Things I Think about, and Don't Think about, When I Compose

By David Temperley

To illustrate what my music is like, it is best to start with an example (see fig. 1).[1] This passage illustrates several important things about my music. First, it is highly tonal. For the most part, I use the harmonic system of common-practice tonality, the system used by European composers from Bach to Brahms. My treatment of motives, my use of instruments, and my handling of rhythm, phrase structure and form are also rooted in the music of the common-practice period.

My music also departs from the common-practice idiom in some important ways. In particular, it is heavily influenced by recent popular music, especially rock. This is not particularly evident in figure 1, but is somewhat so, especially in the syncopated rhythm. It can be seen that the melody really falls into two melodic lines, as shown in figure 2. The top line is syncopated in the manner of rock; some notes that seem accented occur just before strong beats, such as the C and B♭ marked with asterisks. Such syncopated notes are heard as belonging on the strong beat after the beat they occur on. I find this kind of syncopation enormously suggestive, and use it in countless different ways. For one thing, syncopation allows for great rhythmic variety; for example, the rhythm of the upper line in figure 2 would never be found in a common-practice piece. I often employ syncopation in meters not commonly found in rock, like 9/8, 12/8 (see figure 5), and 3/2. When used together with an irregular metrical structure (as they sometimes are in my music), syncopations can create situations of great rhythmic complexity—though my aim is that the listener should never "lose the beat." I also like to use syncopated patterns canonically, particularly in such a way that one rhythm fills in the gaps of the other (a bit like a medieval hocket); figure 3 gives an example, from my Rhythmic Study for Piano No. 12.

It can be seen from figure 1 that I employ many of the same structural and expressive techniques used by common-practice composers. I often make use of tonal sequences—a melodic pattern heard at different pitch levels—such as the half-measure pattern repeated in mm. 1–2 or the one-measure pattern in mm. 3 and 4. I like to play around with the way a single melodic line can be constructed so as to suggest multiple lines that converge and diverge in complex ways—for example, the way the two lines of the right hand in mm. 1–2 split up and then join again. I like to build intensity by fragmenting a motive: for example, a one-measure melodic idea

Figure 1: Preludes for Piano, Book 1, No. 3, mm. 1–13.

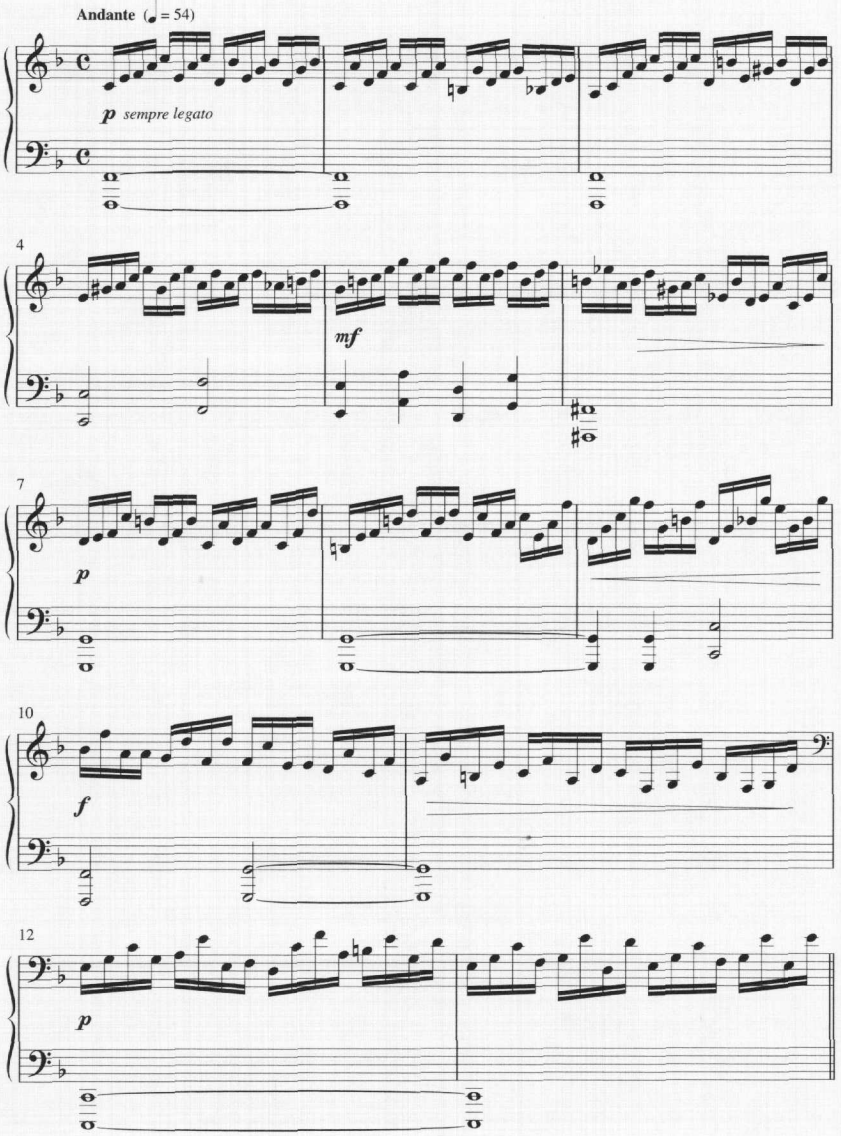
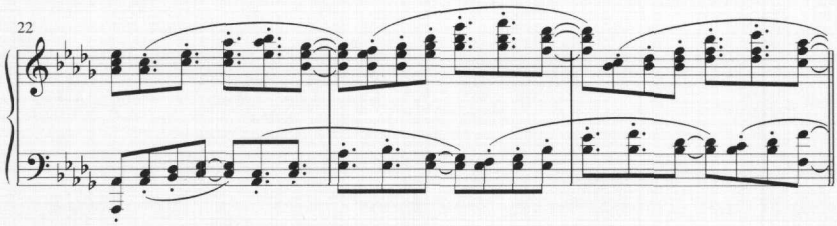


