# INTRODUCTION

Teaching musical composition today has become a very complicated endeavor, owing to the students' unprecedented variety of needs, interests, and backgrounds.

Overall, there are three broad categories of students studying musical composition at the undergraduate level: those aiming to compose concert music; those aiming at a career writing functional music for film, theatre, TV, video games, publicity, and so forth;[1] and those whose main interest lies in theory or musicology, but who nonetheless want to have some insight into a composer's point of view.

Making the teacher's problem even more complex, above and beyond these disparate needs, the concert music of the past century has seen an unprecedented level of stylistic fragmentation. A composer of concert music could be writing in a hyper-complex style, like that of Brian Ferneyhough, or applying electro-acoustic techniques to harmonic spectra, like Tristan Murail, or else writing somewhat minimalist, tonal music, like John Adams. Even popular music today encompasses many different styles. How can one teach composition in a way that effectively addresses all these different needs?

Existing composition textbooks either focus exclusively on the classical repertoire or else simply catalog various more or less recent stylistic trends, with short chapters devoted to each one.

Arnold Schoenberg's *Fundamentals of Musical Composition* remains the best model of the former type, and it still contains much useful material, as well as a host of examples, with many useful comments by the author.[2]

The other kind of book focuses on what is distinct and unusual about each new style. While certainly of interest to a contemporary composer, this approach is of limited use to someone who wants to acquire more widely

applicable basic skills, since these books do not focus on what the various styles have in common, but rather on what differentiates them. Also, such a compendium of the latest styles can become somewhat dated rather quickly.[3]

In this book I attempt to reconcile the varied needs listed above with an approach that is style-neutral, and that focuses on craft.

Despite their obvious differences, most kinds of music heard today[4] share certain formal requirements that grow out of how music is perceived. For example, even though film music normally follows an extramusical, narrative story line, a film composer still needs to know how to compose a convincing transition between music of differing characters. Music for an ad campaign needs an effective beginning, so as to quickly attract the listener's attention, and so on. As these examples show, there is a pressing need to teach composition today in a way that is stylistically flexible, but at the same time helps the young composer to master the skills required to respond to the music's formal requirements.

Over thirty-five years of composition and composition teaching, I have tried to find, and to focus on, general principles that are not limited to one style of music. The result is this book. The common principles laid out here have rarely, if ever, been explicitly discussed as such, and certainly not all in one place, in a logical pedagogical sequence, with exercises and examples. This is the book I wish had been available to me as a student.

Some of the ideas here germinated out of passing remarks by my own composition teachers, David Diamond and Elliott Carter. Most of them, however, came simply from regular observation of great music that I admire. In a sense, they were attempts to answer questions I myself had about what exactly makes great music work as well as it does. Other notions gradually became clear to me during years of trying to teach many different kinds and levels of students as constructively as possible.

These principles are certainly not of my own invention. Despite the fact that they are almost never referred to in composition textbooks, most successful composers have clearly been aware of them on some level for hundreds of years: they are everywhere to be seen in the best music of the western tradition.

## ASSUMPTIONS

Even attempting to focus on general principles in a way that is applicable to multiple styles, I do make certain assumptions in this book about the na-

ture of music. Some of them can of course be debated, but it is impossible to teach composition at all without at least some minimal consensus about what the word implies.

I assume that powerful emotional communication is an important goal of music. I also assume that some means are more effective than others in reaching this goal. Often the difference between a successful piece and a weak one is that in the latter there are aspects of the music that distract from, or even contradict, the desired musical character. This is because beginning students do not always realize the significance of all of their choices. For example, imagine the beginning of Beethoven's Fifth Symphony played very slowly, an octave lower, on a marimba. The enormous dramatic drive of the famous "fate motif" would completely disappear, even though the pitches and the note values would be correct. This may seem like a trivial example, but long experience with student work has shown me that dimensions of the music like register, tempo, dynamics, and timbre are often not accorded enough attention, although they contribute enormously to the quality of the final expressive result. If the young composer makes the wrong choices in these areas, the music's character will suffer greatly. In this book, I will try to pay more or less equal attention to pitch and to these other aspects of the music.

