

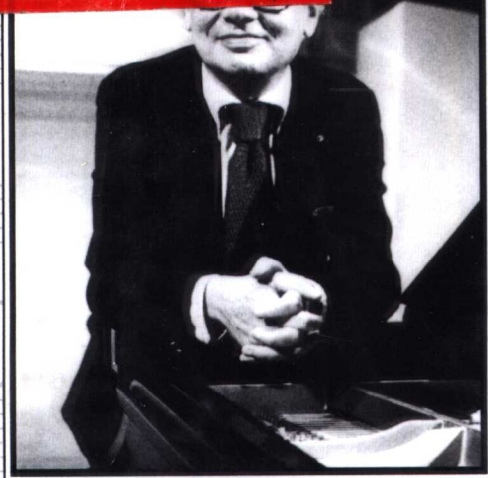
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Introduction
to the*

Music of

MILTON
BABBITT

ANDREW MEAD

Babbitt

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AN INTRODUCTION
TO THE MUSIC OF
MILTON BABBITT

Andrew Mead

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**AN INTRODUCTION
TO THE MUSIC OF
MILTON BABBITT**

PROLOGUE

MILTON BABBITT has been a central figure in contemporary American music for most of the past forty years. As a teacher and a writer he has influenced two generations of students, including such notable musicians as Stephen Sondheim and Donald Martino. His years at Princeton University helped establish the study of composition and music theory as serious academic pursuits, and his articles on Schoenberg, Stravinsky, and the twelve-tone system form the foundation of an extensive body of research by a wide variety of scholars. But Milton Babbitt is first and last a composer, and all his words about music have been secondary to his central endeavor: the creation of a large body of complex, demanding, but ultimately rewarding compositions.

This volume is a celebration of Milton Babbitt the composer and of his music. It is addressed to anyone enthusiastic or curious about contemporary music and is conceived as a guide to a more informed hearing of Babbitt's work. Make no bones about it, I enjoy this music, and it is my hope that the following remarks will increase others' enjoyment as well.

In keeping to this particular goal, I have had to omit a great deal about Babbitt. This is not a biographical study, nor does it attempt to place Babbitt in a historical context, except, incidentally, as an heir to the insights of Arnold Schoenberg and Anton Webern, among others. Although Milton Babbitt was a major figure in the development of electronic music in the United States, I have chosen not to emphasize his work with the synthesizer in a special way, because the music he composed for that medium raises essentially the same problems of comprehension for the listener as his compositions for more conventional ensembles. Similarly, I have not included commentary on his *Three Theatrical Songs*, part of an early musical theater work, *Fabulous Voyage* (1946); these works partake of an entirely different world from that of the rest of Babbitt's music, though it is possible to hear the ghosts of jazz and American popular song lurking beneath the surfaces of his most abstract compositions.

The pleasure I derive from Babbitt's music is not merely some intellectual satisfaction at teasing out a complex puzzle. Nevertheless, the strong emotional and expressive charge of his music is deeply rooted in the ways notes and rhythms work together to create webs of association and connection over ever-larger spans of time. To appreciate fully the music's expressivity, we must be able to follow its structure.

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And while his musical surfaces revel in great sensuous beauty, they can only grant us incidental gratification unless we attempt to hear the ways they reveal the underlying long-range motion through the background structure that forms the lasting emotional drama of his compositions.

The trick to this, of course, is learning what to listen for and how to understand it in context. The best way to do this is to listen to a lot of music and to listen to the same pieces many times. It is still helpful, however, to have some guidelines, and it is toward this end that I have written this volume. Much of what follows is technical, but it is always offered to elucidate ways of hearing that will lead the listener to a greater appreciation of a rich and rewarding musical world. Despite a reputation to the contrary, Babbitt's music is truly music to be heard, and it yields up beauty upon beauty to the engaged listener.

