American Philosophical Quarterly
Volume 54, Number 2, April 2017

AUDIOPHILE AESTHETICS

Steven D. Hales

ABSTRACT

What little work has been done on high fidelity/audiophile aesthetics uniformly agrees that the aesthetic aim of high fidelity is to achieve maximum transparency—the degree to which the listening experience is qualitatively identical to hearing the live instruments. The present paper argues that due to modern recording techniques, transparency is often impossible and may not be the proper aesthetic goal even in cases of documentary recordings. Instead, audiophilia should be understood as a broadly pluralist artistic endeavor that aims at an idealized generation of a musical event. This positive conception serves to explain away certain debates among audiophiles themselves.

The Possibility of an Audiophile Aesthetic

One audio journalist recently wrote that "all that separates audiophiles from everybody else is we care about what our music sounds like" (Guttenberg 2015). And audiophiles are willing to spend considerable money to pursue this sound. A 2014 survey by the San Francisco Audiophile Society characterized a mid-level system at $10,000 for the amp and speakers, and a high-priced system at $50,000 for amp and speakers. Above that is cost-no-object.[1] In that category are things like the Goldmund Telos 5000 monoblock amplifiers ($375,000), Genesis Dragon speakers ($360,000 per pair), and the Audio Note M10 preamp ($140,000). What is it that audiophiles are aiming to achieve with their expensive hobby? What is (or are) the aesthetic aim(s) of audiophilia? There has been next to zero philosophical investigation into these issues.

One might suspect that audiophilia is merely a form of status-seeking, and that owning expensive gear is no different from possessing designer dresses or Swiss watches. There is no doubt that some audio equipment is elegant and stylish; turntables and preamps from the Danish firm Bang & Olufsen have been exhibited at the Victoria and Albert Museum in London and are part of the permanent collection of the Museum of Modern Art in New York City. However, for the most part, audio equipment is either unobtrusive (there is one dimly lit meter on the front of a Sunfire Cinema Grand amplifier, but otherwise it is a black box) or just plain bizarre (the Gradient Helsinki speaker looks like a toilet for extraterrestrials). Owning a Rolex may raise one's social status—Rolexes are well known, recognizably expensive, and handsome—but no one besides audio cognoscenti will be impressed to learn that one has an M&K Sound X-12 subwoofer stashed behind one's couch. If audiophiles are simply interested in enhancing their social standing, they are going about it very poorly.

Audiophiles also come under fire for being self-deluded and scientifically ignorant (e.g., Winer 2005). If there is truth in those

charges, then one might suspect that there is no genuine aesthetic merit to high-end audio. To be sure, there is a cultic mysticism at the fringes of audiophilia, where people believe that coloring CDs with a green marker or putting bricks on top of their amps will improve the sound. Others have been duped into replacing the volume control *knob* with a $485 custom beechwood model, or buying a Tice Clock.[2] It is also the case that some conflate frequency response with sampling rates or make other scientific errors. Finally, as in all human endeavors, listeners are subject to various psychological biases that impede judgment. With other things being equal, listeners tend to prefer louder playback, which means that unless the volume is carefully controlled, one is more likely to prefer a more efficient speaker to a less efficient speaker, even if the former has more measurable distortion. In addition, humans have short auditory memories, which presents challenges for A/B comparisons, and when listening fatigue sets in, fine discriminations become impossible.

Even if one grants all of the preceding criticisms, there might still be a genuine aesthetic experience at which audiophilia aims. Compare: when it comes to medicine, many people subscribe to all kinds of fantastical views that are flatly inconsistent with our scientific understanding of the world (cf. Raso 1995). Even serious medical researchers are still prone to expectancy and confirmation biases, and there is continued debate about how statistical analysis can help establish etiology. Yet none of these criticisms show that health is not the aim of medicine, that there are no benefits to medical research, that it is all a con job, or is wholly subjective. We fallible human beings suffer many epistemic vices, but that alone will not prove skepticism. We might still be able to know that there is no link between vaccines and autism, or that one amplifier is sonically superior to another.

Transparency

The very little philosophical work done on audiophilia uniformly agrees that the aesthetic aim of high fidelity is to achieve *transparency*. Unfortunately, that term has more than one meaning in aesthetics. One sense of transparency comes from Kendall Walton, who argues that photographs are like windows to the past, and that we see Abraham Lincoln through a Brady photo just as we see Jupiter through a telescope (Walton 1984). The sonic counterpart is that we hear performances through recordings. In the Waltonian sense, a cheap clock radio is a wholly transparent means of hearing The Cleveland Orchestra perform Beethoven's Ninth Symphony; transparency is all or nothing. Another sense of "transparency" does come in degrees, in the same way that a window might be more or less transparent depending on cleanliness, whether the glass is distorted, and other factors that affect its opacity. In this sense, sonic transparency is the degree to which the listening experience is qualitatively identical to hearing the live instruments. Failure to recognize that "transparent" is ambiguous has led to confusion (cf. Kania 2009, p. 27 and footnote 13). It is the second sense of "transparent" that is of interest here.