Another critical assumption here is that music's evolution over time is more than simply a question of duration. The musical frame—the beginning, the middle, and the end—greatly influences the way the music is structured.[5] In other words, what the composer needs to do at any given moment depends a lot on where the music has arrived in its temporal trajectory. A beginning has different requirements than an ending, and so forth. Also, during the piece, the music must develop, and that requires constantly balancing novelty and variety. Over longer time stretches, some contrasts will need to be more marked, so the composer also needs to be able to move between musical characters with various degrees of smoothness. In a word, the composer needs to be at ease with the techniques of transition.

Be it as background for a story in a film, or in an hour-long symphony, all the kinds of music here discussed need to respect these minimal formal requirements.[6]

## PERCEPTION

These formal principles are based, as much as possible, on how music is actually perceived. While this is not a textbook about the psychology of

perception, a composer must, at least implicitly, take a position on these issues: composing is all about audible choices. All the principles here discussed will refer to aspects of the music that are clearly audible. Some are more refined than others, and some may not necessarily be easily audible at first hearing, but I have avoided spending time on anything that a sensitive music-lover cannot discern through attentive listening. Of course, a professional musician will perceive things somewhat differently than an amateur, but much of the difference is mainly a matter of knowing the names for what is happening. For example, a musician might speak of a perfect authentic cadence, where the untutored music-lover would just sense some kind of relatively strong punctuation.

## FORM AND FORMS

Some books on composition, like Schoenberg's, start from the well-known standard forms, such as ternary form, the rondo, and the sonata. While I also use simplified versions of these forms for the composition projects in this book, this is for pedagogical reasons. Eventually the mature composer will leave these textbook models behind, since no single description of any of these forms can be really adequate. A careful look at multiple examples of any one of these forms in the literature will always reveal wide-ranging disparities in the details of how they are actually realized. Indeed, books that attempt to discuss these forms in detail, even when limited to one single historical period, always list multiple variants of each. Only the most naive of composers would assume that all sonatas, or all binary forms, are alike. For a mature composer, these forms are just useful conventions for solving certain basic problems, but the details will always depend on the musical ideas contained therein. As the young composer moves gradually from learning the craft toward the more artistic aspects of musical composition, more and more of the work will consist of a search for the right form for any given piece.

For example, the transition section of the prototypical sonata form can be realized in many ways, all depending on the character of the ideas being connected. Some transitions are quite dramatic and sudden; others are so smooth as to be virtually unnoticeable. The decision in each case can only be made according to the character of, and relationship between, the specific musical ideas in the piece. A mature composer will often experiment with different transitions in order to find the most effective one. This is another reason for the craft-centered approach adopted here: a composer who is at

ease with many techniques and degrees of transition will more easily be able to find the right solution for each situation.

To make this point about the variety of the standard forms clearer, each of the chapters containing a major composition project (Variations, Rondo, and Sonata) contains a little section at the end called "Elaborations," mentioning a few variants of the form in question. Such variants may also be mentioned occasionally elsewhere, but not as systematically.

## QUANTIFYING

A novel aspect of this book is the idea of quantifying various aspects of the music—say, from 1 to 5 or 1 to 10. This kind of rough quantification makes it easier to figure out what needs to be done to solve a given problem. For example, quantifying degrees of harmonic accent helps to fix harmonic problems. In the same way, understanding that a given formal problem is a result of too strong a contrast between two ideas makes it easier to see how to attenuate it: the composer will play with the newer elements in order to gradually attenuate one or more of them until the passage feels right.

When it comes to such formal problems, I have noticed that most unsatisfactory musical composition shows one of two kinds of defects, which I call bumps and holes. A bump draws the listener's attention to something undeserving of notice; a hole is a place where the music is inert, but where it should instead be attracting attention. With the quantifying approach, once we notice a bump or a hole, the next step is to determine in what aspect of the music (harmony, orchestration, etc.) it occurs, and then roughly how much adjustment it will take to correct the problem. A composer using this method would quickly see, for instance, that the passage leading up to a climax is too short, which makes the climax arrive too abruptly, creating an awkward bump. Quantification enables one to gauge such problems with more precision, to get from "Something feels wrong here!" to "How much more or less (of x) do I need here?" It also makes it possible to approach technical problems incrementally, by making finer and finer adjustments.

## WHAT THIS BOOK IS NOT

A useful textbook requires a clear focus. It is therefore worthwhile to clarify what distinguishes this book from other, related musical texts.

