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Rock 'n' Recording

The Ontological Complexity of Rock Music

There was even a time when I asked Paul McCartney to dub in a note on a record, and he said he didn't want to because he thought it was cheating. I told him: "We've all been cheating all the time." And he did it.

—George Martin[1]

"None of them along the line know what any of it is worth." This line from Bob Dylan's "All Along the Watchtower" could serve as a trenchant summation of the response of the discipline of aesthetics to rock music. In spite of the fact that rock is the dominant form of music in the second half of the twentieth century, very little has been written about rock by philosophers or music theorists.[2] No doubt this reflects an unstated judgment about the relative worth of rock music compared to classical music. This unstated value judgment is, in my view, closely connected to the fact that what has been written about rock by academic theorists tends to assume that the conceptual scheme that fits classical music is adequate to understand rock. Placed within that scheme, the questions that have been asked tend to treat rock principally as a social phenomenon, a medium of folk poetry, or a genre of songs that are musically more complex than you might have thought.[3] Much is missed by this approach; it is a limiting framework that inevitably discovers a limited musical form.

Rock does not just challenge traditional assumptions of taste—although it certainly does do that—and it is not a simplistic musical medium. It is really best viewed as a separate type of music.[4] Its mode of existence is significantly different from classical or even earlier pop music. Failure to see this can be explained by a general disregard of the question of the ontology of rock musical works. Academic and even critical writing on rock is endemically vague concerning what rock musical works are. In such writing it is never made clear what exactly rock musicians create. The working assumption seems to have been that we can understand rock on the model of pop songs, and these in turn, on the model of classical music, which is the only musical form whose ontology has been extensively investigated.[5] But this assumption, I shall argue, is mistaken.

Moreover, it is a mistake with significant aesthetic consequences. The assimilation of rock to pop song and classical musical works leads thinkers to focus on the wrong features of rock music, insofar as they notice it at all, and to disregard whole domains of aesthetic interest that exist in rock music.[6] Given the rudimentary and predictable nature of rock's tonal structures, allegiance to traditional musical standards forces any search for rock's special character to shift to the power of live performance over its youthful audience and the social role of rock music in their lives. But this leaves out much that is special about the character of the music as heard.

To work out a complete reconceptualization of rock music would require a thorough rethinking of such central concepts in the philosophy of music as scores, works, and performances as these apply to rock. In this essay I shall focus on the concept that is key to understanding the changes in all the other central concepts of music as applied to rock: to understand the nature and history of rock music, as well as to understand why the aesthetics of rock music significantly differs from classical music, one must recognize the centrality of recording in rock music. But how central and in what way?

This centrality could be stated in many ways, some more radical than others—all, however, emphasizing a different relationship between music and recording than exists in other genres of music. In *Rhythm and Noise: An Aesthetics*

of Rock, Theodore Gracyk argues that rock "employs recording as its *primary medium*."[7] Elsewhere, I have made the claim that rock musical *works* are recordings.[8] Donald Meyer claims both that "the producer is now the primary *auteur* of rock music," and that "the record (or CD) has become the *musical object*, now consumed in the car, at work or at home rather than in the concert hall."[9] Robert Ray asserts, "What distinguishes rock & roll from all the music that precedes it—especially classical, Tin Pan Alley, and jazz—is its elevation of the record to *primary status*."[10]

These claims are far from equivalent, nor are they transparently clear; they need philosophical scrutiny. If these thinkers are right, we must now add the concept of a recording to the fundamental concepts in the philosophy of music, if we wish to understand rock music. Accordingly, the details of how to formulate the central claim concerning rock music and recordings, why we should regard it as true, what a recording is, and what aesthetic consequences follow, will be sketched in what follows.

I. THE STANDARD ACCOUNT OF MUSIC

The account of musical works prevalent among philosophers and music theorists is founded on three interconnected concepts: work, score, and performance. The musical work is determined by the musical score, but is not to be identified with the score. Performances are instances of the musical work, which itself is commonly regarded as having the ontological status of a universal or a type, as individual 1987 Honda Accords are instances of the abstract type: 1987 Honda Accord.[11] Although, of course, the sensual pleasure of hearing the music can be achieved only if individual performances are produced, they otherwise have no bearing on the properties of the musical work per se. The differences between performances, in particular, are not of special theoretical interest, as all performances are conceived to approximate the ideal sound structure or pattern described by the score.

One of the claims implicit in most theoretical work on the ontology of music, whether Platonistic or nominalistic, is that this standard account, itself prior to any ontological theory, describes the nature of *all* music. It is commonly implied that it applies to musical works in general, not just to the set of works these theorists particularly care about, namely, the classical music canon from 1700 to 1950. And even if the standard account fits Native American music or Tibetan rituals rather awkwardly, its proponents no doubt believe that at least it adequately describes Western music of recent centuries. I believe, however, that not even this is true. There is an extremely familiar and all-pervasive type of music that is not fully or adequately described by the standard account, and that is rock music.

II. ROCK MUSICAL WORKS AND RECORDINGS

Undoubtedly, the field of rock music, from the mid-1950s to the present, is enormously varied. Still, I believe that we can usefully begin to understand rock musical works by noting two points: first, that rock musicians of any stature first and foremost make recordings;[12] and second, that their hit recordings are their most important product. In itself this may not seem remarkable. After all, classical and jazz musicians of any stature also make recordings. One might even grant for the sake of argument that their recordings too are in some ways their most important product. This admission, however, does not appear to require reconceptualizing the familiar triad of work, score, and performance. This is because the recording may be viewed simply as a documentation of one important live performance of the work. What is "primary" in rock, according to this perspective, is either the song or the performance of the song. Adherents of this perspective will hold that rock pieces (i.e., songs) are independent of recordings and that recordings document performances of rock pieces, pieces that can be and are performed on many other occasions as well.

But this assimilation of rock recordings to pop or classical recordings, and with it of rock pieces to classical musical works, rings false to anyone familiar with rock music. If we reflect upon favorite rock pieces, we immediately sense that recordings stand to rock musical works in a different relation than recordings of classical music works stand to those works: for example, that the Beatles' recording of "Lucy in the Sky

With Diamonds" (on *Sgt. Pepper's Lonely Hearts Club Band*) stands to the work "Lucy in the Sky With Diamonds" in a more definitive relation than Monteux's recording of *The Rite of Spring*, however authoritative, stands to *The Rite of Spring*. Indeed, I join Gracyk and others[13] in proposing that instead of bracketing rock with the multiply-instanced arts of classical music and literature, that we regard it as primarily a recorded medium and we bracket it with film and printmaking (which are also multiply-instanced, but in an autographic way). Just as the final cut of a film is not just a recording of one performance of that film, but rather the definitive version of *the film* in all its detail (ditto for a lithograph plate), so a rock recording is, with the exception of "live" recordings, the definitive version of that musical work in all its detail.[14]

But unlike movies, rock music does involve live performance and sometimes even scores. So the intuition that rock records are somehow primary and analogous to movies will require much analysis and clarification. Before we can make any progress in that analysis, we need first to develop an adequate account of what a recording is.

