"But how many 'times' are there?...

The most pure musical time, that which is the true nature of musical time, is a live performance... where the intersubjective relationship [between musicians] is formed..."

MUSICAL TIME

An Intersubjective Relationship

MICHAEL MINKOFF

THIS PAPER IS A PHENOMENOLOGICAL EXPLORATION INTO THE TRUE NATURE OF MUSICAL TIME. DRAWING ON THE THOUGHT OF HENRI BERGSON, VLADIMIR JANKÉLÉVITCH, AND CONTEMPORARY PHILOSOPHERS OF MUSIC, I PROPOSE THAT THE NATURE OF MUSICAL TIME LIES WITHIN THE PERFORMER AND THAT ITS EXISTENCE IS PARALLEL TO THAT OF THE ORDINARY LIVED TIME OF THE EMPIRICAL UNIVERSE. WE EXPERIENCE MUSICAL TIME AS "MOBILE" (BERGSON'S TERMINOLOGY) AND AS A PHENOMENON OF PASSING. A MUSICIAN'S ABILITY TO PLAY MUSIC "IN TIME" IS GOVERNED BY WHAT I REFER TO AS HIS "INTERNAL MUSICAL BIOLOGICAL CLOCK." HOWEVER, AS MUSIC IS AN ART FORM THAT IS TYPICALLY PERFORMED IN A GROUP, A MUSICIAN'S RELATIONSHIP MUST BE AN INTERSUBJECTIVE RELATIONSHIP WHERE THE PERFORMERS' EXPERIENCE OF TIME IS FORGED BY A SYNCHRONIZATION OF THEIR INTERNAL MUSICAL BIOLOGICAL CLOCKS.

When one thinks of time, many questions come to mind. After careful examination, the seemingly simple question 'Does time exist?' is actually difficult to answer. An aspect of time that can be particularly perplexing is time in music. A musician would never initially question the existence of musical time—that which grounds a piece of music and helps it to unfold. But where does this time come from, and how can someone learn to "stay in time" or "keep time"?

This paper aims to investigate how time in music is understood. As that is pieced together, the next step will be determining whether or not this understanding is an accurate representation of the nature of musical time. From this we can move on to determine whether musical time exists at all or if it is something which merely appears to exist. Finally, we will investigate the possibility of multiple musical times. Vladimir Jankélévitch describes the nature of music in relation to a "musical universe" in his book Music and the Ineffable. In it he says, "The musical universe does not lie there exposed to the mind or proposed to the mind: music . . . inhabits our intimate center; we live music, as we 'live' time, as a fertile experience." This excerpt suggests we still understand that music, despite its ambiguous nature, flows intertwined with the fabric of our being. We experience the passage of a piece of music just as we experience the passage of time.

To begin the investigation of the meaning of musical time, we first look to the thought of Henri Bergson. In his book *The Musical Symbol*, Gordon Epperson describes Bergson's thought relating to music, beginning with the concept of 'mobility'. Bergson described understanding motion as mobility: "a gradual organization of our successive sensations This is just the idea of motion which we form when we think of it by itself, when, so to speak, from motion we extract mobility." ii 'Mobility' is the term used by Bergson to describe our conscious experience of the passage of time, specifically that of motion in time. Drawing from this description, Epperson states that "in its relation to time, mobility is of central importance to a consideration of music." The performer as well as the listener experi-

ences the sounds of music as passing. Music cannot be described in a mere instant, as each moment of a particular piece is a relation between the previous and subsequent moments of music. Jankélévitch calls attention to this fact when he says, "A chord that is not integrated within the before and after . . . is not endowed with signifying force—this chord . . . is arrested at the stage of nontemporal materiality."iv The abstraction of a particular chord in a piece of music removes it from mobility. We no longer experience the motion of the music. Instead, we hear the sounding of a few notes-major, minor, diminished, or augmentednothing more. This is not the nature of music but the materials by which a piece of music is crafted. To get to the heart of a poem, one cannot simply look at each word individually. Instead, one must look at the whole work (or at least an excerpt). The same is true for a piece of music.