Figure 2: Measures 1–2 of the Prelude in figure 1, showing the implied two-voice structure of the melody.

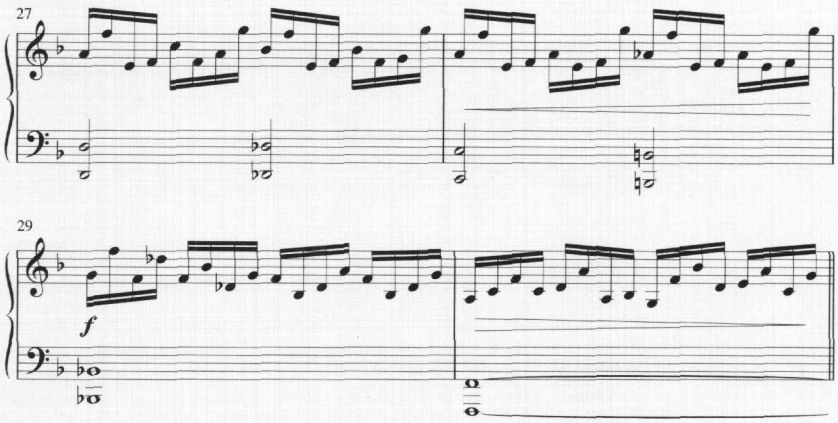
Figure 3: Rhythmic Study for Piano No. 12, mm. 22–24.



in mm. 7 and 8 becomes a half-measure motive in m. 9, leading to another half-measure motive in m. 10, which fragments into a quarter-measure motive in the first half of m. 11. I use surprising harmonic moves and dissonance for dramatic effect, like the move to vii°7/V of C in m. 6 (with the F♯ in the left hand clashing against the F in the right hand just before). I try to build satisfying harmonic progressions of chords and keys, taking the listener on some kind of journey through a multileveled space. The expressive use of major and minor, and the infinitely many possible mixtures between the two, is also an important part of my style—seen in figure 4, a passage near the end of the Prelude, where the prevalent F-major tonality is colored (in quite a conventional way) by the addition of ♭3s and ♭6s.