III. ONTOLOGY OF RECORDINGS

There is a fundamental ambiguity at the heart of how we think about recordings. We think of them both as temporally ordered sets of sounds and as physical objects, for instance, as LPs, tapes, or CDs on the shelf. This ambiguity is reflected in the very meaning of "recording," which is ambiguous in much the way the term "book" is. In such utterances as "Is the *Philosophical Investigations* on the shelf?" "That's a heavy (or worn-out) book," and so forth, we are referring to physical objects that encode the book in its other and primary sense, that is, as a more abstract item, defined in the case of books/texts in terms of words, word order, and punctuation. Similarly, in such utterances as "How many records do you have in this room?" "These records are heavy," or "The *Sgt. Pepper* CD is a lot smaller than the old *Sgt. Pepper* record," we are referring to recordings as physical objects. In this, the material sense, recordings have little aesthetic importance.

But examine any discussion of recordings, whether classical, pop, jazz, or rock, and you will hear a discussion, not of the physical properties of tape or disc but of sounding properties and events, whether of the musical work (for classical music), or of the performance, or of the mix or ambience. The very sounds we hear are the subject of discussion; what is *not* being talked about are the physical properties of tapes or discs. I shall call the temporal sequence of sounds we hear on a recording, the "extended sound event." This includes all the sounds one hears when the recording is played back. (I shall not try here to work out the units of this extended sound event. I do not, however, assume that these can be described always or adequately as tones in standard notational systems.) At any rate, to attend to the extended sound event is to attend to the exact speed of the music at any moment, the exact timbre of instruments, the exact balance of instruments, exact distortion of instruments, and any other sounds (found, sampled, generated) that are introduced. Thus, Glenn Gould's recording includes his humming as well as the exact frequencies from his piano (tones we crudely describe as bright or dull, sharp or flat, and so forth), his tempo fluctuations, the exact quality of his attack on each note, and so on. Here are some examples of features of the sound events on rock recordings: the exact way Paul McCartney's bass is mixed up over the vocal in "Got to Get You Into My Life"; the exact ways that the two backup vocals are mixed with Levon Helm's lead vocal on the chorus of the Band's "The Weight," each with a distinctive character that the recording highlights (even to mixing up the wordless vocalizations of the highest voice); or the exact juicy, squishy, reverb sound of the bass drum on that same cut (a sound whose descending first four notes, in contrast to the gentle folk guitar introductory chords, does so much to define the song);[15] more generally, the exact speed and the ways the tempo fluctuates on any given cut; or the exact feedback distortion and sounds (not just the particular notes—if he even hits conventional notes) that Jimi Hendrix gets out of his guitar on his extended guitar solo (from 4'25" to the end at 6'49") on "Third Stone From the Sun" (*Are You Experienced?*) as well as the sound of his highly processed and distorted voice on the same cut, which is mixed with elec-

tronically distorted found sounds; or the studio sounds, coughing, noodling on their instruments, and the voice counting: "One, two, three, four, one, two" at the beginning of "Taxman" (*Revolver*)—and so on, through an indefinite number of examples of properties that rock recordings have as extended sound events.

For some types of music, especially electronic and rock, we have learned to go beyond conventional musical nomenclature in order to describe the sounds that are heard, for example, in our understanding and description of electric guitar sounds ("feedback," "fuzz," "wah-wah"). For rock an eclectic vocabulary has to be used that borrows from ethnomusicology, electrical engineering, and performance criticism (e.g., in describing vocal sounds). In some cases, the best way to describe sounds and sonic properties may be to refer to how they are produced, as in "phase shift," "sine wave," or the sound of a saw tooth generator.

There is an obvious objection, however, to taking the recording as a sequence of sounds: *Which* sequence of sounds shall we regard as *the* recording?[16] Played back on tiny speakers a piece will sound very different from the way it sounds played back on big speakers with a powerful amplifier. And the reissue of a recording on CD may sound different from the way it sounded on the original 45s, even more so if the reissue is in simulated stereo whereas the original was in monaural (a once common practice). Such tremendous variability of the sound events, depending on format and circumstances of playback, might tempt one to associate the recording with the unchanging master tape; in its stolid determinateness and causal priority it appears to be the fundamental determinant of the identity of the recording, whereas the tape or LP purchased in the store and the sounds generated therefrom seem mere epiphenomena by comparison.

However, there are insuperable problems with identifying the recording with the master tape. The master tape is the wrong *type* of thing. It doesn't have the same types of properties as a recording does in the sense in which we discuss the latest recordings of the Beatles or Cecilia Bartoli. The tape is so many feet long, whereas the recording lasts 3′42″. The tape weighs so many pounds whereas the recording does not weigh any pounds. And so on. The tape has the *capacity* to produce music upon appropriate playback, but in itself it does not begin loudly or with a F-sharp played on the organ.

Moreover, the recording is unique, whereas the master tape is not. Typically at least two master tapes are made and it is possible to make even more copies of it and for the recording to continue to exist even though the original master tape is destroyed.

The same argument that eliminates the master tape because of the lack of shared types of properties between a recording and the master tape also undermines any attempt to identify the recording with the physical LPs, tapes, and CDs produced when the recording is released. Besides, some of these may be defective. But absent appeal to the master tape, what sensible standard could establish which are defective?

It is natural to react to these problems by identifying the recording with the extended sound event *produced by* tapes, CDs, or LPs. This is on the right path but we need to solve some problems, the most important of which we have already seen: we will hear different sound events depending on which format we choose and how we choose to play it back. Assuming there is just one recorded entity, must we not choose one format and one right sound on playback? On what basis do we make such choices? And if we do make such choices, how can they be reconciled with a central way we think about recordings, namely, that the *same* recording exists in different formats?

IV. RECORDINGS AS NORM-KINDS

To accommodate these points, I propose an account that, while acknowledging the priority of the master tape, holds that the sort of entity we want is the extended sound event with its sonic properties. To frame such an account of what a recording is, I shall begin with the notion of norm-kinds, a notion due to Nicholas Wolterstorff and developed by James Anderson to account for the ontology of classical musical works.[17]

The idea of norm-kinds is simply the idea that there are kinds of thing that can have defective instances. Anderson gives the example of animal species: for example, the Lion; there can be properly and improperly formed lions. The kind Red Thing on the other hand, is not a

norm-kind, "for there cannot be an improperly formed red thing, *qua* red thing" (44). The properties that define the norm-kind K are said to be "normative within a kind," and these are defined as properties that it is impossible to lack and still be a *properly formed* example of K. Now, Anderson points out that to every norm-kind there is a descriptive-kind that is defined as the kind of thing that *exactly* possesses all of the set of properties that define the norm-kind, for example, the descriptive-kind Perfect Lion. He uses these two notions to give an account of norm-kinds brought into existence by human activity (unlike animal species), such as musical works: "Perhaps the best way to understand the activity of creating a norm-kind is as an intentional operation on a previously existing descriptive-kind. . . . A humanly-created norm-kind, then, is a descriptive-kind made normative by a person at some time" (47). In the account Anderson proposes of the classical musical work the previously existing descriptive-kind is the sound structure defined by the score. This sound structure is made normative by the composer's publication of the score. And this is Anderson's point. He realizes that norm-kinds can be created by human activity, and thus he sees a plausible way to explain how composers can genuinely create their musical works, even though their works are in some sense identical with timeless sound structures.