Joshua Glasgow, who offers the most in-depth assessment of the hi-fi aesthetic, conflates two further ideas in his description of the transparency thesis (Glasgow 2007). Sometimes he characterizes transparency as *playback* that sounds just like the original performance itself sounded.[3] Other times, he emphasizes the qualitative identity of the *recording* and the original sound.[4] It is worthwhile to draw a distinction between the two for this reason. The traditional recording of analog instruments, such as a tenor saxophone, can sound more or less like a live performance depending on the recording equipment. However, in the case of purely digital recordings, such as a digital

synthesizer directly connected to a digital mixing board, there never was any movement of air to be picked up by microphones that constituted the sound of the synth. The "sound" was in its origination nothing but a series of ones and zeros until converted to analog and played back over loudspeakers. So, in the synthesizer case, the recording is completely transparent because it is strictly identical to the original performance. Unlike the case of the saxophone, it is logically impossible for there to be a better recording of the synthesizer. Nevertheless, it is still an open question as to whether the *playback* of the recording is transparent. Thus there is an important difference between recording and playback. Audiophiles are primarily interested in the sound of the playback and only secondarily in the recording insofar as it affects the reproduction of sound. In my subsequent discussion of the transparency thesis, I will focus on the issue of playback.

Hamilton (2003), who is primarily interested in how the invention of recording has transformed the nature of music as an art (p. 357), asserts that transparency is a necessary and sufficient condition for fidelity (pp. 351, 353). Brown (2000) also subscribes to the transparency ideal, at least for what he calls "documentary" recordings. Mag Uidhir maintains that "there is no *necessary* aesthetic difference between a live performance and a recording of that performance—a recording of a live performance can *in principle* be aesthetically equivalent to the live performance recorded" (Mag Uidhir 2007, p. 298; emphasis in original). Rawson (2006, p. 202) writes that "the audiophile [desires that] his high-fidelity playback can, by transmitting an information-rich signal, most nearly ideally reproduce/recapture/recreate an originary event." Glasgow claims that transparency "is the central concept of hi-fi aesthetics" and is "the hi-fi ideal" (Glasgow 2007, p. 164). Even Rumsey (2008), who raises some concerns about the meaning of fidelity given varying listener partialities and environments, concurs that "there is an unwritten assumption that the aim of recorded music is to provide an experience of listening that is as close as possible to that of natural listening—perhaps to the 'concert hall' experience" (Rumsey 2008, p. 213).

There are two related theses regarding transparency:

1. It is always possible in principle for a reproduction to sound just like the original performance itself sounded.
2. Transparency is the only proper aesthetic aim of audiophilia.

The only debate has been over the first thesis, whether achieving transparency is possible. There has been no serious debate over the second, whether transparency is the proper aesthetic aim of audiophilia. I will show that both theses are false: transparency is neither always possible nor, in general, the right goal of audiophilia. In addition, I will provide an alternative positive account of audiophile aesthetics, and hope to shed some light on debates within the audiophile community.

When Transparency Is Impossible

An effective criticism of transparency as an audio possibility will have to do more than show that listeners play a crucial role in music appreciation, or demonstrate that they have variable preferences.[5] It is too tempting for a defender of transparency to appeal to a neutral, ideal listener. So what would conclusively undermine transparency? The central conceit of transparency is that there is a possible auditory isomorphism between the original performance and its reproduction. Such isomorphism is possible *only if there is something that the original performance sounded like*. If there is (1) no such thing as an original performance, or (2) nothing that it sounded like, then transparency would be unattainable. Let us consider these possibilities in turn.

No original performance. The transparency ideal is for the sound in playback to be qualitatively identical to the sound of the original performance. However, there is a vital and complicating difference between a live concert and recorded music: live concerts are synchronic, and recordings very often are not. That is, during a live performance, the musicians are all playing simultaneously, combining the sounds of their instruments in real time to produce an audible piece of music. Recordings, however, are very often diachronic—they are discontinuously recorded in bits and pieces and then combined in the studio into a sonic whole. These cases pose a threat to transparency because a recording can't be faithful to the original performance when there wasn't really one to start with.

