

counsel, and to Paul Carter for his care and dedication in producing the musical examples.

The final years of this book's long gestation period were marked by two happy events: my marriage to Diane Taublieb in 1993, and the birth of our daughter, Alice Jeanette Lambert, in 1995. It gives me great pleasure to associate Diane and Alice with the conclusion of a project that I have always primarily associated with my parents, whose support and encouragement was vital in the early stages. It is with a renewed appreciation of my parents' influence and my debt to them, revealed more and more vividly with each passing day of my own parenthood, that I respectfully and gratefully dedicate this book to my mother, and to my father's memory.

I The Composer and His Language

The story of Ives's musical upbringing is a familiar one. As a youth he showed prodigious talent and was tutored and coached by his father. He felt a spiritual affinity with the elder Ives, and absorbed from him a liberal perspective on music and artistic expression that he would carry with him throughout his life. George Ives was fabled as a musical experimenter and seeker of new sounds, and these activities certainly fostered progressive tendencies in his son. As Burkholder emphasizes, however, the progressivism went hand in hand with an "assured, disciplined technique";¹ Charles Ives's early development as a musical innovator is no more important than his training in traditional music fundamentals. His early growth was also enriched by his exposure to sundry musical experiences as a young participant in the musical life of his hometown of Danbury, Connecticut.² As a drummer in his father's bands, a vocalist in church, a piano student and recitalist, and a church organist, he began to cultivate a keen awareness of music's expressive and artistic power.

The details of Ives's adulthood and musical maturity are also familiar, and they are studies in contrasts. While expending the effort necessary to succeed in the insurance industry, he was also producing musical works of disparate sizes and types. He wrote delicate songs and enormous symphonies. He wrote music

of extraordinary complexity and sublime beauty, usually without hearing it performed. He wrote in styles that mocked music indigenous to American culture and in styles that followed and paid reverence to the traditions out of which such music evolved. The central ideas in his music include thoughtful metaphysical questions and jovial evocations of programmatic images. His musical language includes frankly tonal, marginally tonal, tonally centric, and densely atonal idioms, incorporating compositional techniques that range from the freely formed to the rigidly schematized. He had no patrons to please or publishers to satisfy, and his music reflects all the idiosyncrasies and paradoxes of a composer who answers only to his own whims and agendas.

Technique and "Experimentation"

To make sense of this vast diversity, recent students of Ives's music have identified a basic duality in his work and compositional attitudes. Burkholder explains the duality as a "strict dichotomy between private inquiry and public performance" in the approaches of both Ives and his father. The results of private inquiry, according to Burkholder, are "experiments," intended not for public performance but as elaborate sketches trying out progressive ideas, while the pieces suitable for public presentation are "concert" works that are less technically oriented and more freely inspired.³ To put it another way, the experiments are part of a trend of "research" into new possibilities for musical organization, while the concert pieces aspire to be works of art in the conventional sense.⁴ Ives himself supports separate consideration for his private and experimental compositions by referring to them as "studies" (for example, *Memos*, 56), "memos in notes" (*Memos*, 64), and "not . . . definitely completed works of art" (*Memos*, 111).

Let us examine this widely accepted dualism. A judgment placing a work in one category or the other is a reflection on the *beginning* of the compositional process. To call certain works experimental is to say that Ives evinced a desire to try new ideas when he wrote those works, and had no expectation of public presentation. To use the label *concert* implies that the composer was initially less concerned with experimentation and was anticipating public exposure. But suppose we turn the tables to emphasize not initial motivations but ultimate compositional goals. Ives's goals are a part of his basic views of music, which, as Burkholder has demonstrated, are firmly rooted in Western art-music traditions.⁵ They are apparent throughout Ives's life, from his boyhood exposure to conventional and progressive sounds to his mature creations in various idioms. Ives's ideas about what music is and what it should do are those shared by anyone who contemplates such things: that great music is both profoundly expressive and skillfully organized. His most basic goal is to produce music that

exhibits both these characteristics.⁶ When he writes music designed to try out new, progressive ideas—and which manifests an attitude that might be termed experimental—he is particularly concerned with organization. Expressive content is also important, but if he ultimately feels that a piece has not succeeded on both counts he is inclined to criticize it and highlight what he sees as an inability to meet high artistic expectations. Similarly, when he is not concerned with new compositional techniques, the expressive content in his music may seem to take the lead. But of course its success will also be dependent on its organization, whether exemplified by traditional formal structures, familiar developmental devices, treatment of borrowed material, or any number of other factors.

The two facets are inevitably interdependent. From the point of view of organization, expression is an outcome, a result of the constructive decisions made in the compositional process. A work's language may be wildly unorthodox or stubbornly conventional, but the way it is organized will determine its expressive success. From the point of view of expression, organization is a means to an end. The composer begins with an idea to be expressed and then searches for the right tools to communicate it. The compositional process is a continual interaction between the two perspectives, as expressive desires inspire organizational tools and new techniques of organization suggest further expressive possibilities.⁷

Our shift of perspective away from initial motivations and toward ultimate goals can bring about important revisions in our understanding of Ives's attitudes and development. For example, it has been common to see an experimental work as a kind of proving ground for ideas that might be used later in concert music. Ives supports this notion when he says that the "memos in notes . . . opened up things naturally that later were used naturally and spontaneously" (*Memos*, 64). In Burkholder's words, "Ives later incorporated many of the ideas he had first developed in his 'memos in notes' into his music for public performance."⁸ And Charles Ward constructs a paradigm for Ives's compositional process in which "experiments" are a "necessary prerequisite" for large-scale compositions.⁹ The suggestion is that Ives's early works fall into either the experimental or the nonexperimental category, while his later music effects a kind of synthesis of the earlier categories by employing earlier experimental techniques alongside "nonexperimental" ideas.¹⁰