Applying the notion of a norm-kind to recordings, I propose that the *descriptive-kind* that underlies the recording is the extended sound event (the sequence of sounds) produced by a studio-quality standard playback (circa the time of creation) of a master tape. There is no absolute precision here. If there are two master tapes, they might vary slightly, as might episodes of playback in the studio, even if governed by industry technical standards: for example, different speakers would produce slightly different sounds. But this fuzziness is built into the identity of the recording, I claim, just as a similar if lesser fuzziness is built into the identity of a film.

The *norm-kind*, which *is* the recording, is brought into existence, at least for commercial recordings, by the recording artists releasing or at least authorizing or approving a master tape;[18] this amounts to an extended sound event being made normative by industry and musical conventions. Industry conventions govern the production of physical recordings (discs, tapes, LPs) to ensure that they approximate this sound when played back in the intended way.

To further capture our concept of a sound recording it is necessary to require that instances of the extended sound event be produced by a causal process emanating in the right way from the original master tape. This is because we regard even an exact *copy* of a recording's sound, if it is made by other musicians and engineers on a new master tape, as inauthentic; in rock, where such copies have been produced frequently, they are regarded as fakes. For example, in rock music we do not regard best-of-hits copies by other artists as authentic instances of the original recording, however accurately the copying artists mimic the sound of the original. This point is reflected in copyright law: although the sound of the recording is copyrighted, other musicians are free to make another recording that mimics that sound. Such a copy produces instances of the song but does not produce an instance of the original recording and would, therefore, not be regarded as an infringement of copyright.[19] It is a new recording. The failure to require a causal tether from an originating master to instances of a norm-kind is a significant gap in Anderson's account of norm-kinds. Its absence from an account of recordings would disguise the fact that recordings are autographic, and thus that musical works that are recordings, such as electronic music (and rock music; see below), are autographic artforms.

Anderson treats the relation between descriptive- and norm-kind as analogous to the relation of simple set inclusion in that *any* entity that instantiates most of the properties of the descriptive-kind would be an instance of the norm-kind. But it is doubtful that this is sufficient, even, in the case of a lion. A particular type of causal history of a putative lion is clearly being assumed. If a "lion" does not gain its properties by generation from a lion zygote, we will not be sure that it is really a lion. This is equally true for classical musical works, which are regarded by Anderson as abstract tonal structures made normative by composers. As Jerrold Levinson has shown, for a sound event to be a performance of a classical musical work—and there cannot be *instances* that are neither perform-

ances nor recordings of performances—some causal relation between sound production and original compositional indication of the sound structure has to exist.[20]

To summarize then, we can say that an instance of a recording must be produced by playback of a copy of a pressing master causally descended from the master tape. Causal processes are implicated at two stages then in our understanding of recordings; they also play a role in defining the norm-kind itself: it is the sound produced by appropriate playback of the master tape (or digital substitute) in the studio, where appropriate playback is clearly a notion that is governed by conventions in the music world and the record industry. An implication of this is that the precision or fuzziness of the norm kind could then change over time as the conventions vary in their requirements for studio playback.

On my account, then, instances of recordings have two types of salient properties: an essential causal condition and normative sonic properties. The essential condition of being an instance of the norm-kind Sound Recording is that it be the result of a playback of a properly caused physical recording—that is, a causal descendent from the master tape—whatever format that might be (tape, CD, LP), and even if it is a pirated copy.[21] The normative properties, against which playback is measured, are determined by the properties of the extended sound event heard in studio playback. So, if your tape recorder plays a tape of "No Expectations" at an incorrect or varying speed, it is still a playback of "No Expectations," but a defective one (in which, say, the pitches of the instruments are off).[22] If you equalize the playback in an exotic way, eliminating the bass and amplifying the higher frequencies, for instance, that is also a defective instance of the norm-kind.[23] If your record produces pops or thuds from a scratch, you are still hearing the recording but with additional sounds.

Now, Anderson claims that "[t]he essential characteristics of a norm-kind remains the same . . . such a kind is a kind for which correct and incorrect instances are possible."[24] It seems to me that recordings diverge in a significant way from both sorts of cases that he focuses on, that is, biological species and performances of classical music. In contrast to species and performances of classical musical works, where it is typical to correctly instantiate the norm, almost all instances of the norm-kind Recording only *approximate* to a certain degree the descriptive-kind defined by the studio playback.[25] Because of this difference, I suggest that we call Recordings and other entities that typically only approximate a norm, *approximate* norm-kinds. There is also another difference, tending in the opposite direction: instances of a recording (i.e., playback episodes) will be more similar to each other, considering their nonrelational properties, than are instances of natural kinds. Species, for example, can have all sorts of variable nonnormative features such as hair and eye color or size. By contrast, the main variable quality for instances of recordings is absolute volume.

Although I regard recordings as similar to movies, prints, and photographs in being both autographic and norm-kinds, these other artforms do not appear to be approximate norm-kinds. Movies, for instance, must be projected in a standard way (this standardized causal process defines the norm-kind). For example, there is nothing for movies quite like the freedom to change loudness and equalization that is so characteristic of playing a recording. Recordings are played back on millions of variable and adjustable playback systems. In this privatized setting, playback is only partly standardized. Nor are the differences introduced in this way irrelevant to our experience of the music. On the contrary, the variable features of playback events, especially for rock records, directly and relevantly affect our musical experiences in a way that, say, reading a book with very large or very small type should not affect our aesthetic experience of the book.

Let's briefly examine the application of this account to some recordings. Glenn Gould's first recording of the *Goldberg Variations* is the norm-kind whose normative properties are defined by the sounds produced by the master tape he and Columbia Records produced in 1955; his last recording of the *Goldberg Variations* is the norm-kind whose normative properties are defined by the sounds produced by the master tape he and Columbia Records produced in 1982. If the original was recorded in monaural and then released in fake stereo, then such stereo records are instances of the norm-kind although universally defective in one regard. Defective physical

records are explained by this account, since they produce sound event instances defective relative to the descriptive-kind. If the recording is released in different formats, it may well sound different when played back in these different formats. But again, the notion of norm-kinds accommodates this: all of the resulting recordings produce instances of the work when played back even though they sound discernibly different from each other and some may be more defective than others. But what if, as happens in rock, a record is mixed differently for different formats? For playback on tinny portable phonographs, 45s may have been mixed in a way to boost their bass frequencies, for example; and dance club mixes are notoriously different in sound from the other versions of the same recordings. In such cases, we have to say that the work exists in different versions, since in effect there are different master tapes, just as a movie may exist in different versions, for example, in different "final" cuts.[26] On the other hand, a total remix, as in pieces on the recent *Blondie Remix Project* ("remixed, remade, and remodeled for the 90s") creates a new if derived work because it adds and alters material so as to stray significantly from the original extended sound event heard in the studio when the recording was originally produced.