Musical time is understood to be mobile; it is organized successively by our sensations. Each point in a piece of music is not individually posited as points on a line are. Jonathan D. Kramer supports this by saying, "The present is not simply a point in time We hear notes moving to other notes because the perceptual present stretches out in both directions forming the instant of now." Instead, a piece is conceived of as successive moments in time as described by Kramer. Epperson supports this by describing music in relation to time as "literally in and out of time . . . We can conceive it only as moving. We use up physical time even as we imagine the course of a melody."vi It is in time when it is performed, played on a recording, or even recollected as a memory of a melody, song, or piece. It is out of time when it is awaiting performance on sheet music or when it is on a hard-drive or in an MP3 player, awaiting the push of a button to release the potential music into actuality. Therefore, we have come to realize that music unfolds in time as successive mobility.

Now the question arises, "Does music exist in time, or does time exist in music?"vii Musical time can either be something that is contained by time itself—as a being coexisting with the other beings in our world—or something com-

pletely outside of the normal unfolding of time in the universe. In this sense, it could be compared to another reality that manifests itself inside and simultaneously alongside our own. Kramer suggests that if we consider this alternate possibility—what I will call the 'autonomy' of musical time—"then we begin to glimpse the power of music to cre-

what makes the time of music appear to be within ordinary lived time. The ability of a piece of music to sweep us up—whether it is in relation to emotion, spirituality, or time—reveals something of the nature of musical time and of music itself.

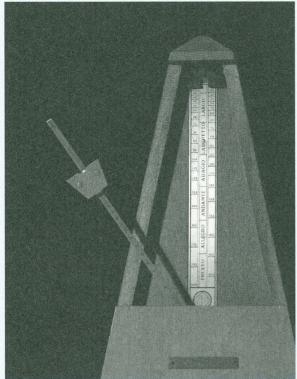
"When a piece ends, or if we stop focusing on it, we return to our experience of time as we live it normally. It is as if we are transported outside of our normal state of consciousness during a piece and then, upon its ending, are returned to that state of normalcy."

ate, alter, distort, or even destroy time itself, not simply our experience of it."viii As the master of its own destiny, music can suspend time with a fermata, quicken time with an accelerando, or slow down time with a ritardando. Kramer's question and subsequent consideration allows us to suggest that these abilities of any piece of music do, in fact, distort—or even destroy—time. If musical time is located in the temporal fabric of our own universal experience of time, it could only appear to alter our temporal experiences. However, if musical time were in fact its own separate time, these aspects of its ability to control and to distort time would be something exclusively possible in music.

One may object to the notion that musical time exists outside of time. On the contrary while a piece of music can speed up or slow down an experience of time, time itself still flows smoothly and uninterrupted. Furthermore, I look to Kramer's notion, "Musical time exists in relationship between listeners and music, just as ordinary time exists in the relationship between people and all their experiences, including music. Thus musical time and ordinary time lead parallel existences." ix This parallel existence is

Our own existence in ordinary time, the temporal nature of our being-in-the-world, can appear to be altered by listening to a piece of music. This suggests that we are at least partially affected by the presence of musical time. When a piece ends, or if we stop focusing on it, we return to our experience of time as we live it normally. It is as if we are transported outside of our normal state of consciousness during a piece and then, upon its ending, are returned to that state of normalcy. As Kramer describes, "We become immersed in a kind of time different from ordinary lived time." This immersion is what causes us to experience musical time as different from ordinary lived time. In this regard, musical time is something other than ordinary lived time.