Although it is true that Ives reuses ideas, it is a mistake to suggest that experimental pieces exist solely for the purpose of supplying material for other music. His goals are more ambitious than that. We owe him the assumption that he approaches one of these works with the same ideals that he has for any other compositional effort. Each experiment deserves to be considered on its own terms, to be evaluated for its own organization and expressivity, independent of

any other music it may have influenced. Once we have taken this view, it is easy to see Ives's compositional evolution not as a continuum from experiment to concert piece but as a typical progression of compositional trends toward greater sophistication and maturity. If Ives seems in his early experimental works to be excessively concerned with organization, this is surely a mark of immaturity—evidence of a composer struggling to find a voice. Surely there are also early works that suffer from a lack of attention to organization. In neither case can the goal of expressivity be achieved. In later works, on the other hand, we may find many ways in which Ives moves closer to his goals. He may do this by employing techniques from earlier “experiments” within a piece that is not essentially “experimental” in conception, or by writing freely inspired music that does not incorporate such techniques, or by employing “experimental” techniques almost exclusively. It becomes very difficult to use the word *experimental* to describe the efforts of a composer who has by then become very experienced with his resources and confident in his technique.

How, then, can we characterize that area of Ives's work that has been known as experimental, using language that forsakes initial motivations for the actual ideas and methods he uses to pursue his artistic goals? The common thread in these works is a reliance on pattern and logic in the formation and development of musical ideas. The structures typically display distinctive compositional designs based on schemes involving pitches, chords, rhythms, metrical structures, formal units, expressive markings, instrumentations, and the like. It is music that can be rigidly organized, exactly contrived, formulaic. It is not experimental but *systematic*; we will refer to this area of Ives's work as systematic composition. In applying this concept we do not, of course, mean that Ives pursued a uniform “system of composition,” but that he developed tools that are systematic in nature and applied them to satisfy particular expressive needs.

Previous studies of Ives's music have focused more on other aspects of its organization. His treatment of borrowed material has been extensively explored, most notably and comprehensively in a recent work by Burkholder.¹¹ Other aspects of Ives's technique that are becoming better understood include his use of stylistic diversity and his strategies for motivic development.¹² But the attention given to the systematic aspect of his work has too often taken the form of superficial observations about techniques that anticipate later twentieth-century trends. It is the goal of this study to give systematic methods a more exalted status, to recognize them as some of the many tools Ives has at his disposal to pursue his compositional objectives, and to consider the place of these methods within the full chronology of the composer's work and compositional evolution.

Technique and “Substance”

One way of understanding how systematic composition fits in with Ives's overall artistic goals and evolution is to consider what the composer himself says about this aspect of his work. Doing so, however, can be a difficult enterprise, as readers of the Ives literature well know, for his major writings about music easily suggest incompatible views on matters of technique and artistry. We have come to know his *Essays Before a Sonata* as a tribute to the ineffable in art—spirit, soul, abstract philosophical messages¹³—whereas the *Memos* seem to favor exactly the opposite qualities—structure, organization, technique. But just as a broader consideration of experimental and concert music yields a common basis in certain fundamental artistic beliefs, so does a new reading of the *Essays* and *Memos* reveal a more consistent articulation of these beliefs than initial impressions may suggest. Though these two works have been amply studied over the years, we owe them yet another visit.

One issue attending any discussion of *Essays* and *Memos* is the contrasting purposes for which they were written. Ives wrote the *Essays* in the years before 1920 as a philosophical backdrop for the *Concord Sonata*, while he wrote the *Memos* in the 1930s as a remembrance of virtually all of his earlier compositional activities. The distinction of purpose is crucial, according to Burkholder, but was overlooked when the first historical and biographical perspectives on Ives were formed.¹⁴ While the *Memos* were regarded as the valuable source of musical commentary that they are, the *Essays* were ascribed a significance broader than that indicated by their stated purpose. They were seen not as philosophical ruminations relating to a specific work and specific period in Ives's creative life but as a kind of artistic manifesto for his entire oeuvre. In reality, as Burkholder observes, the *Essays* express views Ives fully developed only at the end of his composing years. They are his “final, hard-won synthesis of the many conflicting views of music he had either held or encountered during his lifetime.”¹⁵ Burkholder asserts that we cannot weigh all of Ives's musical values against those of the *Essays*, because in so doing we will deprive Ives of his “history and diversity;” we will judge music written at earlier stages of Ives's development on the basis of artistic ideals he formulated only in later years.¹⁶

And indeed Ives has been unfairly pigeonholed, owing to misperceptions of the *Essays*. But we should not be too quick to dismiss absolutely any possible relevance of the *Essays* to Ives's earlier work. If the *Essays* accomplish a synthesis of earlier views, then the seeds and roots of their main ideas lie within the views being synthesized. They articulate artistic values whose individual components may appear in less refined manifestations throughout his earlier music. When Ives wrote the *Essays*, he had some twenty-five years of composing behind

him—during which he had produced music in a diversity of styles and idioms, using a variety of systematic and nonsystematic methods—and he did not ignore this legacy as he formulated his “hard-won synthesis.” Without misrepresenting the position of the *Essays* in Ives’s intellectual development, we can gain valuable insights into his earlier music—even his systematic music—by exploring their principal themes.