The Preludes are among my more "classical" pieces. In other pieces, I venture somewhat further away from the common-practice style. My Suite for Brass Quintet and Drums is a much more rock-influenced piece; figure 5 shows an excerpt. Here again, rock-like syncopations are important in the rhythm, though I use them in ways that would rarely be found in any rock song (see for example mm. 13–14, where a pattern spanning three dotted-quarter beats is repeated, creating a kind of 9/8 cross-rhythm against the underlying 12/8 meter). The harmony, too, betrays rock influence. The underlying harmony of the section beginning in m. 9 features a (minor) i in mm. 9–10 going to a (major) IV in mm. 11–12. This combination of i and IV—suggesting Dorian mode—is widely used in rock, and is a

Figure 4: Preludes for Piano, Book 1, No. 3, mm. 27–30.



common feature of my music. Note also the prominent $\flat\hat{5}$ in the melody (F♭). This, too, is a frequent element in rock (arising, of course, from the blues); frequently it appears as an ornamental inflection, sliding into a $\hat{4}$. I like to treat it, rather, as a self-standing scale-tone; frequently I use $\flat\hat{5}$ instead of $\hat{5}$ in triads and sevenths, for example, treating a diminished triad or half-diminished seventh as a tonic chord (as I do, in a way, on the downbeat of m. 9). Despite the rock elements of this passage, there are unmistakable elements of common-practice harmony too: for example, the move to the i^6_4 in m. 13 (more about this measure, below), which I use to create a strong expectation of a cadence to come, just as it would be used in common-practice music; and the move to the Neapolitan harmony, C♭ major (though used in kind of an unconventional way), in m. 15. Sometimes, the combination of rock and classical harmonic elements can lead me into somewhat more exotic territory. For example, consider the chord on the downbeat of m. 13; I think of this as a i^6_4, although the i chord involved is really a minor seventh (B♭ D♭ F A♭) with no root, and with an F♭ on the top, clashing harshly with the F in the bass—this is a chord that would hardly be found in either common-practice music or rock.

A final influence I should mention is African and Latin rhythms. I make extensive use of certain rhythmic patterns from African music, particularly the "standard pattern" of Ewe music: ♩♩♪♩♩♪. The Rhythmic Studies offer several examples; see figure 6. This pattern is interesting in several ways. It is highly ambiguous metrically, and can be reconciled with a variety of different metrical frameworks (3/2, 6/4, or 12/8, and different phases of each of these meters). It can also be understood in terms of rock syncopation—a straightforward rhythmic pattern (♩♩♩♩♩♪♪) with

Figure 5: Suite for Brass Quintet and Drums, V, mm. 8–19.