My goal is not to provide a compendium of recent compositional trends. However, the fact that most of the musical examples in this book are taken

from the standard repertoire of tonal music should not be taken as implying that these trends are unimportant or uninteresting. Rather, it comes from the fact that no serious musician can be unfamiliar with this repertoire. It is enormous, it is the basis of western musical culture, and it also lurks behind most of the popular music and most of the functional music heard all over the world today. This music is also by far the most easily accessible online, in both score and sound, for free.

The people using this book who are aiming at writing music for video games, commercials, or films have a particularly strong need to know about tonal music in some depth, since it is ubiquitous in these domains. (I have included occasional examples here and there in the book from film music and music for video games, for students aiming to work in those areas.)

Serious concert music in some of the more current styles may sound quite different from the classical repertoire on the surface, but once again, the principles set out here are also applicable to many of these kinds of music.

For example, music with any pretense of intelligibility must include some kind of punctuation. The need for multiple levels of punctuation is ubiquitous, since it is an outgrowth of the ways in which human attention and memory always function. In tonal music this need is usually addressed by the familiar tonal cadences. In, say, the music of Pierre Boulez, such formulas are nowhere to be found. Nonetheless, Boulez's music does include punctuation; it is just accomplished by other means.

This will be true of all the principles discussed here: once the student has properly understood a core principle, it becomes easy to see it at work in other styles. I will from time to time refer to more recent examples of nontonal concert music to reinforce this point, and although I have not attempted to represent all current styles in the examples, many of the exercises can be realized in various diverse styles, if the instructor so desires.

*Musical Composition* also makes no pretense to being a history of musical form. Despite its emphasis on general principles and the many classical-repertoire examples, this book is not intended as a theoretical nor as a musicological study of the classical repertoire. My goal is not pastiche, nor is it historical precision. Of course, serious theoretical and musicological studies of specific repertoires do have great value and interest, and there exist several excellent books of this sort, especially for music of the Classical period. I will refer to them in due course. But their job is to catalog what composers have done, not to tell others how to do compose.

This book is also not an analysis textbook. The questions asked by a composer sometimes differ from those asked by a theorist. Specifically, the student often needs to focus on why the composer has chosen one particular gesture as opposed to another, and also on why it happens when it does, rather than earlier or later. For a theorist, the answers to these questions would be considered interesting, but perhaps too speculative. However, it is impossible to compose anything without making such choices, and some choices are necessarily going to be more convincing than others. We are mainly interested here in why, in a given situation, one choice is better than another.

Another aspect of analysis, already mentioned, where the emphasis is different for composers, is the relative importance accorded to timbre, tempo, articulation, and register. In much theoretical work, these issues are considered secondary; indeed, there are few well-developed analytical techniques to discuss them in detail. But these aspects of the music have enormous influence on musical character and movement, so the professional composer has to think about them in some depth. Compositional skill must include all of these dimensions, not just pitch and rhythm.

## CRAFT

It should be clear by now that I think that musical composition is best seen as a craft, whose principles can be explained and learned. Rightly understood, craftsmanship is not about memorizing formulas, but about knowing how each aspect of the music works on the listener (and the performer) to achieve a specific expressive goal. It means being at ease with all the tools available for achieving these goals.

Such a craft-based approach must inevitably remain somewhat open-ended. Looking at great music, simply asking how this or that effect is achieved, can lead to surprising discoveries. For example, I first observed what I call "announcing" (see chapter 20) when looking at the fugue from Bach's Fantasy and Fugue in G minor for organ, BWV 542. I then started seeing this technique in many other situations, not just in Bach. This led me to formulate a general principle: point the listener to important events, prepare them in advance, build up expectation for them. I have never seen this principle described elsewhere, and yet it is extremely common in great music. It helps to create the sense of inevitability we feel when listening to a masterpiece.

## PEDAGOGY

I have tried to provide for many and varied pedagogical needs in the exercises in this book. Of course, the instructor is free to choose the ones most relevant to a given student or group.

In a few chapters I have added one or two advanced exercises, for students whose preparation is more thorough than that of the average undergraduate student. I have also included several exercises potentially of interest to students in film and video-game music. As already mentioned, many of the exercises lend themselves to being realized in more than one style, and the instructor should not hesitate to adapt them as needed. I have also occasionally provided model solutions that are not limited to a classical tonal language.

For some of the shorter exercises, I have included and discussed poorly realized versions before examining better solutions. These less satisfactory efforts are typical of the kinds of mistakes often made by beginners, and can be useful as examples of what to avoid.