One of the main ideas is a fundamental artistic duality for which the *Essays* are renowned. Ives defines the most profound qualities of art as *substance*, consisting of a “body of conviction,” a strong artistic “spirit,” a moral and artistic high ground. It is, as Kavanaugh points out, an “Ivesian equivalent of the Kantian noumenal reality, known to the moral consciousness, or the Platonic good, true and beautiful essence of the universe.”¹⁷ He contrasts this with the *manner* of art, its form or external reality.¹⁸ Ives discusses manner and substance at great length in the *Essays*. Though he says that substance is “practically indescribable” (p. 75), he offers a reasonably clear definition by listing its attributes and drawing comparisons with nonsubstantial art, artists, and ideas. He says substance is composed of “reality, quality, spirit” (p. 75). He contrasts the substance and nonsubstance, respectively, of Emerson and Poe (p. 76), Thoreau and Debussy (p. 82), Beethoven and Richard Strauss (pp. 82–86), introspection and observation (p. 86), genius and talent (p. 88), and truth and repose (p. 88). From these and other descriptions, one aspect of the fundamental duality is clear; we know what substance is and what it is not. And yet the concept of manner is not so clear. If manner is a work’s external reality, it would have to be necessary for the communication of substance; as Ives says, manner is the means by which substance is “translated into expression” (p. 75). Yet at other times he also refers to manner in a very different way, implying not that manner is a necessary conduit but that it is the opposite of substance, the trivial and shallow counterpart of substance’s profundity. For example: “Substance has something to do with character. Manner has nothing to do with it” (p. 77); “The substance of a tune comes from somewhere near the soul, and the manner comes from—God knows where” (p. 77); “Substance tends to create affection; manner prejudice” (p. 78); “We would be inclined to say that Thoreau leaned toward substance and Debussy towards manner” (p. 82). But Ives cannot really mean that manner is bad, since he also acknowledges that it is omnipresent and necessary. What he must mean is that manner that does not reflect substance is bad, and that in such cases the manner itself receives undue attention. In his explicatory comparisons the word *manner* actually means “nonsubstance,” or “manner without substance.” We might rephrase his statements with more precision: “Substance has something to do with character; manner-without-substance has nothing to do with it”; “Substance tends to create affection, nonsubstance prejudice”; and so

forth. It is only in the final pages of the *Essays* that Ives seems to recognize the importance of both sides of the duality, when he speaks of “using in their true relation, as much as one can, these higher and lower dual values” (p. 100). As Burkholder notes, “manner is necessary for art—one could argue that it *is* art, although Ives does not say as much—but must assume its true relation to substance, proceeding from and depending upon the spirit.”¹⁹

Thus manner can be good or bad, depending on its source, which might or might not be substance. Music may have manner without substance, but it cannot have substance without manner. Let us recast Ives’s terms into a more general conceptual framework. We start where the artist begins: with a certain set of *values* that will be projected into the work. These values represent the guiding spirit of his creation, the source of his inspiration. If these values are of the highest spiritual strength and moral character, they are values of substance. Otherwise, they can exhibit any number of undesirable qualities—superficiality, materialism, unoriginality, intellectual simplicity, to name a few. Ives criticizes Wagner, for example, for an “undercurrent of make-believe” in his music, for his overemphasis on “the repose of pride” rather than the “truth of humility,” and for choosing “the representative rather than the spirit itself” (pp. 72, 74). In other words, Ives rejects Wagner’s original values because of their spiritual weakness. Ives’s criticisms of Debussy single out a “sentimentality deadening something within” and a “sensual sensuousness” in Debussy’s attitude toward nature (pp. 73, 82). That is, he also finds that Debussy prefers spiritually vacuous qualities over values of substance. The works of Bach and Beethoven, by contrast, are held up as exemplars of great art (pp. 73–74); the original values of these composers are values of substance.

After the initial inspiration, the model of Ives’s beliefs would continue with the three additional stages shown below. The second stage is the intellectual process of translating original values into terms that are capable of artistic realization—the conception of concrete *ideas* that will reflect the initiating values. Ives describes the progression from values to ideas using a biological metaphor: “Substance in a human-art-quality suggests the body of a conviction which has its birth in the spiritual consciousness, whose youth is nourished in the moral consciousness, and whose maturity as a result of all this growth is then represented in a mental image” (p. 75). And at this point it is just an image. These ideas are not specific musical constructs but general visions of the scope and character of the artwork. They both reflect the quality and profundity (or lack thereof) of the original values and look ahead to the specific materials that will give them musical life.

Values —> Ideas —> Manner —> Realization

The third stage translates the mental image from stage two into concrete musical structures—Ives's *manner*. This move from ideas to manner is the progression from conception to composition, from the ideas that formulate a work to the details of the way these ideas are communicated. And once again, the manner will be deficient only if it reflects nonsubstantial original values. Finally, stage four is the *realization* of the finished work—for music, the performance. This is included here as the natural and essential conclusion of the process, although Ives devotes little attention to it in the *Essays* (perhaps because he had all too little experience with it).²⁰