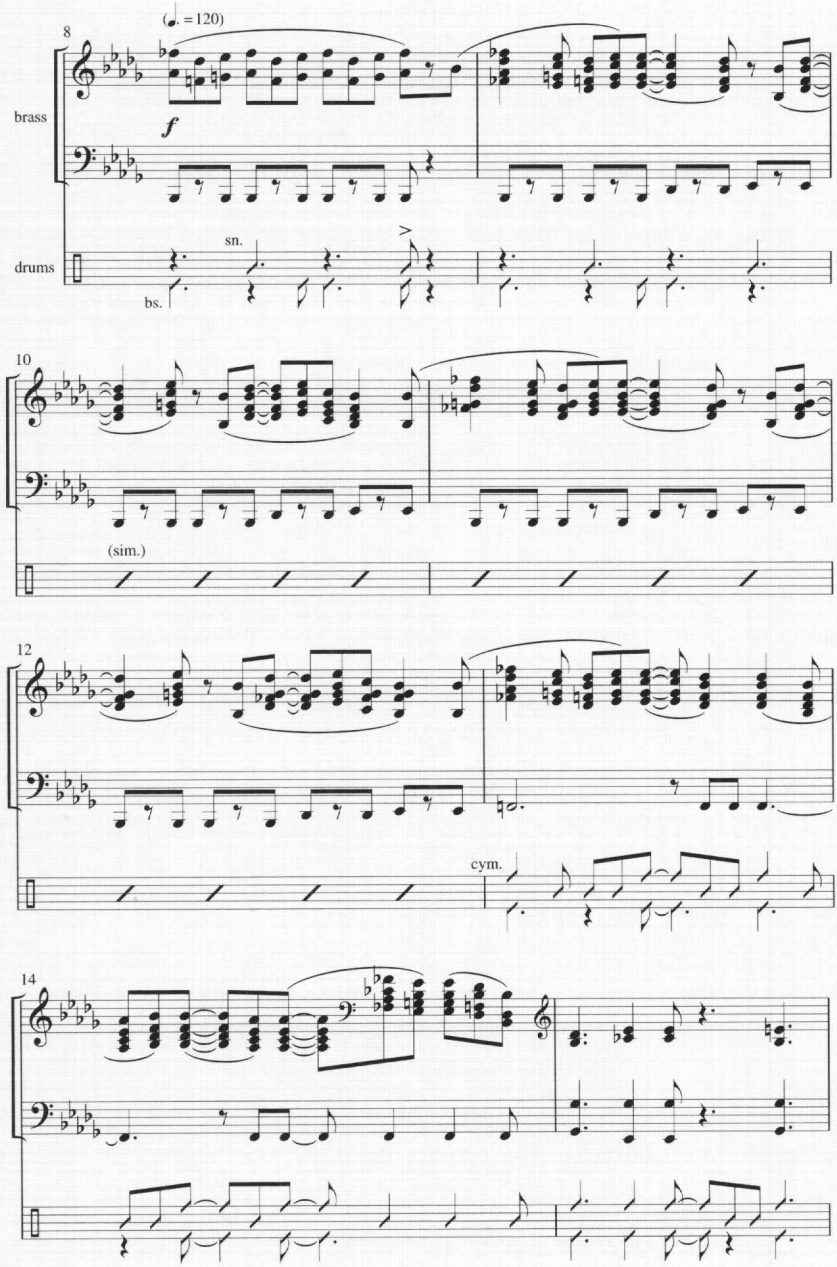
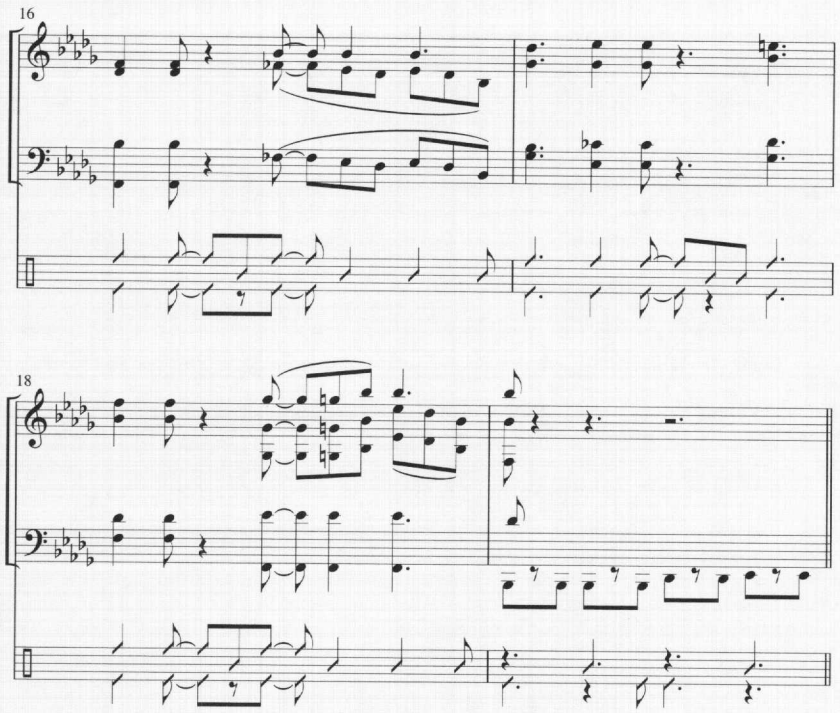


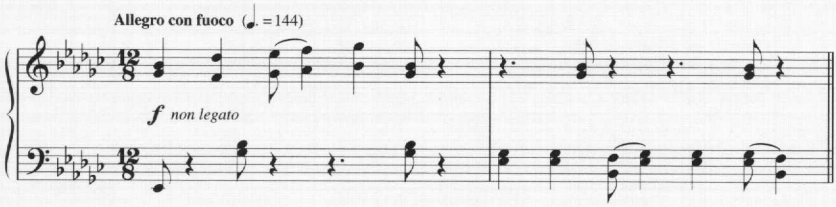
Figure 5 (cont.)