1

MILTON BABBITT'S COMPOSITIONAL WORLD

Introduction

IMMERSION in the music of Milton Babbitt leaves one with an impression of overwhelming variety. From the compact intensity of *Post-Partitions* to the broad lyricism of *Philomel* or *The Joy of More Sextets*, from the intimacies of *The Widow's Lament in Springtime* to the vast canvases of *Relata* or the Piano Concerto, we are constantly invited to explore new realms of musical expression, to try out new ways to listen. Nor does this variety partake merely of the intellectual or the purely experimental. There can be an enormous visceral excitement in a live performance of *Reflections*, while the text setting of *A Solo Requiem* can touch our gravest emotions.

Our appreciation of the range and subtlety of Babbitt's music, however, depends on our ability to perceive the underlying structure behind the local details, to follow events below the surface. Once we can recognize the significance of various changes in intervallic patterns, rhythms, or instrumentation, we can begin to assimilate the wealth of surface detail as the most immediate manifestation of larger patterns of transformation and recurrence that add up to our sense of the overall unfolding of a composition. This is what leads us to the vital center of his music, the source that animates the farthest reaches and ramifications of the sounding surface.

As the preceding might imply, the expressive power of Babbitt's music is inextricably entwined with its structure, and, as is true to varying degrees of any body of work based on a highly consistent, richly elaborate self-contained system of relationships, a lack of comprehension or a superficial acquaintance can level the greatest distinctions and render even the most emphatic expression obscure. This problem is not unique to Babbitt, or to twentieth-century music in general; for various groups of people at various times, the same could be said of High Baroque, bebop, or South Indian music.

What has perhaps contributed to the situation with Babbitt's music is that the composer has to a remarkable degree questioned the underlying assumptions of how music goes, has gone, or could go,

based on its principles for assembling sounds in time. Most habits of musical construal forged by extensive exposure to tonal music will be of little use with Babbitt's compositions, just as they can be misleading with music by Schoenberg or any number of other recent composers, but Babbitt goes farther than most in pursuing the ramifications of his particular chosen set of compositional constraints. The notions of large-scale form, continuity, and surface gesture adapted from tonal practice that can ease our way into the more radically different pitch worlds of Schoenberg or Webern are less helpful as an *entré* to Babbitt's music.

This is not to say that Babbitt's music lacks form or continuity, or that his surfaces are without a wealth of compelling gesture; quite the opposite is true, but the ways that immediate moments compound in a continuity, and the means by which he shapes that continuity into the whole, single complex gesture that is a complete piece, differ radically from those that evolved in the works of the tonal masters. At the heart of this difference is Babbitt's wholehearted embrace of Arnold Schoenberg's revolutionary invention, the twelve-tone system. With joy, rigor, and relentless energy Babbitt has explored the implications of twelve-tone composition throughout his career, and they have ramified into every dimension of his music. Form, continuity, and gesture in his compositions all have their source in the principles underlying relationships determined by the twelve-tone system.

Alas, to many, twelve-tone composition seems an artificial technique for generating music without the interposition of a composer's humanity. For some, twelve-tone relationships are unhearable, and compositions so structured acquire musical value in spite of their twelve-tone aspects.¹ Others fear that dabbling in what seems to them a mechanistic approach to composing will rob their own music of originality, and to avoid contamination they have steered clear even of the twelve-tone musical repertoire, let alone the underlying theory.

The twelve-tone system, however, when properly understood, is no more prescriptive than tonality, and its consequences no less hearable. Nor does working within the constraints of twelve-tone relationships and their extensions either obscure a composer's individual voice or remove his or her responsibility for a composition's ultimate qualities. All the many disparate approaches loosely embraced by the phrase "twelve-tone composition" seek to understand and exploit the definable laws of intervallic relationships within the equal-tempered twelve-note universe. A composer working within the chromatic universe is constrained by those relationships, whether or not he or she is aware of them.

Milton Babbitt is, indeed, a twelve-tone composer, unabashedly so, and it is precisely his profound understanding of Arnold Schoenberg's epochal insight that gives Babbitt's music its special quality. By examining the underlying principles of twelve-tone composition, and by understanding the ways Babbitt has extended Schoenberg's thought as a way of making music, we can begin to appreciate Babbitt's music on its own terms, as a richly varied yet unified body of work.

