. 22–23) in musical experience the same stimulus, the music, activates tendencies, inhibits them, and provides meaningful and relevant resolutions for them. This is of particular importance from a methodological standpoint. For it means

that granted listeners who have developed reaction patterns appropriate to the work in question, the structure of the affective response to a piece of music can be studied by examining the music itself.

Once those sound successions common to a culture, a style, or a particular work have been ascertained, then, if the customary succession is presented and completed without delay, it can be assumed that, since no tendency would have been inhibited, the listener would not respond in an affective way. If, on the other hand, the sound succession fails to follow its customary course, or if it involves obscurity or ambiguity, then it can be assumed that the listener's tendencies would be inhibited or otherwise upset and that the tensions arising in this process would be experienced as affect, provided that they were not rationalized as conscious intellectual experience.

In other words, the customary or expected progression of sounds can be considered as a norm, which from a stylistic point of view it is; and alteration in the expected progression can be considered as a deviation. Hence deviations can be regarded as emotional or affective stimuli.

The importance of this "objective" point of view of musical experience is clear. It means that once the norms of a style have been ascertained, the study and analysis of the affective content of a particular work in that style can be made without continual and explicit reference to the responses of the listener or critic. That is, subjective content can be discussed objectively.[39]

## *The Meaning of Music*

### THE PROBLEM OF MEANING IN MUSIC

The meaning of music has of late been the subject of much confused argument and controversy. The controversy has stemmed largely from disagreements as to what music communicates, while the confusion has resulted for the most part from a lack of clarity as to the nature and definition of meaning itself.

The debates as to what music communicates have centered around the question of whether music can designate, depict, or otherwise communicate referential concepts, images, experiences, and emo-

tional states. This is the old argument between the absolutists and the referentialists (see pp. 1 f.).

Because it has not appeared problematical to them, the referentialists have not as a rule explicitly considered the problem of musical meaning. Musical meaning according to the referentialists lies in the relationship between a musical symbol or sign and the extramusical thing which it designates.

Since our concern in this study is not primarily with the referential meaning of music, suffice it to say that the disagreement between the referentialists and the absolutists is, as was pointed out at the beginning of this chapter, the result of a tendency toward philosophical monism rather than the result of any logical incompatibility. Both designative and non-designative meanings arise out of musical experience, just as they do in other types of aesthetic experience.

The absolutists have contended that the meaning of music lies specifically, and some would assert exclusively, in the musical processes themselves. For them musical meaning is non-designative. But in what sense these processes are meaningful, in what sense a succession or sequence of non-referential musical stimuli can be said to give rise to meaning, they have been unable to state with either clarity or precision. They have also failed to relate musical meaning to other kinds of meaning—to meaning in general. This failure has led some critics to assert that musical meaning is a thing apart, different in some unexplained way from all other kinds of meaning. This is simply an evasion of the real issue. For it is obvious that if the term "meaning" is to have any signification at all as applied to music, then it must have the same signification as when applied to other kinds of experience.

Without reviewing all the untenable positions to which writers have tenaciously adhered, it seems fair to say that much of the confusion and uncertainty as to the nature of non-referential musical meaning has resulted from two fallacies. On the one hand, there has been a tendency to locate meaning exclusively in one aspect of the communicative process; on the other hand, there has been a propensity to regard all meanings arising in human communication as designative, as involving symbolism of some sort.

Since these difficulties can be best resolved in the light of a general definition of meaning, let us begin with such a definition: ". . . anything acquires meaning if it is connected with, or indicates, or refers to, something beyond itself, so that its full nature points to and is revealed in that connection." [40]

Meaning is thus not a property of things. It cannot be located in the stimulus alone. The same stimulus may have many different meanings. To a geologist a large rock may indicate that at one time a glacier began to recede at a given spot; to a farmer the same rock may point to the necessity of having the field cleared for plowing; and to the sculptor the rock may indicate the possibility of artistic creation. A rock, a word, or motion in and of itself, merely as a stimulus, is meaningless.

Thus it is pointless to ask what the intrinsic meaning of a single tone or a series of tones is. Purely as physical existences they are meaningless. They become meaningful only in so far as they point to, indicate, or imply something beyond themselves.

Nor can meaning be located exclusively in the objects, events, or experiences which the stimulus indicates, refers to, or implies. The meaning of the rock is the product of the relationship between the stimulus and the thing it points to or indicates.