certain elements shifted to the left—and it mixes well with other rock-like rhythms. (Another interesting thing about it is that it corresponds exactly to the diatonic scale—though I have not yet figured out any useful way of exploiting this fact compositionally!) In my Rhythmic Study No. 12, both the rhythmic feel and the basic harmonic progression (I–IV–I–V) are reminiscent of African (particularly South African) popular music. Lately I have begun to experiment with some Latin rhythms; this is apparent in the final movement of my String Quartet No. 3, for example, which requires Latin percussion.

My fusions of rock and classical (and African and Latin) elements are not intended to create effects of collage or ironic juxtaposition; rather, my aim is to unify them into a single language. One of the premises of my work is that there is enough common ground between these various styles that such a synthesis can be achieved.

Figure 6: Rhythmic Study for Piano No. 3, mm. 1–2.



Form has always been a problematic issue for me. My early pieces mostly use quite conventional classical forms, such as sonata, ternary, and variation form. More recently, I have come to find these unsatisfactory, especially sonata form: too predictable, and too "front-loaded" in that most of what is new and interesting happens in the first part of the piece. (I find them too predictable in earlier music, too; when I hear a classical sonata movement now, I usually feel that 80%—or more—of the interest is in the exposition.) However, it remains important to me to have some kind of tonal return, and as a general rule I try to respect the essential principle of sonata form articulated by Charles Rosen—that all significant material should appear in the tonic key by the end of the piece. In my pieces over the last eight years or so, I have sought more flexible and individual ways of achieving these ends. (As I explain below, I have also become somewhat skeptical about the perceptibility of large-scale tonal closure.) Rhythmic Studies 1, 4, and 9 represent attempts to apply the "sonata principle" in unusual ways. The Preludes mostly reflect quite traditional binary or rounded binary structures, as do movements II, III, and IV of the Brass Quintet. Movements I and V of the Brass Quintet employ more of a rondo form; they also reflect the "verse" structure—built around a tonally closed section repeated several times—characteristic of rock (and jazz and other popular music).

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Describing one's compositional style is easy enough. The much harder question is: Why do I write the way I do? This question can be answered at several levels. It could be answered, first, in terms of my personal background. Because my father is a musicologist and a specialist in music of the common-practice period, I was immersed in this music from a very early age. My father (a pianist) used to play chamber music regularly with friends and relatives, many of whom are amateur string players. Being surrounded by people who loved classical music as amateur listeners and

performers made me think of classical music as a living thing, a part of daily life in which everyone could participate. (Perhaps this background also accounts for my preference for solo and chamber music, as opposed to orchestra.) Later on, of course, popular music also became a vital and lasting influence. I spent several years dabbling seriously in pop and musical theater songwriting, which undoubtedly had a big influence on my compositional thinking.

For the past several years, my main occupation has been as a music theorist, specializing in music cognition. Perhaps surprisingly, I find that my work in cognition has not influenced my composing very much. My approach to composition is mostly pretty spontaneous, and I'm not particularly interested in bringing to bear explicit theories of cognition, or anything else, in my work. Having said that, I think my experience in music cognition has influenced my composing in subtle ways. I think I am more attentive now than I used to be towards how things will be heard, as opposed to the way they look on the page. Simply writing a passage in a certain time signature does not mean that it will be heard with the corresponding meter —something that even the greatest composers seem to have forgotten occasionally. Similarly, you can write what looks like two crossing lines, but the chances are they will not be heard that way. Finally, one important lesson I have learned from music cognition research is that there's not much point in constructing complex, large-scale key structures (for example, modulating through several different keys and then returning to the main key several minutes later); people don't hear them. I used to put a lot of thought and energy into such large-scale tonal journeys, but in my recent work (for example, the Brass Quintet), I've tended to keep the tonal excursions fairly short, "checking in" with the main tonic at regular intervals.