IV. CONSTRUCTIVE RECORDINGS

The idea that rock pieces are recordings or that recordings are or can be musical works are not new ideas, but they have not until recently been taken seriously.[27] In part this may be because we have not previously had a clear notion of the ontology of recordings. But to get at the idea that a recording can be an *artwork* we need more than this. We need to make a distinction among recordings because not all recordings of music ought to be regarded as themselves musical works. That required distinction is between veridic and nonveridic or "constructive" (as I shall call them) recordings. Veridic recordings—or those regarded as true-to-performance—are those that are guided by two regulative ideas: (1) the notion of an independently existing live performance that the recording documents, and (2) a notion of how the live performance should sound, as established by some set of conventions for listening to performances of that sort. Examples of musical subject matters whose recordings are standardly regarded as veridic are classical music, ethnic and folk music, classical jazz, and live rock music.[28] Such recordings played back are meant to sound as much as possible as the live extended musical event would sound, and they are, accordingly, regarded as the product of a neutral registration process in the same way that photography is often regarded (naively, to be sure) as a neutral recording of what things look like. Indeed, we tend unreflectively to think of *all* recording as necessarily veridic, but that is not correct.

If constructivity is a status based on how a recording is regarded, in most cases this status is honestly earned because of the type of causal process involved in producing the final recording. The total process of making a sound recording contains many points at which truth-to-performance can be undermined—put another way: many points where creative addition, subtraction, and alteration of the sounds can be accomplished. We may schematize the total recording process into inputs, mixing, processing, and mastering. Since this process is practiced on electronic, and therefore manipulable and degradable signals, it involves tremendous effort and skill, in fact, to produce a recording at the end of the process that is true to a performance played into microphones at the beginning. (If there is such a performance, as there is not for many recent rock recordings if we require that a "performance" involves the musicians playing together at the same time.)

Now, it will be clear that I am claiming that many rock recordings are constructive. This was much less true at its beginnings in the mid-1950s, but became more true as the recording technology developed sufficient complexity and power by the mid-1960s. Signals are input from sources other than microphones (e.g., electronically generated sounds and found-sound tapes). Signals are altered by various electronic devices to produce alteration in the wave forms and to add or subtract information through the use of processes such as feedback distortion, wah-wah, reverb, echo, aliasing, flanging, chorus, compression, and devices, such as harmonizers, ring modulators, enhancers, and so forth. With multiple tracks, signals are recorded at different times and places—thus removing the objective

reality of an actual performance being recorded—and they can be mixed together in an indefinite number of ways. When a medium takes advantage of these possibilities, as rock music has, then it has certainly entered the realm of constructive recording. There likely will not be any actual, and there may not even be a possible performance that the recording reproduces (other than a "performance" consisting of a reproduction of the recording). The lack of a possible live performance is often invoked as an explanation of why some groups, such as the Beach Boys and the Beatles, ceased performing. The constructive nature of rock recording is also why, although a "live" recording of classical music is very similar to a studio recording of the same music, a "live" recording of rock music is usually very different from studio products.

We are now in a position to formulate the notion that recordings have a unique centrality in rock music. Here are two salient claims that one might make concerning any given recording:

1. The recording is (itself) a musical work.

2. The recording is the *primary* musical work brought into existence when the record is created.

Note that (1) is necessary but not sufficient for the truth of (2). Note, also, that typically, neither (1) nor (2) are true of veridic recordings. But while there seems no reason to regard veridic recordings as artworks in their own right no matter how important they may be for a given genre of music,[29] there is substantial reason to regard constructive recordings as artworks, indeed, musical works.

Recordings that are highly constructive because of their causal genesis (we might dub this subcategory "causally constructive") are compelling candidates to be regarded as musical works in their own right.[30] Recall that a recording is an extended sound event or sequence of events. In a recording that is causally constructive to a high degree this sound event is largely a product of the way electronic signals are generated and mixed within the recording process. The final result is created in the way that a sculptor might assemble a complicated sculpture. For example, to get the fantastic hurdy-gurdy sound on "Being for the Benefit of Mr. Kite," George Martin, the producer on *Sgt. Pepper*, made tapes of recordings of Victorian steam organs, cut the tapes into sixty small sections, mixed them randomly, and spliced them together, thus creating "a whole amalgam of carousel noises." As Martin describes it: "It was an unreal hotchpotch of sound, arrived at without rhyme or reason; but when it was added as a background 'wash' to the organ and harmonica track we had already made, it did give an overall impression of being in a circus."[31] Practices at least as causally constructive as this have become entirely typical in the recording studio since then. Certainly for such recordings it is plausible to hold that the musicians and producers and engineers have created a new type of musical work: together they have intentionally produced an extended sound event, tokens of which are produced when one plays their record. They have just as much claim to have produced a musical work as a classical music composer who composes electronic music on a record.[32]

Causal-constructivity is a matter of degree. While many records are far removed from any originating live performance, others are closer. Especially in rock until the mid-1960s, and for many groups since, the recording begins with musicians playing and producing sounds in the studio. The sounds on the recording, although certainly altered from the sound of live performance, still reflect the sound events of studio performances.

Even in such cases in which the recording process has only modest but definite influence, we can still regard the recording as constructive in the appreciative sense that it is not regarded as a veridical documentation of a live performance. Gracyk argues for this status for many rock and roll records, starting with Elvis's Sun session recordings of 1954. Gracyk, Greil Marcus, Peter Guralnick, and Robert Ray all point out the crucial nature of the sound of those Sun recordings. Guralnick writes: "The sound was always clean, never cluttered, with a kind of thinness and manic energy." Marcus adds: "There is that famous echo, slapping back at the listener. . . . The sound is all presence, as if Black and Moore each took a step straight off the record and Elvis was somehow squeezed right into the mike." And as Gracyk says, "the

Sun recordings were records first rather than recordings of musical performances," while Ray adds, "the performances that began rock & roll, Elvis's Sun recordings, could not be reproduced in any live situation except in a very small and empty (to permit reverberation) room."[33] Critics, knowledgeable listeners, and just plain fans all pay attention to the sound of rock records. It is the object of critical discourse and appreciative attention. Gracyk concludes that the Sun recordings "embodied a new *sound* as an essential quality of the musical work." Thus, even though only modestly causally constructive, these recordings became appreciated as constructive (nonveridical) as soon as they were released. This mode of listening was rapidly to become the common way of appreciating rock recordings, indicating why records have played a constitutive role in the development of rock music.[34]

We can now formulate two theses relating constructive recordings and rock music. The first is that, since rock records for the most part have been constructive, they have been musical works (in their own right). More strongly, I suggest that since the mid-1960s (for most rock recordings) the recording has been the *primary* musical work brought into existence with the creation of the rock record. I turn now to developing the idea of the recording as the primary work by comparison to other musical entities *also* generated in the creation of rock recordings.