Though the perception of a relationship can only arise as the result of some individual's mental behavior, the relationship itself is not to be located in the mind of the perceiver. The meanings observed are not subjective. Thus the relationships existing between the tones themselves or those existing between the tones and the things they designate or connote, though a product of cultural experience, are real connections existing objectively in culture.[41] They are not arbitrary connections imposed by the capricious mind of the particular listener.

Meaning, then, is not in either the stimulus, or what it points to, or the observer. Rather it arises out of what both Cohen and Mead have called the "triadic" relationship between (1) an object or stimulus; (2) that to which the stimulus points—that which is its consequent; and (3) the conscious observer.

Discussions of the meaning of music have also been muddled by the failure to state explicitly what musical stimuli indicate or point

to. A stimulus may indicate events or consequences which are different from itself in kind, as when a word designates or points to an object or action which is not itself a word. Or a stimulus may indicate or imply events or consequences which are of the same kind as the stimulus itself, as when a dim light on the eastern horizon heralds the coming of day. Here both the antecedent stimulus and the consequent event are natural phenomena. The former type of meaning may be called designative, the latter embodied.

Because most of the meanings which arise in human communication are of the designative type, employing linguistic signs or the iconic signs of the plastic arts, numerous critics have failed to realize that this is not necessarily or exclusively the case. This mistake has led even avowed absolutists to allow designation to slip in through the secret door of semantic chicanery.[42]

But even more important than designative meaning is what we have called embodied meaning. From this point of view what a musical stimulus or a series of stimuli indicate and point to are not extramusical concepts and objects but other musical events which are about to happen. That is, one musical event (be it a tone, a phrase, or a whole section) has meaning because it points to and makes us expect another musical event. This is what music means from the viewpoint of the absolutist.

## MUSIC AND MEANING

Embodied musical meaning is, in short, a product of expectation. If, on the basis of past experience, a present stimulus leads us to expect a more or less definite consequent musical event, then that stimulus has meaning.[43]

From this it follows that a stimulus or gesture which does not point to or arouse expectations of a subsequent musical event or consequent is meaningless. Because expectation is largely a product of stylistic experience, music in a style with which we are totally unfamiliar is meaningless.[44]

However, once the aesthetic attitude has been brought into play, very few gestures actually appear to be meaningless so long as the listener has some experience with the style of the work in question. For so long as a stimulus is possible within any known style,

the listener will do his best to relate it to the style, to understand its meaning.

In and of themselves, for example, the opening chords of Beethoven's Third Symphony have no particular musical stylistic tendency. They establish no pattern of motion, arouse no tensions toward a particular fulfilment. Yet as part of the total aesthetic cultural act of attention they are meaningful. For since they are the first chords of a piece, we not only expect more music but our expectations are circumscribed by the limitations of the style which we believe the piece to be in and by the psychological demand for a more palpable pattern (see chaps ii–v).

Thus the phrase "past experience," used in the definition of meaning given above, must be understood in a broad sense. It includes the immediate past of the particular stimulus or gesture; that which has already taken place in this particular work to condition the listener's opinion of the stimulus and hence his expectations as to the impending, consequent event. In the example given above, the past was silence. But this fact of the past is just as potent in conditioning expectation as a whole section of past events.[45] The phrase "past experience" also refers to the more remote, but ever present, past experience of similar musical stimuli and similar musical situations in other works. That is it refers to those past experiences which constitute our sense and knowledge of style. The phrase also comprehends the dispositions and beliefs which the listener brings to the musical experience (see pp. 73 ff.) as well as the laws of mental behavior which govern his organization of stimuli into patterns and the expectations aroused on the basis of those patterns (see chaps. iii and iv).

The words "consequent musical event" must be understood to include: (1) those consequents which are envisaged or expected; (2) the events which do, in fact, follow the stimulus, whether they were the ones envisaged or not; and (3) the more distant ramifications or events which, because the total series of gestures is presumed to be causally connected, are considered as being the later consequences of the stimulus in question. Seen in this light, the meaning of the stimulus is not confined to or limited by the initial triadic relationship out of which it arises. As the later stages of the

musical process establish new relationships with the stimulus, new meanings arise. These later meanings coexist in memory with the earlier ones and, combining with them, constitute the meaning of the work as a total experience.