One can also try to explain one's composition in terms of aesthetic or philosophical perspectives. I don't usually think about such issues as I compose, and I can't offer any justification of this kind. I do, however, sometimes think about such arguments in a *negative* way. People have sometimes criticized my music on the grounds that it raises "issues" or "problems" of various kinds. Usually people have difficulty articulating exactly what these issues are. The problem is, of course, the fact that I write in what is basically a style from the past. (Actually, it should be clear from the previous discussion that there is a lot in my music that is not borrowed from the common-practice style, but these elements are not necessary to the defense of my music that I am about to make.) I have thought about these arguments (as far as I am able to construct them), and have decided that they are no good. To conclude this essay, I would like to take a look at these arguments, and explain why I reject them.

One argument concerns cultural context. It is commonly said that Mozart's music arose out of a certain historical and cultural milieu, and can only be understood in terms of that milieu. This is a kind of truism that I think most people accept; what does it imply for composition? Well, it implies, presumably, that you can only write in the style of Mozart if you're part of that milieu; to do otherwise would be to somehow go against the laws of history. This is a very common fallacy, for which there ought to be a name: the "natural fallacy," perhaps. It says that "People behave in a certain way; therefore that way is natural; therefore you ought to behave in the same way"—though the very need for the argument demonstrates that *not* everyone behaves in that way. (It should be noted that the same argument is used, just as absurdly, against serialism: "People can't enjoy or appreciate serial music, therefore *you* shouldn't be able to either"—even though the person to whom the argument is directed presumably does enjoy and appreciate serialism; therefore the premise is clearly false.) But quite apart from this, the argument fails completely to account for the behavior of listeners. If knowledge of Mozart's milieu is necessary to understand his music, then only listeners from the same milieu—or intimately familiar with that milieu—should be able to understand it. Now, there do appear to be things in Mozart's music that were, perhaps, only appreciated by listeners of the time. For example, there are (at least according to some historians) many "topics"—musical gestures with conventional meanings—in classical-period music whose meanings are no doubt mostly lost on listeners today. Yet, plenty of listeners today *love* Mozart's music. Apparently, then, neither topics nor anything else that was available only to Mozart's listeners is necessary for an understanding and appreciation of Mozart's music. If it's possible for listeners to understand Mozart's style today, and to get so much out of it, then it is difficult to see why we shouldn't compose in the style as well.

A second argument concerns originality. This one requires a closer look.

Music, it seems, is a kind of information. Music tells us truths, about—about what?—experience, emotions, patterns, things like that. Maybe a pattern of notes and chords—tensing and relaxing in a certain way, fluctuating in energy and activity, taking us on a journey in some imagined space of chords and keys, presenting motives ("characters") that enter, exit, develop, and interact—is a metaphor for life experience, telling us some kind of fictitious story from which we derive general truths about humanity, kind of the way a novel or a movie does.

We don't usually need to hear information more than once. We don't usually read books or see movies many times. Once we've got the information,

we've got it. Now, it's true that sometimes we can enjoy a piece of music even when we've heard it many times and know it very well. But eventually we do get tired of it. In fact, eventually we can get tired of whole *kinds* of music. This is what we would expect if music were information. Not all kinds of sensory input are information. For example, consider food. Food involves sensory input (taste and smell), and this input is a large part of what we enjoy about it. Yet, you can eat the same food many hundreds of times without getting tired of it. Similarly, you can see the beautiful mountain landscape outside your window (if you're that lucky) hundreds of times without getting bored; you can get the same massage hundreds of times and still enjoy it. Music is information; food, scenery, and massages (as well as other kinds of sensory input that we don't talk about in respectable scholarly journals) are not.

This brings us back to originality. If music is information, then presumably there has to be something original about it for people to enjoy it. The really great music, by this view, is the music that is really original.

There are two problems with this. First of all, it's often very hard to actually say what a great composer did that was original. Sure, you could probably point to some things that Mozart did that were new, but are they really central to what made his music great? Even Beethoven: he may have been the first one to begin a sonata with a ii^6_5 chord, or the first to write a ten-minute-long development section, or the first to use four trombones in an orchestra; but such certifiably original things seem like a rather small part of his greatness.