A related concept in the *Essays* is Ives's notion of beauty. One statement on this subject may be the work's most quoted passage: "Beauty in music is too often confused with something that lets the ears lie back in an easy chair. Many sounds that we are used to do not bother us, and for that reason we are inclined to call them beautiful" (p. 97). But in general Ives is as inconsistent in his discussion of beauty as he is in his definition of manner. On the one hand, there is the "easy-chair" beauty, consisting of the "sounds that we are used to," the clichéd and unchallenging musical conventions that result from "a kind of a first necessary physical impression" (p. 76). Ives says, "when a new or unfamiliar work is accepted as beautiful on its first hearing, its fundamental quality is one that tends to put the mind to sleep" (p. 97). This definition of beauty also underlies statements such as: "We like the beautiful and don't like the ugly; therefore, what we like is beautiful and what we don't like is ugly . . ." (p. 77). On the other hand, Ives also adopts a definition of beauty that is more vague and abstract, that is a reflection of the spiritual essence of a work. This artistic beauty is roughly equivalent to substance. It brings to mind Emerson's thoughts on beauty in *Nature*, when he speaks of a "high and divine beauty . . . found in combination with the human will."²¹ And it is this definition that Ives has in mind when he speaks of "moral beauty" (p. 77, quoting François Roussel-Despierres), and when he claims that "Probably nobody knows what actual beauty is" (p. 76). He invokes this definition of beauty when he admits "that manner has a great deal to do with the beauty of substance, and that to make a too arbitrary division or distinction between [manner and substance] is to interfere, to some extent, with an art's beauty and unity" (p. 97).

Thus Ives's concept of beauty embodies both sides of the duality. Easy-chair beauty is a variety of manner-without-substance—a conventionally structured manner that reflects a musically unoriginal and intellectually shallow substance. Artistic beauty is manifested in manner that does reflect substance, revealing moral strength and spiritual depth. Ives acknowledges the dual definition, even while doubting that a distinction can easily be made: "Beauty, in its common conception, has nothing to do with . . . substance, unless it be granted that its

outward aspect, or the expression between sensuous beauty and spiritual beauty, can be always and distinctly known, which it cannot, as the art of music is still in its infancy" (p. 76).

Now we can take these main ideas of the *Essays*—manner, substance, and beauty—and see how they might be applied to the *Memos* and to systematic writing in general. Since manner is necessary to art, we now know better than to condemn the discussion of technical details in *Memos* or the focus on method and design in systematic music simply because they place value on a highly organized manner. The issue is whether the initial compositional values reflected by a systematic manner are values of substance.

It is a thorny question, because Ives sometimes avoids addressing it or seems to deny that "systematic substance" is possible. In his discussion of Emerson in chapter two of the *Essays* (pp. 11–36), for example, he praises qualities such as vagueness and eschewal of order and logic in Emerson's writings.²² Elsewhere in *Essays* (p. 77), Ives criticizes "the sculptors' over-insistence on the 'mold'; the outer rather than the inner subject or content of his statue," and "overinterest in the multiplicity of techniques, in the idiomatic." In *Memos* (p. 78) he describes modern music as "too intellectual—the brain has [been] working a little more than that bigger muscle underneath (what you may call it, spirit, inner blast, soul?)." And an inscription in the margin of sketches for his song "Majority" avers that music constructed in a "calculated, diagram, design way . . . is a weak substitute for inspiration."²³

But Ives is not utterly denouncing regularity and organization, nor is he denying the possibility that systematic methods are potential communicators of substance. He does indeed praise Emerson's spontaneity and freedom of inspiration, but he does so only to explain particular aspects of Emerson's work, not to deny other ways of achieving the same spiritual transcendence. He says, for example, "Vagueness is at times an indication of nearness to a perfect truth" (*Essays*, 22). It is *at times* an indication; the implication is that in other circumstances other qualities may serve as indicators. David Michael Hertz observes that Ives derived from Emerson not only a sense of spontaneity and freedom but also an appreciation of "a kind of Emersonian organicism" that would lead to more precise compositional strategies.²⁴ And when Ives denigrates the sculptor and modern music, he is simply illustrating the undesirability of manner-without-substance, without offering any suggestions for how manner in these examples could reflect substance. When he criticizes organizing principles in "Majority," he indicates only that such procedures cannot be the sole inspirational source, not that they have no role to play in good music; they may indeed have one, for example, as technical means of communicating more substantive inspirations.

Elsewhere, Ives does suggest ways that a systematic manner can reflect values of substance. One way is implicit in his criticisms of music that relies too heavily on convention, when he rails against “mellifluous sounds, perfect cadences, perfect ladies, perfect programs,” and “one-syllable gossip for the soft-ears-and-stomachs, easy for their bodies, . . . art prostituted for commercialism” (*Memos*, 73, 134). He often makes such statements as a means of emphasizing his own innovations—he uses himself to demonstrate the value of progressive thinking of the kind that goes into systematic composition. Sometimes his condemnations of tradition take the form of criticisms of technique. In *Essays* (98), for example, he says that “unity is, too generally conceived of, or too easily accepted as analogous to form; and form as analogous to custom; and custom to habit.” In *Memos* (86), he criticizes those who value “workmanship” in music. When they use this word, he says, they “mean just one and the same thing, ‘groove made technique,’ reflecting almost literally some sofa-cushion formulism which they’ve slept on for generations—the little, usual, tried-out, played-out expediences in harmony, melody, time—(rhythm is beyond them)—every right sound (sound or unsound) in just the nice way they’ve always seen it done, etc. etc.” But once again, the technique he criticizes is that of a composer who is unoriginal and uninspired, who falls back on tradition without attempting to break new ground. Pathbreaking technique, such as we see in the systematic writing, is desirable and therefore can be a reflection of substance.