At any point in a day, we can know what time it is. Time always appears to us as a flow from the future to the present and into the past, and there is always one universal time by which we measure all things in our lived world. Musical time, however, is something that is not always flowing but instead can be enacted at any time. Another objection may arise by pointing out that ordinary time can be enacted in a



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similar fashion through the use of something like a stopwatch, or, even more simply, by counting. By the act of pushing a button, a new 'time' has begun, and can therefore be started and stopped at any point. However, this objection does not stand firmly against musical time as separate from ordinary lived time. While a stopwatch might measure the time of a certain event, it is still in relation to a universal time that flows without cessation. Three minutes on a stopwatch is still three minutes out of a day that contains 1,440 minutes. There is no universal musical time to which a piece of music contributes. Also, a piece of music is not a measurement of time, but instead is an unfolding—it is mobile. These distinctions further separate musical time from ordinary lived time. The only aspect of musical time that is related to ordinary lived time is the duration of a particular piece of music given in minutes

and seconds (constructs of ordinary time). It is in this sense and this sense alone that musical time participates in the universality that is ordinary lived time. We must refer again to Jankélévitch, "Musical reality is always somewhere else . . . evoked by means of evasive expressions with double meanings." The evasive expression of particular melodic lines or mysterious harmonies, for example, is what creates the elusive nature of musical time. The 'reality' that Jankélévitch refers to is a reality that exists parallel to that of ordinary lived time as described above by Kramer. Musical time is real, just as lived time is real. Nevertheless, it is "somewhere else."

We must now make an attempt at discerning where this "somewhere else" could be, or at least try to understand how we have a means to access it. We will examine jazz music, as this genre has particular characteristics that may reveal some truth about the nature of musical time. When beginning a jazz piece, either a conductor or a member of the ensemble will count off the piece. This means that the person will begin by snapping his or her fingers in time, typically on what would be beats one and three of a measure of music.xii This act of counting-off dictates the tempo of the piece and is generally meant to remain constant throughout the piece. The phrase used above to describe this—snapping in time—describes an interesting phenomenon. Almost without fail, an experienced musician can determine at what tempo he or she would like the piece to be performed.xiii The tempo of the snapping comes seemingly from nowhere. Musical time simply begins with the snapping of the fingers. From where does a musician get this time? This is the "somewhere else" suggested by Jankélévitch. It is another time, separate from the ordinary lived time described above.

A solo performance displays a rather different aspect of musical time. Tempo is not necessarily maintained throughout the course of a solo performance, and the musician has the freedom to embellish a particular melodic line or insert dramatic pauses or an *accelerando* or *ritardando*.xiv Here musical time is again generated from inside

the performer, but there is no relationship to be made with other musicians. This is further evidence of the nature of musical time as being other than ordinary lived time. The time of a solo piece of music is not necessarily constant or static. Instead the performer can take liberties with tempo and as a result, in the words of Kramer, to distort, or even to destroy, musical time itself.

Kramer has an interesting insight into the ability of a musician to generate time: "Musicians seem to have one par-

ticularly stable biological clock, which regulates the perception of tempo . . . several pieces have been studied in which performers repeatedly play the same piece at virtually the same tempo, even after an interval of several years."xv I can personally attest to this fact by citing the Miles Davis recording of "If I Were A Bell."xvi This song is performed at tempo of between

186 and 190 beats per minute. Whenever I think of this song, I can simply start singing the melody and snapping my fingers in time, knowing with confidence that I will be snapping my fingers at about 186 beats per minute due to my musical biological clock. The notion of a biological clock sheds some light on the "somewhere else" in which musical time might reside. If musical time lives within the musician, then this suggests that it is a subjective time rather than an objective time.

Musicians must collaborate when performing a piece of any genre. There must then be an *intersubjective* relation-

ship between different musicians in which they agree on a particular tempo at the onset of a piece and then maintain this tempo together, creating a unified sound through the use of different instruments. This relationship is a sign of true musicianship. Not all musicians are able to keep steady time. Jazz as a genre is especially demanding for members of the rhythm section. XVII If any of these musicians fail to uphold his or her end of the tacit agreement to stay in time, the music suffers and "loses time" itself, an interesting phrase used to describe the moment when a piece

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of music fails to maintain steady musical time. Using Kramer's terminology,

Using Kramer's terminology, these musicians must then have flawed musical biological clocks. With practice and experience, the flaw can be fixed. However, not every musician is able to reach that level of expertise. This reveals that musical time exists within the

performers and that it requires a collective intersubjectivity to remain in time.