In this development three stages of meaning may be distinguished.

"Hypothetical meanings" are those which arise during the act of expectation. Since what is envisaged is a product of the probability relationships which exist as part of style (see pp. 45 ff., 54 ff.), and since these probability relationships always involve the possibility of alternative consequences, a given stimulus invariably gives rise to several alternative hypothetical meanings. One consequent may, of course, be so much more probable than any other that the listener, though aware of the possibility of less likely consequences, is really set and ready only for the most probable. In such a case hypothetical meaning is without ambiguity. In other cases several consequents may be almost equally probable, and, since the listener is in doubt as to which alternative will actually materialize, meaning is ambiguous, though not necessarily less forceful and marked (see pp. 51 ff.).[46]

Though the consequent which is actually forthcoming must be possible within the style, it may or may not be one of those which was most probable. Or it may arrive only after a delay or a deceptive diversion through alternative consequences. But whether our expectations are confirmed or not, a new stage of meaning is reached when the consequent becomes actualized as a concrete musical event.

"Evident meanings" are those which are attributed to the antecedent gesture when the consequent becomes a physico-psychic fact and when the relationship between the antecedent and consequent is perceived. Since the consequent of a stimulus itself becomes a stimulus with consequents, evident meaning also includes the later stages of musical development which are presumed to be the products of a chain of causality. Thus in the following sequence, where a stimulus ($S$) leads to a consequent ($C$), which is also a stimulus that indicates and is actualized in further consequents,

$$S_1 \ldots\ldots C_1S_2 \ldots\ldots C_2S_3 \ldots\ldots \text{etc.}$$

evident meaning arises not only out of the relationship between $S_1$ and $C_1$ but also out of the relationships between $S_1$ and all subsequent consequences, in so far as these are considered to issue from $S_1$. It is also important to realize that the motion $S_1 \ldots\ldots C_1$ may itself become a gesture that gives rise to envisaged and actual consequents and hence becomes a term or gesture on another level of triadic relationships. In other words, both evident and hypothetical meanings come into being and exist on several architectonic levels.

Evident meaning is colored and conditioned by hypothetical meaning. For the actual relationship between the gesture and its consequent is always considered in the light of the expected relationship. In a sense the listener even revises his opinion of the hypothetical meaning when the stimulus does not move to the expected consequent.

"Determinate meanings" are those meanings which arise out of the relationships existing between hypothetical meaning, evident meaning, and the later stages of the musical development. In other words, determinate meaning arises only after the experience of the work is timeless in memory, only when all the meanings which the stimulus has had in the particular experience are realized and their relationships to one another comprehended as fully as possible.

## THE OBJECTIFICATION OF MEANING

A distinction must be drawn between the understanding of musical meaning which involves the awareness of the tendencies, resistances, tensions, and fulfilments embodied in a work and the self-conscious objectification of that meaning in the mind of the individual listener. The former may be said to involve a meaningful experience, the latter involves knowing what that meaning is, considering it as an objective thing in consciousness.

The operation of intelligence in listening to music need never become self-conscious. We are continually behaving in an intelligent way, comprehending meanings and acting upon our perceptions, cognitions, and evaluations without ever making the meanings themselves the objects of our scrutiny—without ever becoming self-conscious about what experience means. What Bertrand Russell says

about understanding language also applies to the understanding of music: "Understanding language is . . . like understanding cricket: it is a matter of habits acquired in oneself and rightly presumed in others." [47]

Meanings become objectified only under conditions of self-consciousness and when reflection takes place. "One attains self-consciousness only as he takes, or finds himself stimulated to take, the attitude of the other." [48] Though training may make for a generally self-conscious attitude, one is stimulated to take the attitude of the other when the normal habits of response are disturbed in some way; when one is driven to ask one's self: What does this mean, what is the intention of this passage? Reflection is likewise brought into play where some tendency is delayed, some pattern of habitual behavior disturbed. So long as behavior is automatic and habitual there is no urge for it to become self-conscious, though it may become so. If meaning is to become objectified at all, it will as a rule become so when difficulties are encountered that make normal, automatic behavior impossible. In other words, given a mind disposed toward objectification, meaning will become the focus of attention, an object of conscious consideration, when a tendency or habit reaction is delayed or inhibited.

### MEANING AND AFFECT

It thus appears that the same processes which were said to give rise to affect are now said to give rise to the objectification of embodied meaning.