In fact, when Ives uses the term *workmanship* to describe music that is both organized and original, the word takes on positive connotations. In *Memos* (91), he describes *Hallowe’en*, a meticulously crafted systematic work, as “one of the most carefully worked out (technically speaking), and one of the best pieces (from the standpoint of workmanship) that I’ve ever done.” Then he surveys some of the work’s systematic characteristics, as if to confirm that these well-reasoned and novel procedures are part of what makes *Hallowe’en* one of his “best pieces.” Later he adds, “I happened to get exactly the effect I had in mind, which is the only (or) at least an important) function of good workmanship.” Ives added the phrase in parentheses sometime after writing the rest of the sentence.²⁵ Clearly, good, progressive workmanship is a component of good music. It is not the only thing of value, but it is important.

At one point in *Memos* (31–32) Ives even uses the phrase *technical substance* to refer to well-organized and innovative structural details. Referring to the music critic who ignores this aspect of music, he says,

If he should sometime be compelled to listen, or try to hear, and then try to tell others what is going on in this music, first from a technical standpoint (enough to know that he has sensed what the technical substance

implies), not in too much or every detail . . . but in the fundamental problems that have to do with all music in general, . . . what would he say? Of course here we are referring to a kind of music that he is not much accustomed to, and which he has not trained himself to listen to and hear. What would he tell the public about what is taking place, as to its form, as to its tone-associations, as to its rhythms, as to its tonalities (poly-, a-, or others), its division of tones, as to the recurrence or sequences of the musical thought, its sound-centers, the relation of the different groups of tones and intensities, etc. etc.?

Ives leaves no doubt that all these things that the critic misses are things of value, aspects of music that can form part of “technical substance.”

Another way that technique can reflect substance has to do with the role of the intellect. Ives explains that there is a part of substance that is associated with intellectual depth and strength. Early in the *Essays*, for example, he says that music should have meaning “perhaps of a spiritual nature, in the expression of which the intellect has some part” (p. 4). Shortly thereafter, he singles out “mental, moral, or spiritual” qualities as among the highest artistic values (pp. 7–8). And in the Emerson chapter, while recognizing that “the intellect is never a whole,” he explains that the intellect “is where the soul finds things” (p. 24). These comments bring to mind Ives’s references, elsewhere than in his discussions of substance, to intellectual values in music. In *Memos* (p. 63), for example, he describes pieces that “were in part made to strengthen the ear muscles, the mind muscles, and perhaps the Soul muscles too.” And he says the intensely systematic work *In Re Con Moto Et Al* is “if not good music (though today I think it is), at least good exercise for strengthening the muscles in the mind—and I’m not sure that it doesn’t help some in the muscles of the heart and soul (wherever they are!)” (*Memos*, 101). Music can embody intellectual depth through profound philosophical messages, or references to literary figures and trends, or displays of the complexity and expressive power of music, among others. But surely systematic writing is one of the most effective ways. The systematic compositional process is *ipso facto* an intellectual act, more so than any other approach.

Further, when Ives discusses beauty in the *Essays*, he assumes that there is an intellectual component of perception. He implies that the beauty of substance is something that can be appreciated only by those who are sufficiently open to a concept of music expanded to encompass the forces of intellect. A listener who knows only easy-chair beauty is a listener who is intellectually confined and lazy, who is unwilling to acknowledge a kind of artistic beauty that may include sounds that would not be “beautiful” in a conventional way. This is what Ives

means when he says "My God! What has sound got to do with music!" (*Essays*, 84)—the "music" is the substance that narrow-minded listeners miss by limiting their understanding of beauty to certain sounds only.²⁶ But a listener who recognizes the beauty inherent in true substance is intellectually open to unconventional sounds and intellectually capable of seeing beauty in systematic complexity and compositional sophistication. Again Ives's views echo Emerson's in *Nature*: "There is still another aspect under which the beauty of the world may be viewed, namely, as it becomes an object of the intellect. . . . The intellect searches out the absolute order of things as they stand in the mind of God, and without the color of affection."²⁷

Ives has still more to say about the issues of intellectual sophistication and technical complexity in his essay on insurance.²⁸ After a deep, complicated exposé of guidelines for insurance agents in determining amounts of coverage, he writes,

For what are technical complexities, anyway? Whence do they come if not from the natural evolution of the business? Why make believe they don't exist? Why not see if they have their lessons for us—and, if so, learn to use them or not use them, so that, in any event, our work may be made more valuable and comprehensive.

The method outlined in this paper, or any similar one, becomes less and less complicated the more thoroughly it is learned and the longer it is practiced. Whoever takes the trouble to know whatever he has to know, whether it be a problem of "transmitting the molecular force," or of "selling a book," in as perfect a way as he is capable [of], and then keeps *at it and at it* until all sides of his problem may become as clear to him as the sun was to Galileo, *will* find a way of making his message clear to the dullest listener. Truth always finds a natural way of telling her story, and a natural way is an effective way, simple or not.

All fundamental aspects of anything—moral values or an organized business activity—have their complex side; all are part of the natural laws coming up from the roots. Any man, in any valuable work—no matter how limited his capabilities and power of expression seem to him at the start—who sincerely seeks to find the truths and essentials so often confused with or covered up by the immediate and superficial, and who constantly tries, as well as he knows how, to present them in preference to the easier, the more expedient, or the less substantial, will find a way to the *kind* of success he wants. And the way will be simple enough to be understood by the many, and complex enough to be of some value to all!²⁹

He could essentially be talking about his systematic music. He urges us to take the time to understand technical complexity and find out how we can learn from

What we will find are basic "truths and essentials" that are often obscured by the "immediate and superficial" and that should be preferred to the "easier, the more expedient, or the less substantial." In other words, the complex inner core is where we find substance. And substance is complex because it reflects the complexity of the world itself. In the process of understanding it we learn more about ourselves and our environment.