All the exercises must be listened to in class, ideally performed by the students themselves. If this is not possible, the teacher can play them at the keyboard. At a minimum, students should be required to provide a decent computer simulation for class use. I have added some tips about how to make quality simulations in Appendix B.

When working out the shorter exercises, it is a good idea to think in terms of more than one possible solution; listening to several students' versions of the same exercise can be a learning experience for everyone. The differences between the versions should be discussed in some detail. It is always worth trying to find out why something works, or why not. This "why" is an essential question, since it allows the students to transfer knowledge gleaned from other students' experiments to their own work.

One pedagogical idea I have found particularly useful, when looking at pieces from the standard repertoire, is to experiment with them, modifying various aspects of the music, one by one, to gauge their effect. This is also a good approach to discussing student work. For example, try a given passage in a different register or another timbre, or vary the dynamics, the tempo, or the articulation. Some changes will have little or no effect, but others will make an enormous difference in the result. Why do these changes affect the result to the degree they do?

Many such changes will not be black-and-white, but rather differences of degree. In orchestration, for example, there can be many degrees of con-

trast. A piccolo is closer to a flute timbre than to the sound of an oboe. A tuba is closer to a trombone than to a cello. The same kind of nuanced thinking is also useful when applied to register, harmony, contrasts between musical ideas, and so on.

For changes that affect the result dramatically, experiment with quantitative adjustments, for example, a less drastic change of register or of timbre. An experienced composer spends a lot of time on this kind of fine tuning; this is a good way to develop the necessary sensitivity.

There is also a separate pdf document for instructors (available on my website, alanbelkinmusic.com), with suggestions for teaching each chapter of the book.

## PREREQUISITES

A solid grounding in tonal harmony—at least one semester—is the minimum requirement to use this book. This grounding should include a knowledge of the common tonal chord progressions and cadences, as well as a thorough understanding of the way a bass line creates direction, in addition to furnishing a good counterpoint to the top line. The student should be at ease with basic roman-numeral analysis of the harmony.

Counterpoint and orchestration studies are also desirable, but they can be pursued at the same time as this course. Composition, by its nature, cannot ignore any of these dimensions of the music. Indeed, the practical application of many of the notions learned in these disciplines is only evident when composing whole pieces of music.

## THE LAYOUT OF THE BOOK

In *Musical Composition* I propose a novel, verb-based approach. I have carefully chosen a small list of verbs representing general formal functions, such as presenting, progressing, and connecting, that are also applicable to a wide range of styles. Thinking about musical processes as verbs encourages the student to see them as goals to achieve while composing the music, which need to be intentionally addressed.

The book begins with four preparatory chapters, focusing on motives and phrases, and then on singing and playing. The latter two subjects—in effect, a discussion of the differences between vocal and instrumental music—are rarely dealt with in composition textbooks, despite the immense importance

for the young composer of knowing the subtleties of their respective constraints and possibilities.

After these preliminary chapters, the verb-based chapters are interspersed with practical composition projects. The latter chapters can be recognized by their names: each one is named after a standard musical form.

Whereas a theoretical or a musicological study would attempt to be comprehensive regarding all the existing variants of a given form, here the focus is on skill, on doing. Since a student cannot possibly compose all the various kinds of sonata forms, we have to choose one specific type.

To compose music is first and foremost to create something. The immediate goal may be modest, but the criteria that allow us to say why a Beethoven symphony is great should be the same ones used to evaluate a student composition. Although the expectations are much more limited, the goal is the same: to communicate strongly and significantly.

The material in this book can be efficiently covered in two semesters, the first ending with the variation project (chapter 10), and the second with the sonata project (chapter 19).

Chapter 20, on artistic refinements, and Appendix A, on sketching, can be approached when the rest of the book is done, or somewhat earlier on, as the instructor wishes. Sketching in particular may be useful for the sonata project.

## ACCESS TO EXAMPLES

When the examples are short, and from the standard repertoire, I have provided them here. When they are too long, or when it was impossible to obtain copyright permission without paying substantial fees that would have materially increased the price of the book, I have discussed them without quoting them. However, even for these latter examples the audio is always easily available online. A good college or university music library should have the scores as well.

Students are encouraged to first look online at imslp.org for scores, and at YouTube.com for audio.

Examples without attribution are by me. Audio for these examples can be found at alanbelkinmusic.com.