The originality argument runs into even bigger problems when it's applied to *styles*. One might argue that the classical style was enjoyed in the late eighteenth century because it was original at that time, and therefore fresh and interesting; it is no longer original today. This view assumes that there is some kind of audience of immortal listeners, who had their fill of classical music in the late eighteenth century and are now tired of it. But in fact, of course, the population of listeners is constantly being renewed; every generation brings a new batch of listeners, awaiting introduction to the glories of the classical style. This would lead us to expect that every new generation would produce an audience of listeners who find classical music fresh and interesting—which is in fact what we observe.

The originality argument might also be applied in a somewhat different way. Music, it might be argued, is a kind of intellectual property: to use a musical idea that's already been used is unethical or at least unworthy of credit, a kind of plagiarism, similar to stealing sentences from someone else's novel. This would imply that the only legitimate use of a musical idea was the very first one; all subsequent ones were unoriginal. Again, the problem with the argument is that virtually all aspects of (for example)

Mozart's musical language were not original to him (and, incidentally, were used over and over again in Mozart's own compositions). Thus, this argument does not seem to have much to do with the way we actually judge music or composers—at least, the way we judge the great composers of the past.

I remember one incident from a master class, in which I had just presented a piece that had been very favorably received by the class. After several positive remarks from other students, one of the master composers confronted me with this question (which I paraphrase roughly): "Your music is all very well and good. But when you die and go to the gates of heaven, and the angel says, 'What have you accomplished, what have you contributed to music?' what will you say?" This, to my mind, epitomizes the argument I just expressed. In order for music to be valuable, there must be something in it that one can point to and say, "*This* is the contribution"—presumably, something demonstrably original and innovative. Again, the main argument against this view of musical value is that most of the music that we all value does not pass this test.

Having said all this, I do accept the basic idea of music as information, and the basic idea that, for a piece to be rewarding and enjoyable to listeners, there must somehow be something about it that is new to them. However, I believe that what is original and unique about a composition is basically beyond our understanding right now. There must be things that are original about Mozart's 40th—that is what makes it a great piece—but I don't think anyone is able to say what those things are. The lesson I take from this, then, is that we should not worry about trying to do things that are demonstrably original. No doubt some kind of originality is necessary, but we have very little idea about what kind of originality is good. There is no particular reason to think that a highly original compositional technique will lead to anything good. Similarly, there is no reason to doubt that much great music remains to be written within a given style—even a style that may seem very well-trodden and narrowly defined.

I once brought in a thoroughly classical-sounding piece to one of my teachers. "Ah yes," the teacher said, pointing to a ii^6 chord, "The ii^6 chord. It was great when Mozart used it," he said with exasperated mock-patience, "It was great when Schubert used it, but. . . ." He did not finish; there was no need to. The point was clear: The ii^6 chord *isn't* great when you use it. I wish I had had the nerve to take him up on this point, because I really would have liked to know what his reasoning was. Was it the cultural context argument—only listeners from the classical milieu can appreciate the ii^6 chord (patently false)? Was it the originality argument—Mozart and Schubert were being original when they used the ii^6 chord, unlike me today (equally patently false)? Was he literally saying that a ii^6 chord written

in 1800 sounds different, and better, to him than one written today (simply because he knows the two chords were written at different times)—in which case, what possible reason could there be for feeling this way? (Of course, his point may have been simply that Mozart and Schubert used the ii^6 chord more skillfully than I did—which is undoubtedly true. But I don't *think* this is what he was getting at.)

Anyway, these are a few of the arguments that I think may be lurking in people's minds when they say my music raises "historical issues" or "stylistic problems." I don't wish to erect straw men here; it's possible that I've got the arguments wrong, or that there are other better arguments that I haven't considered. If so, I'd be very interested to know. The arguments I have made (against these other arguments) are purely *defensive.* They do not question or invalidate anyone else's approach to composition; at least, they certainly are not intended to. The lesson, rather, is this: If you wish to compose in the style of Mozart's time (or, for that matter, Ockeghem's or Vivaldi's or Debussy's), you should go ahead. There is no reason to think that you won't come up with some great music. If you've been resisting the impulse to compose in this way because you think there are arguments against it, you should think very carefully about what those arguments are.

Note

1. This piece, along with the other Preludes for Piano, can be heard in MIDI format at my web site, <www.link.cs.cmu.edu/temperley>; the other pieces discussed in this paper—the Rhythmic Studies and the Brass Quintet—can also be heard there.