Contemporary analysts have occasionally addressed the issue of associating substance with technique. Perhaps the first was Dennis Marshall, who showed that Ives's borrowed material is "at the very core of his compositional thought."³⁰ Ives selects and uses borrowed materials, according to Marshall, so that their "musical characteristics and interrelationships" will "form a part of the real *substance* of [Ives's] musical art."³¹ Larry Starr also confronts the issue, asserting that "Ives's often peculiar manner is . . . in fact *necessary* to the appropriate expression of his substance."³² Starr, in his analysis of Ives's song "Ann Street," finds that a pattern of stylistic change, which might seem simply an aspect of manner, actually "helps illuminate the inner musical 'substance'" of the song.³³ To put it in the language we are using here, the song's manner reflects values of substance both because it has artistic beauty and because it appeals to the scrutinizing intellect.³⁴

The value of technique was clear in Ives's mind when he wrote the *Essays*. If it tends to linger in the background of the work, that is only because his main purpose in the *Essays* is to define and describe substance, the higher artistic value that technique serves to communicate. But just because *Memos* conversely places primary focus on technique, we should not assume that its main purpose is to investigate manner. In the end both the *Essays* and the *Memos* help us to understand the nature and qualities of artistic substance. While the *Essays* do this abstractly, with philosophical ruminations about art and aesthetics, the *Memos* do it pragmatically, by illuminating the necessary technical roots of substance.

Aspects of Systematic Composition

On our journey through Ives's musical language, we will be guided by a few basic questions. Why did Ives write systematic music? What was it about systematic methods that he found appealing and worthy of precious hours of his time? And what are the values of substance that particular systematic methods help to communicate? But before we can start to answer these questions, we must ask a simpler one: What are the basic characteristics of systematic composition?

Calculation. The compositional process of creating and implementing systematic methods is cerebral and abstract. And yet this is not its most distinctive

feature—the same could also be said of other approaches. We could, for example, speak of intellectualism in music written without calculation to express a philosophical idea, or in music that is simply organized according to some general principle of thematic or motivic unity. What distinguishes systematic writing from other intellectually centered approaches is the role of calculation—of compositional strategies involving precise measurements and exactly formulated relationships among musical entities. The process may resemble a mathematical activity, and the result may often be modeled with mathematical operations.

Structural Models. The goal of a calculation process is often to create or realize a specific plan, a structural model, for musical relationships. The model may be a registral shape, a prescription for pitch or rhythmic relationships, or a formal design. It can be an important source of musical unity and structure, and as such can be an effective means of supplanting tonal forces. One type of model, for example, is essentially a visual image that might be given any number of musical representations; a “wedge” model, for example, might be realized by a mirroring of melodies or a succession of incrementally structured chords, or by some combination of both. Other types of models are formed from pure musical relationships, such as orderings of pitch classes or intervals. Still other types are distortions or elaborations of customary or familiar models, such as those of a fugue or march. The act of modeling, in its broadest definition, is central to Ives’s compositional technique, encompassing not only the formation and execution of contrived plans but also that most characteristic feature of his non-systematic music, the treatment of borrowed material. Burkholder demonstrates this convincingly in his discussion of the various ways existing music can serve as a model. He finds that “modeling is the seminal technique, appearing in Ives’s earliest compositions, continuing until his last works, and underlying many of the later procedures.”³⁵

Patterns. Virtually all of Ives’s systematic methods, and many of his structural models, are based on some sort of pattern of musical entities—involving intervals, durations, transformations, and the like, and often some combination thereof. Once a pattern is established and set in motion, the musical progression becomes automated or self-generating. Ives refers to this aspect of his systematic music when he says some of his work is “based on deductions from quite simple premises, suggesting other logical premises from similar processes, but almost too self-evident to need explanation” (*Memos*, 140). This aspect gives his systematic music a predictability and regularity that stands in stark and ironic contrast to the freedom and seeming randomness that is not only pervasive but indeed flaunted in much of his other music.

Transformational Orientation. Ives’s systematic structural models or self-generating

patterns are often structured to place primary focus on the transformations between musical entities, not on the entities themselves. This is the case, for example, in a model based on an intervallic pattern, one of Ives’s favored tools. The transformational orientation invites comparisons with other music of the period, as explored in a number of recent studies. These include Richard Cohn’s studies of Bartók, in which equivalent musical entities are related by processes of “transpositional combination,” and David Lewin’s writings emphasizing transformational relationships in studies of various tonal and post-tonal musics.³⁶

Pitch-Class Variety. Finally, a principle underlying many of Ives’s structural models, self-generating patterns, and transformational relationships is that a variety of pitch classes should be involved. In many cases, this concern translates to some method of completing the aggregate, inviting provocative but usually unproductive comparisons with twelve-tone music. The comparisons are more apt with pre-twelve-tone music, where pitch-class saturation and equalization are common methods of denying tonal incursions. Webern, for example, claims to have followed a simple guiding principle in writing atonal music: “until all twelve notes have occurred, none of them may occur again.”³⁷ Similarly, Ives’s close associate Carl Ruggles was said to have felt that a melody should not repeat a pitch class until the note has left the “consciousness of a listener,” usually requiring at least seven intervening tones.³⁸

Musical “Sense”: The Origins of Ives’s Systematic Music

The five aspects are present in music from throughout Ives’s composing years, roughly the late 1880s through the mid 1920s. The earliest evidence survives in sketches and exercises composed when Ives was a teen and just beginning to blossom as a musician and composer. In his *Memos* Ives recalls that his father endorsed and encouraged unorthodox ideas during this period, alongside conventional musical studies (*Memos*, 46–48, 114–115).