V. THE ONTOLOGICAL MULTIPLICITY OF ROCK

Saying that the recording in rock is the primary musical work involves the idea that the sounds of the recording cannot be regarded adequately merely as a performance of a song—in the traditional sense of "song"—in the way that pop and folk recordings in the past have often been correctly regarded as recordings of performances of songs. Rather, the sounds that compose a rock recording constitute a work in themselves. Plus, they are the primary target of both the artists's intentions and the listeners' attentions. To be sure, there is a common use of the term "song" in which it refers both to the hit recordings of rock music and to the song proper instanced on the recording. That song proper is an entity that can be performed by an indefinite number of people in an indefinite number of ways. The criteria for the identity of a song qua song are quite minimal. It is merely a melodic structure and a verbal text. Recognizability is the main condition defining an instance as a particular song.[35] A song can be arranged in an indefinite number of ways. In itself it does not have to have any particular instrumentation or speed or loudness or phrasing. It is extremely schematic, as any comparison of what is common to all of the covers of any Beatles song clearly shows.

Take, as an example, a recent recording of the Beatles' psychedelic masterpiece "Tomorrow Never Knows" (*Revolver*) by guitarist Michael Hedges.[36] Through the use of extensive overdubs and tape-loops, the original plunges the listener into a whole universe of screaming gulls and people, hysterical trumpets, distorted and apocalyptic electric guitars, with symphony orchestra and cheerful honky-tonk piano in the background. In decided contrast, Hedges arranges the song for acoustic guitar and fretless bass. His version takes the song at a relaxed medium tempo, producing a mellow, laid-back, pretty piece of music in the acoustic folk tradition. He uses overdubbing and distortion only near the end of the cut. Hedges also takes great liberties with the notes and phrasing of the song, removing the hypnotic and edgy quality of the narrow up-and-down oscillation of the melody. The result is surely the song "Tomorrow Never Knows," but it is rather like performing a Schubert song substituting an entirely different piano part from a different musical era and leaving out half of the vocal part. In the classical tradition, such a rearrangement would be regarded as, at best, a new work. Hedges's arrangement dismantles the original relation of the music to the words from the Tibetan *Book of the Dead* and Timothy Leary: it alters almost every expressive and aesthetic property of the original music. What properties? Mark Lewisohn describes "Tomorrow Never Knows" as

> a heavy metal recording of enormous proportion, with thundering echo and booming, quivering, ocean-bed vibrations. And peaking out from under the squall was John Lennon's voice, supremely eerie, as if it were being broadcast through the cheapest transistor radio from your local market, and delivering

the most bizarre Beatles lyric yet, including one line taken directly from Dr. Timothy Leary's version of the Tibetan *Book of the Dead*.[37]

Although songs proper are thus ontologically "thin," to use Gracyk's terminology,[38] they are important. As I have already suggested, the names of rock musical works are used in a systematically ambiguous manner both for the song and for a particular recording. "Tomorrow Never Knows" refers to a song as well as to a famous recording. There is, in fact, a clear dualism of creation in rock recordings. They exhibit the creation of two main items: the song proper and the recording (and in fact a third item, the arrangement). My thesis is that the principal object of appreciation, the entity with the best claim to be the rock musical work itself, is the recording.[39]

Arrangements of songs need to be considered as well. They can involve various levels of specificity from the crudely schematic ("head arrangements") to those fully notated in standard musical notion. Such a precisely scored arrangement is in many ways parallel to a classical musical work. However, even precise scores of the sort we get in classical music will not include all the relevant information that goes into determining a recording. In any case, the creation of a rock recording usually represents the creation of at least three musical objects.

We can contrast song, arrangement, and recording by imagining a score of the arrangement of the Rolling Stones' "No Expectations," in which were notated the particular bass line that Bill Wyman plays, with its very striking swooping attacks on the two high bass notes played on the words "to pass" (at 57"). These notes and the way they are played are definitive of the recording but inessential to the song (as demonstrated by their striking absence in the last chorus). But in spite of the greater completeness of the imagined score, the point I insist on is that even a scored arrangement in standard musical notation cannot fully capture the particular extended sound event that we hear when we play a paradigm rock record such as "No Expectations," since the exact mix, and many other features of the extended sound event are not part of the scored work. The exact way Wyman attacks those notes *each* time he plays them as well as the way the bass is mixed up for those two notes and then mixed down at other times is not part of the conceptual scheme of standard musical notation, which does not comment on recording mix. Nor should it comment on exact recording mix. Far from dictating an exact sound, it is an essential feature of standard musical notation that it leaves open the possibility of nuanced variation of performances of scores within norms of performance practice.[40] The difference between the many ways Wyman might have played those notes on different takes of his track all would have been consistent with a score in standard notation (even one with standard expression marks).

Along with the incompleteness of a standardly notated score is an equally significant fact about rock recordings: the absence of a preexisting score. This absence is a critical conceptual feature of the rock recording. Because of this absence, the definitive nature of the rock recording cannot be thought to be the result of its being a particularly significant performance of a work specified by a preexisting score, as we might regard a recording of Rachmaninov playing one of his own piano works or the recordings by Britten and Stravinsky conducting their own orchestral works.[41] So, even though scores of arrangements underlying rock pieces are sometimes produced after the fact by transcribing the recording, these scores are in a curious limbo. Insofar as they are meant to be scores to be performed—and this seems to be the standard case—they will conform to standard musical notation, and accordingly diverge (often quite radically) from the sound heard on the recording, leave instrumentation partially open, and allow for variation in performance.[42] If, however, they were an attempt to capture as exactly as possible the notes played on the recording, they would be only a guess about what possible imaginary arrangement the band instantiated, a guess not underwritten by conventions of authorship and publication in the way that the publication of a score for a classical musical work authoritatively determines that work.

Every musical creation requires the invocation of conventions for bringing the work into existence—the publication of a score, for instance. In rock the release of the sound recording is the act by which the work is brought into existence,[43] and this has consequences for the nature of the rock musical work. While the *song* can be recovered from the recording, it is much less clear that a specific authoritative score of an arrangement can be recovered or that it is relevant to recover it. Indeed the after-the-fact production of a score does nothing to show that the recording was a performance of that scored work, and not, by contrast, a wayward performance of a different score.[44] This underlines the point that the preexisting classical score is normative for performance whereas an after-the-fact rock score is essentially descriptive and could not be normative for future performances.

(What is normative for performance? This is a complex topic. Let me say here, only that we ascribe to the original artists and only to them the ability to produce authentic re-creations of the rock musical work in live performance. Both these authentic instances as well as the ubiquitous fakes—that is, covers—are directly guided by the sound of the hit recording.)

To return to my main thesis, support so far has come from the nature of the record production process and from the observations just made concerning conventions and the absence of scores. There is a further argument for the thesis. We very naturally ascribe the properties of the recording to the work: for example, that in *Exile on Main St.* the voice is, as Christgau says, "submerged under studio murk."[45] And many of the properties one naturally ascribes to the work turn out to be properties of the recording, not of the song nor even an arrangement of the song. Consider the very common practice of fade-outs and cutoffs. R.E.M.'s "What's the Frequency, Kenneth?" (*Monster* [1994]) begins with a tape cut in the middle of the full band sound, giving this work an incredibly abrupt beginning. On the same album, "I Don't Sleep, I Dream" ends with another tape cut in the middle of the full sound of the band. The sudden cutoff is inevitably *shocking*. So, "What's the Frequency, Kenneth?" begins abruptly and "I Don't Sleep, I Dream" has a shocking ending. But the properties of having an abrupt beginning or a shocking ending are not properties of the song (strictly defined) or even of any *possible* arrangement of the song, since in live performance of a standardly notated arrangement[46] the sound of the instruments cannot be suddenly turned on or cut off.