Babbitt is unusual in today's musical world in his decision to pursue exclusively the ramifications of a single compositional concept. His development has been accretive: in even the most recent work one can perceive the presence of his earliest attitudes exerting a powerful influence. These modes of thinking, derived from his insights into the implications of the twelve-tone system, inform his music on a wide variety of levels. Nevertheless, it is these very restrictions that provide the source of the variety and individuality of his compositions. Babbitt's compositional technique is not simply a matter of metier, a dependable method of turning out a proven commodity; nor is his music merely the sterile embodiment of theoretical precepts. Babbitt's remarkable achievement is his creation of a musical world within which to *be* creative. His constraints are his freedoms: by hewing to a particular perspective of the chromatic universe, Babbitt has entered a landscape with discernable distances and directions, recognizable features, and varied terrain. Within this world Babbitt's compositions move with a wonderful balance of spontaneity and inevitability.

Just as it is useful to think of his music existing in a metaphorical world, so it is helpful to think of his compositions themselves as built up of different combinations of musical genes. Each composition can be conceived as a new recombination of a rather small number of practices and predilections found throughout his career, much as Babbitt's complete oeuvre can be seen to develop from certain first principles, constantly reinterpreted and reembodied. These compositional genes are not totally determinate; rather, they endow a composition with certain attributes that will affect and guide its progress, yet allow for the flexibility within the compositional process that gives Babbitt's music its immediacy. Each work moves like a living being through Babbitt's compositional world, affording us its unique perspective on the chromatic universe.

Some of Babbitt's compositional genes are of a technical nature, and we will explore them during the course of this volume, but others are as simple as a preference for certain instruments or an affection for the female voice. His four published string quartets span his career

and embody all his principal compositional techniques. Running like a sparkling thread through his life is a series of brilliant solo piano pieces, and each compositional phase contains a major work for soprano, accompanied variously by different favored instruments or ensembles. This particular predilection blossoms forth in *An Elizabethan Sextette*.² In contrast to the timbral homogeneity of strings or piano, Babbitt has also written a series of works for mixed ensembles. The quartet of flute, clarinet, violin, and cello, initially appearing together in the *Composition for Four Instruments* at the beginning of his career, returns whole or in part along with piano, voice, viola, or percussion in a number of pieces. Babbitt's pioneering electronic work, first emerging in solo compositions, eventually joins various favored live instruments and ensembles. Looming behind the wealth of chamber, vocal, and solo music is a mountain range of vast orchestral works, alas but dimly perceived due to their infrequent performance. This, at present, culminates in two enormous peaks—the Piano Concerto of 1985 and *Transfigured Notes* of 1986. The former conjoins Babbitt's virtuosic piano writing with his lapidary orchestral textures, while the latter is the apotheosis of the string ensembles found in the quartets and *Correspondences* for string orchestra and tape (1967). Each of his compositions represents in both obvious and more subtle ways the recombination of instrumental and compositional preferences found in embryo at the outset of his career. In a very real sense, Babbitt's whole body of work can be heard as a single gigantic composition, emerging intermittently and in different guises like an intricate shoreline seen through mist.

Babbitt's music is not static, however. Listening to one of his compositions is akin to seeing nature in all its richness. All the immediacy and individuality of light falling through thick forest growth or the play of waves in a tidal rip derive from the interactions of simpler, more universal underlying forces, and it is the complexity of their interaction that causes the enormous wealth of variety in their manifestation. By understanding the principles guiding the growth of trees or the interactions of wind and water we can better appreciate the dialectic of singularity within the totality, the moment in the flow of time. So too it is with Babbitt's music. Its dynamic qualities depend on a series of dialectics between the surface moments of a piece and their source in its underlying structures, between a structure's compositional interpretation and its abstract properties, between particular abstract structures and Babbitt's habitual corners of the chromatic universe, and ultimately between Babbitt's preferred perspective of the chromatic universe and the chromatic universe itself. It is from an awareness of the dynamic tension found at each level that we can

build an appreciation of the balance between communality and individuality that makes Milton Babbitt's compositions such a rich and extensive body of work.