In speaking about his father in *Memos*, Ives makes some revealing comments about his early perspective on systematic composition and the nature of his father’s influence on progressive ideas. The early experiments, he says—and at this point they are indeed experiments—were simply “boy’s fooling” (*Memos*, 46). He thereby suggests that the application of unconventional musical ideas is different from “real” composition—that it is more like playing musical games, stepping outside the bounds of conventional music student decorum. But then in the same sentence he recalls what his father told him about this type of compositional activity: “it must be done with some sense behind it (maybe not very much or too good a sense, but something more than just thoughtless fooling).” In other words, a musical game is permissible if it has a sound intellectual basis,

if it is an exercise not only for the playful imagination but also for the rational one. It must make “sense.” As Ives said of his later systematic work, “shorter pieces like these . . . were in part made to strengthen the ear muscles, the mind muscles, and perhaps the Soul muscles too” (*Memos*, 63). Ultimately, his goal is to elevate the writing beyond the level of boy’s fooling: “But doing things like this (half horsing) would suggest and get one used to technical processes that could be developed in something more serious later, and quite naturally” (*Memos*, 61).

Much of the boy’s fooling (or in some cases, “father’s fooling”) that Ives specifically mentions in *Memos* has to do with combinations of two keys:

[Father encouraged] playing left-hand accompaniment in one key and tune in right hand in another. (*Memos*, 46)

If you can play a tune in one key, why can’t a feller, if he feels like [it], play one in two keys? (*Memos*, 47)

I couldn’t have been over ten years old when [Father] would occasionally have us sing, for instance, a tune like *The Swanee River* in the key of E \flat , but play the accompaniment in the key of C. (*Memos*, 115)

Ives also recalls (*Memos*, 46) writing down music with these sorts of key juxtapositions, no doubt referring at least to the three bitonal arrangements of “London Bridge” that survive among his early manuscripts.³⁹

A simple tonal juxtaposition hardly approaches the sophistication of true systematic composition. And yet the exercises Ives describes already display, to some degree, the “sense” behind a boy’s fooling and the salient features of his systematic methods. First of all, a bitonal juxtaposition is an intellectual exercise—“good for our minds and our ears” (*Memos*, 47). The act of maintaining separate but parallel thought processes, unfolding melodic structure and rhythms in one key against harmonic functions in another, requires a type of intellectual facility and discipline that prefigure the systematic calculations in later works, where such processes are more conscious and overt. Second, such an exercise is thoroughly controlled by structural models. One model is the structure of the existing tune, prescribing the melodic line, rhythm, and harmonic progression. Another is the model of “bitonality,” prescribing a constant opposition between the keys of two rhythmically aligned continuities.⁴⁰ A third way that the bitonal exercises reflect systematic values is that the melodic-harmonic and bitonal models exhibit a kind of self-generating pattern—not the type based on some contrived formula but the type in which a particular structural relationship, in this case a bitonal opposition, is established and then allowed to perpetuate itself without impediment. Fourth, the bitonal model also reflects a transformational

orientation in the relationships between its two keys, if the scale of one key is viewed as essentially a transposition of the other. Finally, we could even say that a bitonal exercise exhibits a concern for pitch-class variety, since the opposing keys are typically quite different in pitch-class content.

Still, the systematic elements in a bitonal model are shadows of their later selves. Let us now look at an early experiment in which the components of systematic composition are more strongly anticipated. Another early musical activity Ives mentions in his *Memos* is a technique of “playing the chromatic scale in different octaves, and seeing how fast you could do it.” This, he says, produces “wide jumps in the counterpoint and lines.”⁴¹ In Example 1.1 two excerpts are transcribed from a copybook belonging to George Ives that includes sketches and exercises by both father and son.⁴² Example 1.1A is a sketch of a “wide-jumps” chromatic scale, and 1.1B is a short organ piece that implements the wide-jumps treatment as it appears in the sketch. Below the organ score Ives inscribes: “played as Postlude after Organ Concert Bap[tist] Ch[urch] Danbury Friday May 8 1891.”

Ives recalls that “gradually, as the ears got used to the intervals, I found that I was beginning to use them more and more seriously, that these wide-interval lines could make musical sense” (*Memos*, 44). Now we can see precisely what Ives means by that phrase. Measure 1 of the sketch (Ex. 1.1A) states the first five notes of the scale in a rhythm and contour that is duplicated for the next five notes in m. 2; m. 2 is T+5 of m. 1.⁴³ In the postlude (Ex. 1.1B) this material appears in mm. 3–6 of the right hand, answered canonically in mm. 4–7 of the left hand. Chromatic ideas also begin the postlude: in mm. 1–2, the right hand falls chromatically from E to G while the left hand rises from C to G. Then in m. 3, as the right hand begins the wide jumps, the left hand continues its chromatic ascent, completing the scale with the C that begins its canonic answer in m. 4.