VI. AESTHETIC CONSEQUENCES

I shall briefly conclude with some consequences of the account I have put forth. One consequence I do *not* think follows is the reduction of rock music to the recording. Obviously, live performance is very important in rock. But we tend to give it undue weight in our theoretical accounting. The extreme valorization of rock stars encourages us to romanticize their live performances over the more "technical," collaborative, and distanced events in the recording studio. If the present account is correct, we must add producers and engineers to the group of creative artists who bring the rock musical work into existence.[47] As Mark Lewisohn remarks of "Tomorrow Never Knows," "It would be wrong to assume that the Beatles alone were responsible for this remarkable recording, or for the progressiveness which would be the hallmark of much of their future output."[48] A recording that is a musical work is, like a movie, the product of a collaboration.

Moreover, knowing about the nature of that collaboration is essential to a proper appreciation of the musical work, once we accept that the recording itself is the primary musical work. Knowing about the alternative takes, what was included and what was discarded, is as relevant for rock records as knowing the musical sketches of classical composers is to their works. Moreover, knowing how sounds were produced and combined to make a recording is essential even to knowing *what* one is hearing. Is that a real chicken or an electric guitar at the beginning of the reprise of "Sgt. Pepper's Lonely Hearts Club Band"? (In fact, it is both: the sound of a clucking chicken is so mixed as to turn into the opening guitar note of "Sgt. Pepper.") In short, knowledge of how the recording was made affects and should affect appreciation. It is as relevant as contextual information concerning the creation of artworks is to other art forms.

We have seen that the relevant aesthetic properties of rock musical works are different, more wide-ranging and complex than those of the song sound structure or even than those of the

particular conventional arrangement exemplified on the recording. It follows that we cannot seriously propose that, say, *Sgt. Pepper* or *Surrealistic Pillow*, or any of the songs on these albums, are among the great musical works of the second half of the twentieth century if we do not focus on what *Sgt. Pepper* or *Surrealistic Pillow* really are—or conversely, if we consider only a highly schematic description of them as aesthetically relevant. We can, for instance, make legitimate and illuminating comparisons between the power of the climax, the last twenty-four bars, of "A Day in the Life," and the most powerful moments in classical musical works. But to do so it is necessary to have a full and unblinkered understanding and experience of all the elements that go into that sound sequence (the rising sound of the symphony orchestra overdubbed four times, each out of phase, the final overdubbed "crash" chord, the final 45-second decay of the sound while the microphones increased sensitivity to include all the ambient sound).[49] The theoretical framework necessary to achieve this understanding is one that focuses on the recording, and thus includes *all* of its sounds.

The complexity of the recorded rock work is not such as to be captured by standard musical notation, nor does it involve the harmonic development of classical music. Nonetheless, it has its own compelling dimensions, such as timbral, rhythmic, and sonic effects, often much more intricate and powerful than those of classical music. This is why it is important to sort out the ontology of rock. It is premature to focus on the style of rock music, as has been done up until now, before we identify the main types of musical objects associated with it and their properties. This set of musical objects comprises at the least the recording, the song (in the strict sense), and that rather shadowy entity, the arrangement. I have shown here why, from this set of musical objects, we should regard the recording as the primary "rock musical work." Not only is it a new kind of musical object, it has been the dominant force in the development of rock music. After the mid-1960s, recording became, to use George Martin's words about the recording of *Sgt. Pepper*, "something which will stand the test of time as a valid art form: sculpture in music, if you like."[50]

1. George Martin, *All You Need Is Ears* (New York: St. Martin's, 1979), p. 78.

2. An important exception to this generalization has recently been published: Theodore Gracyk's *Rhythm and Noise: An Aesthetics of Rock* (Durham: Duke University Press, 1996). Other significant exceptions include Richard Shusterman, "Form and Funk: The Aesthetic Challenge of Popular Art," *British Journal of Aesthetics* 31:3 (July 1991): 203–13, and Bruce Baugh, "Prolegomena to Any Aesthetics of Rock Music," *The Journal of Aesthetics and Art Criticism* 51:1 (Winter 1993): 23–29.

3. Examination of academic writing on rock music reveals, unsurprisingly, that the two most popular subjects for attention are rock lyrics (as literature) and the social causes, functions, and implications of rock music. A distant third place goes to the occasional attempt to apply formal music analysis to rock songs.

4. It is beyond the scope of this essay to tackle the complex question of how to define "rock" music. I take rock to be a generic form of music that includes subgenres, such as rap, reggae, punk, (some) blues, heavy metal, and so forth. It grew out of, and in many ways includes rock and roll, which was born in the early 1950s. I agree with Gracyk and Moore that it ought not to be defined essentially as a musical style (in terms of form, harmonies, rhythms, instrumentation, and so forth). It has to be admitted, however, that there is also a common use of the term for a particular style that is only a subspecies of the generic category. Limiting the notion of "rock" music to this subgenre, however, would have the paradoxical effect of ruling out many (perhaps most) of the recordings regularly regarded as among the greatest in the history of rock music: for instance, most of the cuts on *Sgt. Pepper*, a third of the cuts on *Rubber Soul*, and so on. See Gracyk, *Rhythm and Noise*, and Allan F. Moore, *Rock; The Primary Text: Developing a Musicology of Rock* (Buckingham and Philadelphia: Open University Press, 1993).

5. This is by now a very large literature. See Jerrold Levinson, "What a Musical Work Is, Again," in his *Music, Art, and Metaphysics: Essays in Philosophical Aesthetics* (Ithaca: Cornell University Press, 1990); Peter Kivy, *The Fine Art of Repetition: Essays in the Philosophy of Music* (Cambridge: Cambridge University Press, 1993); Roman Ingarden, *The Work of Music and the Problem of Its Identity* (Berkeley and Los Angeles: University of California Press, 1986); and Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Oxford University Press, 1992).

6. This claim is argued with great vigor by Gracyk in *Rhythm and Noise*. Culture critics of rock music—for example, Allan Bloom, *The Closing of the American Mind* (New York: Simon and Schuster, 1987); Theodore Adorno, *Aesthetic Theory* (London: Routledge & Kegan Paul, 1983); and Mark Miller, *Boxed In: The Culture of TV* (Evanston: Northwestern University Press, 1989)—invariably focus on the "wrong" features of rock music. That is, they focus on dimensions (such as harmonic development), that are not important to rock, or else on features (such as rock's often sensuously overwhelming "noise") that *are* important for rock but that in rock are not the mistakes or failings they would be in classical music. For a rebuttal to such critics, see Shusterman, "Form and Funk."