With this realization that musical time is an internal yet intersubjective entity, is there any way that musical time can be objective? With the onset of technology in music, objective timekeepers have often been implemented. The metronome is a mechanical device that keeps a steady beat at whatever tempo the machine is set. Used in a rehearsal setting, a metronome can, in fact, be a completely objective source of musical time. However, this sort of device is almost exclusively used as a method for practice and would

therefore not provide an objective time during a performance. It can, in fact, help condition musicians to understand certain tempos and to internalize them, fine-tuning their musical biological clocks.

The growing popularity of the genre known as electronic music can lead to another consideration of objective musical time. Kramer comments on this phenomenon: "Technology has made duration an absolute in a far more precise way than harmonic stasis ever could."xviii Electronic music is music generated entirely on a computer. A composer or a musician may enter this type of music into a computer, but it can be tweaked and reworked in such a way that it will be perfectly in time and perfectly in tune. One might question whether or not this type of music holds true to the nature of musical time (not to mention music itself). As this sort of piece is never actually performed, it does not ever require the intersubjectivity of performers. The time is not generated from a musician's biological clock. Instead it comes from a machine that is an artificial producer of music. This brings us to our last concern that was raised at the outset of this paper. Perhaps, considering the addition of recent technological advances in musical genres, there is, in fact, more than one musical time.

But how many 'times' are there? To explore this question, we can attempt to sketch a hierarchy of musical times. As we move up the ladder of musical time, we get closer to its true nature. Of the recorded musical times, there are two subsets: human recordings and artificial recordings. The lowest musical time, that which is least akin to the true nature of musical time, is that which was described above—electronic music generated by a computer and artificial recordings. Slightly higher than this is a human recording done in a studio or other recording facility, as this type of recording is produced artificially and can be tweaked or adjusted in a similar fashion, like electronic music. Higher still than this is a live recording. The actual performance of the piece remains true to the nature of musical time, but the reproduction and subsequent playing of these perform-

ances fall out of the realm of musical time and enter ordinary lived time. It is a mobile, successive time still, but it is now at the liberty of the listener to push the play or pause buttons. The most pure musical time, that which is the true nature of musical time, is a live performance. It is at a live performance where the time is generated by the musicians' musical biological clocks, and it is here where the intersubjective relationship is formed and maintained throughout a piece of music.



What we have determined is that musical time is a mobile time intuited by our consciousness. It is different from, and therefore outside of, ordinary lived time, and it is its own sort of time. It is generated within a musical performer in its truest nature, and this generated musical time is maintained by an intersubjective relationship between performers. There are other, less pure forms of musical time, as described in the hierarchy of musical times. That said, the nature of musical time continues to be elusive and mysterious. Jankélévitch speaks eloquently when he says, "Alas, music in itself is an unknowable something, as unable to be grasped as the mystery of artistic creation . . . "xix While we may be unable to grasp the nature of music itself, we have at least begun to delve into just what the nature of musical time is.

ENDNOTES

i. Jankélévitch (95)

ii. Bergson (III)

iii. Epperson (88)

iv. Jankélévitch (109)

v. Kramer (370)

vi. Epperson (305)

vii. Kramer (5)

viii. Ibid. (5)

ix. Ibid. (7)

x. Ibid. (17)

xi. Jankélévitch (103)

xii. For a piece in four-four time signature: four beats for every measure of music.

xiii. Number of beats per minute of a piece of music.

xiv. See page 3 for a description of these terms.

xv. Kramer (346)

xvi. Davis, Miles, "If I Were a Bell," Jazz Showcase, Original Jazz

Classics, 1998

xvii. Drums, bass, piano, guitar: responsible for maintaining the tempo of a piece of music in jazz, with the bass as primary time keeper.

xviii. Ibid. (71)

xix. Jankélévitch (102)

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