The most obvious evidence of the aspects of systematic composition in both the sketch and the postlude is the pitch-class succession itself—a chromatic scale is aggregate completion of the most elemental kind. But the scalar ordering influences not only the parts of the postlude that are literally derived from the sketch. Indeed, the chromatic scale saturates the texture, making this particular ordering of the aggregate a pervasive structural model that prescribes the relative positioning of virtually every note. In addition, the model of the scale ordering supplies the realization of another model in the first two measures: this is the “wedge,” portrayed by the two converging chromatic lines. And this is followed by the canonic treatment of the wide-jumps material in mm. 3–7, thus realizing a model handed down from contrapuntal traditions. Fundamental to all the models are patterns and transformations: the transformational relationship

A.

B.

Example 1.1. George Ives's copybook, pp. 68, 71

between the first two measures in the wide-jumps scale, the self-generating logic of the scale itself, the inevitable progress of two lines related as wedge voices or by canonic answer. The postlude is an amalgam of the products of calculation processes that are prevalent throughout Ives's systematic music.

George Ives's copybook contains other systematic sketches by the young Charles Ives. One is simply a chord, shown in Example 1.2, formed from a self-generating pattern of decreasing interval sizes.⁴⁴ Beginning with the lowest note, the intervals between adjacent notes become gradually smaller by increments of one, from interval 11 between the lowest two notes to interval 3 between the highest two. ("Oct" presumably means 8va.) Ives uses a chord such as this in some later music, but this may be his first lesson in the pitch-class variety inherent in a decreasing interval sequence. Only eight different pitch classes (pc's) will be generated before a repetition occurs; starting on C, as shown here,

Example 1.2. Chord notated in George Ives's copybook, p. 165

the eighth pc is the G#, and the two highest notes (C and D#) repeat pc's that appear elsewhere in the chord. Although at first glance it may seem curious that Ives did not continue the sequence to its logical conclusion with intervals 2 and 1 at the top of the chord, perhaps it was just this concern for pc variety that motivated him to stop at interval 3, even though the next pc generated would be new (F). Perhaps he saw no need to continue since he had already ended with two duplications, and his objective, finding out how many different pc's the pattern would generate prior to repetition, was achieved.

A concern for pitch-class variety is still more obvious in the exercise from the copybook shown in Example 1.3.⁴⁵ An introductory measure outlines a converging wedge, and then measure 2, repeated as measure 5, arpeggiates black keys in the left hand against white keys in the right hand. These complementations are subsequently answered by wedges of converging half-step-related major triads. In mm. 3–4 the hands move in contrary motion to the distance of a tritone, from FM to BM, thus again exploring complete pitch-class variety by stating every possible major triad between the hands. A similar procedure is thwarted in mm. 6 and 7 when the right hand moves a tritone downward but the left hand moves upward through only five chords before discontinuing the established pattern and joining the right hand on a G-major triad at the beginning of m. 7. The chords in m. 7 could represent the beginning of another wedge that Ives, for whatever reason, never notated, but it seems more likely that this is the ending he preferred: two G-major chords together at the beginning of the measure, followed by a clash of A♭M and F♯M, as if extracted from a wedge in progress.

In several places in the copybook the younger Ives tries different methods of realizing the wedge model. Example 1.4A shows another instance of triad wedges, this one with entire octave spans in both hands.⁴⁶ Example 1.4B shows a wedge realization from the copybook that places converging chro-

pc 1 3 6 8 T/02579E4

pc 1 3 6 8 T/025794 E

Example 1.3. Wedge exercise notated in George Ives's copybook, p. 100

matic lines in a tonal-harmonic context.⁴⁷ Judging from the *Amen* repeated in the text, this short piece is apparently a four-voice choral response for a church service. Its outer voices contain converging chromatic lines, stating twelve pitch classes in moving from octave G's to a unison on middle C. But the inner voices fill out harmonies that are actually not particularly unusual—they twist and shove the potentially radical wedge into a kind of harmonic orthodoxy. As suggested in the analytic notations added in the example, the opening G-major sonority is followed by a diminished-seventh chord that acts as an applied chord preparing the A-minor chord at m. 2:1. After a moment of dissonant disorientation at m. 2:3, the final measure implies a V_3^5-I cadence in C major. Thus the initial triad connects with the final cadence to imply an

A. 1 2 3 4

B. A - - men A - - men

1 2 3

GM $\frac{5}{3}$ ø7 (ø7) Am $\frac{5}{3}$ GM $\frac{6}{3}$?

[C: V $\frac{6}{3}$ I]

Example 1.4. George Ives's copybook, pp. 165, 68

overall V–I progression in C major. The progression is at first diverted by the move to the submediant in m. 2.

The “Amen” reveals two sides of its young composer. On the one hand, it is a simple application of principles of systematic composition, with the outer-voice chromatic lines using all twelve pitch classes to form a converging wedge. On the other hand, it is an exercise in chromatic harmony, applying principles that are not in the same sense systematic and that aspire to define structure through different means. The way the “Amen” combines the two is skillful, perhaps ingenious for a teenager, but there are also aspects that are unmistakably elementary. Compare, for example, the “Amen” with the triad wedge of Example 1.4A. The structure of the triad wedge is defined by the wedge model; we know the exercise is over when the converging lines have completed their octaves. The structure of the “Amen” is also defined by a wedge, but it is further defined by the implied harmonic progression; the sense of completion is provided both by the convergence on middle C and by the harmonic arrival. In terms of Ives's long-range objectives, we cannot criticize the pieces for lack of organization, but we can question their expressive capacities: the triad wedge

is sterile and artless, while the *Amen* is limited expressively to the language of tonality that Ives will eventually want to abandon. These early efforts draw attention to the quest that Ives would pursue tirelessly in the years to follow—a quest for a musical language that would be organized and expressive, and that would also be his own.

PART I

Tools and Materials