7. Gracyk, *Rhythm and Noise*, p. 13; emphasis added.

8. "The Ontological Complexity of Rock Music," paper delivered at the American Society for Aesthetics convention, Saint Louis, Missouri, October 1995. Gracyk makes a related but clearer claim: "While the song appears on the fifth track on *Born to Run*, that track (the recording) is a distinct musical work [emphasis added] in its own right" (*Rhythm and Noise*, p. 17).

9. Donald C. Meyer, "The Real Cooking is Done in the Studio: Toward a Context for Rock Criticism," *Popular Music and Society* 19:1 (Spring 1995): 9; emphasis added. Concerning the question of who is the artist in rock, Charlie Gillett has argued "that the artist on a phonograph record can very well be the producer, not the performer." Charlie Gillett, "The Producer as Artist," in H. Wiley Hitchcock, ed., *The Phonograph and Our Musical Life: Proceedings of a Centennial Conference* (New York: Institute for Studies in American Music, 1977), p. 51.

10. Robert Ray, "Tracking," *South Atlantic Quarterly* 90:4 (Fall 1991): p. 781; emphasis added. Jonathan Tankel puts it an even different way. About at least some recordings he says, "The recording itself *is* . . . rock music"; "The Practice of Recording Music: Remixing as Recording," *Journal of Communication* 40:3 (Summer 1990): p. 41.

11. Although Nelson Goodman's nominalist account of the ontology of musical works in *The Languages of Art: An Approach to a Theory of Symbols* (Indianapolis: Hackett, 1976; originally published, Bobbs-Merrill, 1968) blocks him from thinking of the musical work as a type or universal, in other respects his account is a model of the standard one.

12. I realize that (a) a rock group develops and plays *something* prior to recording—though over the last twenty years that "something" less and less resembles a completely arranged song for many groups—and that (b) there may be rock "pieces" that are never or at least not yet recorded. To account for these entities requires a complex discussion of live performance that must be reserved for a larger project of which this essay is a part. Roughly, we may regard such entities on the margins as analogous to sketches (case a) or to song arrangements (case b). See below where it is acknowledged that rock music comprises multiple entities.

13. Gracyk says that in "rock, musical works with a status 'like that of a film' are perfectly common" (*Rhythm and Noise*, p. 17). Gillett, in "The Producer as Artist," argues that the producer is analogous to the director of a film.

14. Accordingly, I believe that Nelson Goodman's claim that music *in general* is an allographic art is an invalid generalization. To show this in any detail, however, goes beyond the bounds of this paper and needs to take into account some of Goodman's qualifications about "marginal" musics (such as electronic music) being nonallographic. In rock it is a familiar fact that there are accurate copies that are not the authentic works—namely, covers—that are both recorded and live; see section IV below, and see also Gracyk, *Rhythm and Noise*, chap. 1.

15. Indeed, these subtle differences are so important in rock recording that contemporary producers of rock records can choose from literally thousands of sampled drum sounds to get just the right drum sound on the record.

16. This problem was emphasized to me by Dale Jamieson.

17. See Nicholas Wolterstorff, *Works and Worlds of Art* (Oxford: Clarendon Press, 1980), and James Anderson, "Musical Kinds," *British Journal of Aesthetics* 25:1 (Winter 1985): 43–49.

18. Recordings can exist even though unreleased. This follows from such facts as that a scholar can study an unreleased recording or that artists can sue the recording company to have the recording released. But because many recordings are "constructive" (see below) it may not always be so clear whether unreleased material amounts to a recording. In part, this confusion results because "approval" or "authorization" is such a complex fact. It comes in many forms. For example, Coleman Hawkins said of his best take on Max Roach's "Driva' Man," during which he makes a prominent squeak, "No, don't splice. When it is all perfect, especially in a piece like this, there's something very wrong" (Max Roach, *Freedom Now Suite*, Columbia JC 36390). Another factor is the type of music involved. For instance, a putatively veridical recording such as the recently discovered but previously presumed lost Byron James recording of *Pictures at an Exhibition* clearly existed even if James did not get a chance to approve it. This is especially so because of his practice of recording in one long unedited take. I would contrast this with the Beatles' never released, nearly complete album *Get Back*, compiled and mixed by Glyn Johns in 1969. The Beatles album (marked: "Keep—do not scrap") may be regarded as never having been fully brought into existence as a complete work (or collection of works); see Mark Lewisohn, *The Beatles Recording Sessions* (New York: Harmony Books, 1988).

19. See J. Gunnar Erickson, Edward R. Hearn, and Mark E. Halloran, *Musician's Guide to Copyright* (San Francisco Bay Area Lawyers for the Arts, 1979; rev. ed., New York Scribner, 1983). Note there the attempt to make the distinction by using the expression "the actual sounds": "infringement takes place whenever all or any substantial portion of the *actual sounds* that make up a recording are reproduced . . . by any method. . . . Mere imitation of a recorded performance by means of a separate, independent sound recording does not constitute a copyright infringement" (p. 39; emphasis added).

20. See Jerrold Levinson, "Autographic and Allographic Art Revisited," in his *Music, Art, and Metaphysics*. The problem that the casual requirement is designed to deal with is to differentiate structurally identical but otherwise different musical works—in other words, indiscernible counterparts. See John Andrew Fisher, "Is There a Problem of Indiscernible Counterparts?" *Journal of Philosophy* 92:9 (September 1995): 467–84. In rock and roll almost indiscernible counterparts of recordings have been common but up until now knowledgeable listeners have been able to tell takes and later covers by the same artists from the original hit.

21. See Erickson, Hearn, and Halloran, *Musician's Guide to Copyright*, p. 39.

22. For example, the premiere of Varèse's *Poème Electronique* in New York in 1958, although a disappointment because it was a greatly flawed playback, was an instance of the work. The work, composed as three tape tracks, was originally played on three banks of specially designed and positioned speakers in Brussels at the World's Fair, whereas in New York it was played over a single set of speakers. See Peter Manning, *Electronic and Computer Music* (Oxford: Oxford University Press, 1985; 2d ed., 1993), p. 86.

23. With with exception of *HPSCHD* by John Cage and Lejaren Hiller (1970), which mandates for each copy of the physical record a different set of specific changes in volume, treble, and bass settings for the left and right channels to be made every five seconds over the course of the 21-minute work.

24. Anderson, "Musical Kinds," p. 47.

25. Of course, a sufficiently defective playback or physical recording will lead to an unrecognizable playback, and this will not be an instance of the norm-kind. This is not a problem. We no more have to decide ahead of time exactly what counts as a nonversion of the recording—that is, where along all the relevant sonic dimensions to draw sharp lines, than we have to decide how many wrong notes (or ignored expression markings) constitute a nonperformance of a classical musical work or how many missing anatomical features constitute a noninstance of an animal species.

26. What of a recording of a recording (e.g., a tape recording of a CD)? Does this also encode the work? If there is an analogy between recording and printmaking, and a copy of a print (e.g., a very good photograph of it) is not the work, then a copy of a physical recording should also not be the musical work, that is, the recording. But the parallel breaks down here. We allow a reproduction process to be iterated in the case of sound recordings, and on my account these will count as examples of the recording.