In the following pages we shall begin to explore Babbitt's compositional world. In the remainder of this chapter we shall investigate a number of the principles underlying Babbitt's music and describe the major features of his pitch and rhythmic languages as they have developed through his career. The subsequent chapters contain discussions of selected works from each of Babbitt's three compositional periods. These divisions of his oeuvre are distinguished by certain technical developments.³ I have endeavored to choose compositions not only for their illustrative power but also according to their availability on recording, as noted in the discography. After all, this is music to be known by hearing, and for all that one can say about it, the best introduction to Babbitt's music is to listen.

The Twelve-Tone System

Fundamental to any discussion of Milton Babbitt's music is the question of twelve-tone composition, as virtually every aspect of his musical world derives from principles inherent in Schoenberg's radical reinterpretation of musical primitives. As a young man, Babbitt was quick to realize that despite its surface similarities to tonal forms, Schoenberg's twelve-tone music represented a fundamental music-syntactic and perceptual shift from tonal composition.⁴ That twelve-tone compositions could effectively be made to behave in ways similar to tonal works was a reflection of Schoenberg's yearning for the syntactical power of Mozart's and Brahms's language in a music that would employ the sorts of materials he had explored in his contextual works.⁵ Babbitt, however, saw that although twelve-tone syntax can support the dramatic strategies of tonal forms, it may also lead to entirely new compositional strategies vibrant and musically compelling in themselves. No matter how it is used, though, the twelve-tone system depends on ways of construing the basic elements of music that are fundamentally different from those we use to listen to tonal music.

What is this fundamental difference and how should it affect the way we listen to twelve-tone music? A proper answer requires a brief consideration of tonal hearing. Tonal music's hierarchies emerge from the subtle and extensive intervallic properties of the diatonic collection, the collection that underlies the major scale. We can tell where we are in tonal music through our ability to differentiate among the

different steps of the scale. This is possible because each member of the underlying diatonic collection has a different inventory of intervals between it and each of the other members of the collection, allowing each scale degree a unique position with regard to all the others.

Two other related properties of the diatonic collection are also of crucial importance. First, each type of interval (or its complement to within the octave) is represented a unique number of times in the collection. Thus any diatonic collection contains two minor seconds (or major sevenths), five major seconds (or minor sevenths), four minor thirds (or major sixths), three major thirds (or minor sixths), six perfect fourths (or perfect fifths), and one augmented fourth (or diminished fifth). This means that each intervallic distance (to within octave complementation) between two major scales will yield a unique number of notes held in common: scales a perfect fourth (or perfect fifth) apart will share six notes in common, while scales a minor second (or major seventh) apart will only contain two notes in common. Second, each type of interval (or its complement) is found at only one distance between scale degrees. Thus, for example, minor seconds (or major sevenths) only occur between adjacent scale degrees, as do major seconds, while thirds, both major and minor, can only be obtained by skipping over a scale degree.⁶ In this way, sets of intervals are assigned unique roles in tonal music.

These properties have an enormous effect on the way we think about tonal music, from our technical terminology to the underlying metaphors we use to talk about music and how we experience it. Our familiar note names—the seven letters A, B, C, D, E, F, G plus their chromatic inflections—reflect the primacy of the diatonic collection in so much of our musical thinking. The similarity between major and minor intervals of a given size containing different absolute numbers of half-steps depends on their shared scale degree difference. Given notes can take on different degrees of stability based on what scale degree they represent, and the interplay of changing scale degree significance for a particular note over different spans of time or levels of structure is central to our construal of tonal music. Our ability to recognize our place within the diatonic collection allows us additionally to recognize the placement of notes outside the collection. Thus we can recognize chromatic inflections within a given key, or the temporary establishment of a new key in tonal music. One of our fundamental metaphors to describe music is motion. We tend to describe musical lines as “moving” from place to place, displaced from one position to another based on the various strengths and tendencies of scale degrees and their combinations.

All of the preceding properties and their interpretations depend on

the fact that a major scale is based on a collection that may be usefully construed as a subset of the totality of twelve distinct notes, or pitch classes, in the equal-tempered system. The diatonic collection is the largest sort of subset of the chromatic totality that has all of these powerful properties. If we attempt to enlarge the collection, we disturb those properties that underlie tonal music.