But this is a dilemma only so long as the traditional dichotomy between reason and emotion and the parent polarity between mind and body are adopted. Once it is recognized that affective experience is just as dependent upon intelligent cognition as conscious intellection, that both involve perception, taking account of, envisaging, and so forth, then thinking and feeling need not be viewed as polar opposites but as different manifestations of a single psychological process.

There is no diametric opposition, no inseparable gulf, between the affective and the intellectual responses made to music. Though they are psychologically differentiated as responses, both depend

upon the same perceptive processes, the same stylistic habits, the same modes of mental organization; and the same musical processes give rise to and shape both types of experience. Seen in this light, the formalist's conception of musical experience and the expressionist's conception of it appear as complementary rather than contradictory positions. They are considering not different processes but different ways of experiencing the same process.

Whether a piece of music gives rise to affective experience or to intellectual experience depends upon the disposition and training of the listener. To some minds the disembodied feeling of affective experience is uncanny and unpleasant and a process of rationalization is undertaken in which the musical processes are objectified as conscious meaning. Belief also probably plays an important role in determining the character of the response. Those who have been taught to believe that musical experience is primarily emotional and who are therefore disposed to respond affectively will probably do so. Those listeners who have learned to understand music in technical terms will tend to make musical processes an object of conscious consideration. This probably accounts for the fact that most trained critics and aestheticians favor the formalist position. Thus while the trained musician consciously waits for the expected resolution of a dominant seventh chord the untrained, but practiced, listener feels the delay as affect.

## MUSIC AND COMMUNICATION

Meanings and affects may, however, arise without communication taking place. Individual *A* observes another individual *B* wink and interprets the wink as a friendly gesture. It has meaning for *A* who observes it. But if the wink was not intentional—if, for instance, *B* simply has a nervous tic—then no communication has taken place, for to *B* the act had no meaning. Communication, as Mead has pointed out, takes place only where the gesture made has the same meaning for the individual who makes it that it has for the individual who responds to it.[49]

It is this internalization of gestures, what Mead calls "taking the attitude of the other" [50] (the audience), which enables the creative artist, the composer, to communicate with listeners. It is because the

composer is also a listener that he is able to control his inspiration with reference to the listener.[51] For instance, the composer knows how the listener will respond to a deceptive cadence and controls the later stages of the composition with reference to that supposed response. The performer too is continually "taking the attitude of the other"—of the listener. As Leopold Mozart puts it, the performer "must play everything in such a way that he will himself be moved by it." [52]

It is precisely because he is continually taking the attitude of the listener that the composer becomes aware and conscious of his own self, his ego, in the process of creation. In this process of differentiation between himself as composer and himself as audience, the composer becomes self-conscious and objective.[53]

But though the listener participates in the musical process, assuming the role which the composer envisaged for him, and though he must, in some sense, create his own experience, yet he need not take the attitude of the composer in order to do so. He need not ask: How will someone else respond to this stimulus? Nor is he obliged to objectify his own responses, to ask, How am I responding? Unlike the composer, the listener may and frequently does "lose himself in the music"; and, in following and responding to the sound gestures made by the composer, the listener may become oblivious of his own ego, which has literally become one with that of the music.

We must, then, be wary of easy and high-sounding statements to the effect that "we cannot understand a work of art without, to a certain degree, repeating and reconstructing the creative process by which it has come into being." [54] Certainly the listener must respond to the work of art as the artist intended, and the listener's experience of the work must be similar to that which the composer envisaged for him. But this is a different thing from experiencing the "creative process which brought it into being."

However, the listener may take the attitude of the composer. He may be self-conscious in the act of listening. Those trained in music, and perhaps those trained in the other arts as well, tend, because of the critical attitudes which they have developed in connection with their own artistic efforts, to become self-conscious and objective in

all their aesthetic experiences. And it is no doubt partly for this reason that, as noted above, trained musicians tend to objectify meaning, to consider it as an object of conscious cognition (see also p. 70 n. 24).

Finally, and perhaps most important of all, this analysis of communication emphasizes the absolute necessity of a common universe of discourse in art. For without a set of gestures common to the social group, and without common habit responses to those gestures, no communication whatsoever would be possible. Communication depends upon, presupposes, and arises out of the universe of discourse which in the aesthetics of music is called style.