27. For example, twenty years ago Charles A. Schicke put it this way: "As one commentator on the record scene has astutely noted, 'The record is the song.' " *Revolution in Sound: A Biography of the Recording Industry* (Boston: Little, Brown, 1974), p. 159.

28. In the case of classical music recordings the assumptions of veridicality to an actual performance is something of an illusion. For one thing, rarely does a recording in fact register a single take; rather, it is a mixture of takes. For the exception that proves the rule, see the *New York Times* (11 December 1994) article on the presumed-lost recording by Byron Janus of *Pictures at an Exhibition* done in a single take, "A Fresh Relic of a 'Lost Generation.' " Still, a recording is meant to represent a possible performance.

29. Paul Berliner, in *Thinking in Jazz: The Infinite Art of Improvisation* (Chicago: University of Chicago Press, 1994), argues that recordings have had a tremendous influence on the development of jazz, for instance. Recordings have enabled jazz musicians to hear and learn influential performances, many of which were improvisations. Still, these recordings document a performance and they are typically listened "through"; that is, they are regarded as transparent records of what a live performance sounded like.

30. For this reason, there are many examples of musical works that exist solely as recordings. For example, many works of electronic music—those that involve no live performance—are essentially recordings: Charles Dodge's *Earth's Magnetic Field*; Pierre Henry's *Variations on a Door and a Sigh*; Luening and Ussachevsky's *Sonic Contours*; Edgar Varèse's *Poème Electronique*; and so on. There are also other genres of music in which musical works are created primarily in the form of recordings: various new-age/environmental records (e.g., ocean with synthesizer, Enya), and many pop recordings, especially those by such studio masters as Esquivel and Les Paul.

31. George Martin, *All You Need Is Ears*, p. 205.

32. With a new type of artwork comes a new art medium. The favored term for this medium is "phonography." See Evan Eisenberg, *The Recording Angel: Explorations in Phonography* (New York: McGraw-Hill, 1987).

33. All quotes from Gracyk, *Rhythm and Noise*, p. 15.

34. This was partly a *social construction*, caused by the mass-produced phonograph record. Given that in rock, each group performs its own distinctive songs (proper), does not often produce multiple recordings of the same song, and is relatively unavailable for live performance, the recording is bound to take on a life of its own even without the further impetus of causal constructivity. How many of us ever heard or could have heard Booker T and the MG's or the Meters live? They were studio creators and creations, even though they did perform live.

35. In the law, copyright infringement of songs requires only tonal similarity between the two musical works and "lack of originality," which means that the similarity is the result of derivation of the later from the earlier work.

36. Michael Hedges, *Oracle*, Windham Hill (1996).

37. Lewisohn, *The Beatles: Recording Sessions*, p. 72.

38. Gracyk, *Rhythm and Noise*, pp. 19–20.

39. Although this thesis is made initially plausible by considering such electronic creations as "A Day in the Life," its scope, as has already been indicated, goes beyond such music to include even recordings from the beginnings of rock and roll, such as those that originated in the studios of Chess and Sun Records; see Robert Palmer, "The Church of the Sonic Guitar," *South Atlantic Quarterly* 90:4 (Fall 1991): 649–73. That is why I have called attention to characteristics of recordings of other less electronically oriented musicians, such as The Band and the Rolling Stones.

40. I take it that there is convincing evidence that each performance of the same arrangement or classical music score will differ from every other, even performances by the same performers; see José Bowen's "Connecting Performance, Interpretation, and Meaning: When Is Beethoven's Fifth Heroic?" paper delivered at the American Musicological Society convention in Minneapolis, October 1994. That's why different interpretations (i.e., performances) of classical music are so interesting, because they differ in all sorts of important ways, but within norms for performing scores. While a given recorded performance is only definitive of one particular performance of a classical music work, in rock it is definitive of the piece itself.

41. No matter how interesting or significant such recordings are, they do not amount to a binding interpretation of the score that subsequent performers must copy. And for good reason, as the composer is free to decide to perform the work a different way subsequently.

42. Meyer, "The Real Cooking Is Done in the Studio," notes defects in Wilfrid Mellers's analysis of Beatles recordings resulting from inappropriate reliance on transcriptions: "I questioned why the harmonic analysis of some songs was given in a different key from that of the harmony on the record, but it became clear that Mellers was contemplating the sheet music version of the songs rather than the records. Scholars like Mellers, it seems, would rather address a secondary realization of the music—the transcription rather than the record—since it bears the comforting similarity to the score in classical music" (p. 3).

43. This is a simplification. There is a curious limbo for unreleased recordings such as the Beatles' album *Get Back*. Consider Prince's unreleased *Black Album*. It was recorded in 1987 but only released in 1994. Prince ordered all copies destroyed in 1987. So did it exist from 1987? A necessary condition, surely, is that the album be completed. However, this may not be determined decisively until it is released. Thus the Beatles' *Get Back* metamorphosed into *Let It Be*, and so forth; see Lewisohn, *The Beatles: Recording Sessions*.

44. There are no conventions to determine an answer here, as far as I can see. And wherer there are no conventions, an answer requiring conventions cannot be right.

45. Robert Christgau, "The Rolling Stones," in Jim Miller, ed., *The Rolling Stone Illustrated History of Rock & Roll* (New York: Random House, 1976), p. 188. This is not a defect of the recording as it would be of a recording of, say, *Exsultate Jubilate*.

46. This qualification is required because live performance has come to resemble a recording session in its use of electronic processes and prerecorded material to mimic studio effects. Thus sudden starts and stops might be possible, in a small room at least, through the use of electronic means on amplified sounds.

47. This has already been asserted for some famous producers, such as Phil Spector. For instance, Lewisohn claims: "Almost all of Spector's output carried the stamp of a dominating and forceful producer; they were perhaps more his records than the actual artist's" (*The Beatles: Recording Sessions*, p. 197).

48. Ibid., p. 70.

49. Martin writes: "Geof had his faders—which control the volume input from the studio—way down at the moment of impact. Then, as the sound died away, he gradually pushed the faders up, while we kept as quiet as church mice. In the end, these were so far up, and the microphones so live, that you could hear the air-conditioning" (*All You Need Is Ears*, p. 212).

50. Ibid., p. 214. This article grew out of two papers delivered at meetings of the American Society for Aesthetics. I read "The Ontological Complexity of Rock Music" in Saint Louis, Missouri, in October 1995, and I read "The Ontology of Recordings: A First Pass," in Asilomar, California, April 1996. I thank my commentators on those occasions, Patricia Herzog and Stephen Davies, for helpful discussion. I also thank Christopher Shields, Jason Potter, and Richard Cameron for reading various versions. Above all, I thank musicologist, rock performer, record producer, and ancient instrument performer, Mark Davenport, for giving me the benefit of his superior knowledge. Thanks are also due Tom Peard, who insightfully discussed the argument of this essay with me several times. That argument is much clearer because of his influence.