In twelve-tone music an entirely different situation obtains.⁷ Twelve-tone music—particularly Schoenberg's and, in turn, Babbitt's—is based on concatenated presentations of *aggregates*, the general term in twelve-tone theory to denote a single presentation of the twelve pitch classes, without regard to order. Composing music that proceeds in aggregates poses a problem. In aggregate music that does not employ elements of tonal syntax to maintain our tonal interpretations, the musical fabric no longer automatically possesses the means of sorting and hierarchizing provided by the properties of the diatonic collection. Each member of an aggregate has exactly the same catalog of intervals between it and all the other members. With no differentiation of elements, there can be no differentiation of scale degrees. Such a situation calls for a radical reinterpretation of the significance of virtually all our basic musical perceptions, from our way of construing difference and similarity among intervals to the metaphors we use to describe music. In twelve-tone music we cannot depend on the same sorts of collectional properties that form the very basis of our sense of tonal music.

As collections of pitch classes, aggregates are indistinguishable. What makes them distinguishable from one another, and what can perform the basis of comparison among them, is the interior distribution of their constituent elements, the twelve pitch classes. The distribution of pitch classes encompasses a variety of musical means and dimensions, including time, register, instrumentation, articulation, and dynamics. All may serve individually and in conjunction to group the pitch classes in various ways. Such groupings, to various degrees, constitute orderings of the elements of the aggregate. Composing in the total chromatic using concatenated aggregates entails controlling the order of their constituent elements. Babbitt's music suggests that this is the fundamental lesson he learned from his early contact with Schoenberg's scores.⁸

How did aggregate music come about? A comprehensive examination of this question is beyond the scope of this volume, and Schoenberg's practice was firmly established by the time Babbitt decided to adopt and extend it for his own. Nevertheless, the question is fundamental to a proper understanding of how twelve-tone music works, and how we might best go about listening to it.⁹ The great chromatic

enrichment of composition in the latter half of the nineteenth century helped to break down the very distinctions it sought to enrich. By overwhelming the diatonic collection, composers obscured its crucial properties, gradually obliterating the different degrees of distance and direction it provided within and among keys. Syntactical problems arose through the increased use of ambiguity in the interpretations of intervals, and the increased stabilization of certain sorts of dissonance. While the period produced a wonderful variety of music, more and more composers were forced to find unique compositional solutions. Schoenberg's emancipation of the dissonance was merely the logical extension of what he heard around him, and it led, as one might expect, to a complete breakdown of tonal syntax. Each new composition required its own syntax, and the extreme difficulty of composing extended works based on contextual associations is reflected in the works of Schoenberg's middle period by their brevity or their dependence on a text for structure.¹⁰ As the vestiges of tonal voice leading recede in the music of Schoenberg's middle period, the ways collections may be partitioned into smaller ones or assembled into larger ones become increasingly evident as the motivating structural strategy.¹¹ The maximal size for larger collections is the aggregate, and eventually it took on a significance of its own. Schoenberg, faced with the compositional problem of dealing with large collections sliced into smaller ones, or small ones compounded into larger collections, sought ways of controlling them that led to the twelve-tone system. The important point to realize is that the twelve-tone system emerged as the *solution* to a compositional problem and did not spring from nowhere into Schoenberg's mind. The understanding of the significance of twelve-tone composition, however, depends on our ability to understand what it means to hear music in terms of aggregates.

Can we hear aggregates—and if so, how? Chromatic enrichment of the diatonic scale not only clogs the distinctions among pitch classes within the collection but also reduces the vividness of pitch classes not included in the collection. What does remain vivid is the recognition of pitch class membership in a highly chromatic context. Thus, given a collection of a large number of different pitch classes, each represented once, we *can* recognize—although we are not able vividly to determine what pitch classes we have not yet heard—whether or not any additional note represents a new pitch class. By interpreting the recurrence of a pitch class as a signal that we have crossed a boundary, we can parse a highly chromatic undifferentiated musical surface into a discrete series of large bundles of pitch classes that we might call *perceptual aggregates*. Perceptual aggregates may or may not contain all twelve pitch classes, but because of their size this will not