Take, for example, Bill Evans's jazz piano albums *Conversations with Myself* (Evans 1963) and *Further Conversations with Myself* (Evans 1967). On these, Evans overdubbed multiple piano tracks for each song. He played each part, just not simultaneously. Indeed, it would have been impossible for him to do so. Or consider Natalie Cole's duet with her father Nat King Cole on "Unforgettable" (Cole and Cole 1991). Nat King Cole died in 1965 from lung cancer, but Natalie, through studio wizardry, recorded the duet in 1991.[6] Here, too, there is no specific performance that a recording could sound like; instead there is an artistic collage of performances. Going even further, Jim Reeves and Patsy Cline sang a duet together when both were already dead. Reeves and Cline had independently cut the song "I Fall to Pieces" in a similar key. Nashville producers Chet Atkins and Owen Bradley lifted Reeve's and Cline's isolated vocal performances off their original 3-track stereo master session tapes, resynchronized them, added new digital backing tracks, and turned it into a posthumous duet (Cline and Reeves 1982). Now, a tremendous amount of slicing and dicing goes on in the studio, especially as hip-hop, rap, dance, and electronica sample, remix, and mash up all kinds of original sources. To what original performance might a recording be true?

Transparency fans might at this point reach into a bag of metaphysical tricks. Performances are events, and events have temporal extension. This extension may be instantaneous in the limit, very brief (e.g., a lightning flash), or very long (e.g., the Cambrian Explosion). Furthermore, events can be mereologically composed of shorter events. Wars are events and battles are events, and wars are composed of battles, even temporally discontinuous ones. The Battle of Guadalcanal and the Battle of the Bulge helped compose World War II, although Guadalcanal was long over before the Battle of the Bulge began. When exactly two events compose a third is a contested issue in metaphysics. The principle of unrestricted mereological composition states that all combinations of things are things, so if one accepts that view, then *any* two events compose a third thing. Thus one might argue that *the duet performance of "I Fall to Pieces"* is a genuine event, just one with, as in the case of World War II, temporally divergent parts. If the Reeve/Cline graveyard duet is plausibly a metaphysically legitimate performance, albeit one with scattered temporal parts, then a defender of the transparency ideal could then point to that performance as the one an audiophile system should try to reproduce.

Appeal to unrestricted mereological composition (UMC) alone won't be sufficient to support transparency, though. Even if combinations of things are themselves legitimate things, that fact does not determine the type of thing the hybrid is. Under UMC, the Statue of Liberty and the Grand Canyon together form a third thing, but that third thing is neither statue nor canyon. Even two things of the same type seldom comprise a third thing of that type. The Statue of Liberty and Michelangelo's *David* are both statues, but they do not compose a third statue (although

under UMC, they compose a third object). The same is true of events—inauguration and graduation are both events, and given UMC, they jointly constitute some strange hybrid object, but that object is not itself an event.

Sometimes distinct musical performances compose a third musical performance, and sometimes they don't. In an ordinary sextet ensemble, players each contribute parts to the whole. Miles Davis's trumpet, John Coltrane's tenor sax, Cannonball Adderley's alto sax, Bill Evans's piano, Jimmy Cobb's drumming, and Paul Chambers's bass together make up *Kind of Blue* (Davis 1959). However, it is not in general true that every combination of musical performances is itself a performance. John Cage's *4'33"* (which demands silence from the musicians) and Yngwie Malmsteen's "Arpeggios from Hell" (which demands lightning-fingered heavy metal guitar riffs) do not and cannot compose a third chimerical musical performance.[7] Moreover, there are musical events that are not also musical performances. Cage's "Musicircus"—an anarchic musical Babel of unrelated pieces happening simulaneously under one roof—is plausibly a musical event, but is much less plausibly a musical performance.[8] Not every combination of events is an event, not every combination of musical performances is a performance, and not every musical event is a performance. A supporter of transparency who wishes to defend "graveyard duets" or other diachronically recorded music as an original performance that an audiophile stereo could faithfully replicate has to do a great deal more metaphysical lifting than a mere appeal to unrestricted mereological composition.

While I have focused on diachronic recordings as examples of impossible performances, they are hardly the only examples that might be developed.[9] A casual listener can easily underestimate the studio effects that make a piece unplayable live. For example, at the beginning of Yes's "Roundabout," pianist Rick Wakeman plays a fading minor chord that is then tape-reversed to gradually fade in until Steve Howe's guitar takes over (Yes 1972). The Beatles commonly used reverse tape effects (e.g., McCartney's backwards guitar solo on "Tomorrow Never Knows"; The Beatles 1966). Because such manipulation reverses the attack and decay sounds of the instruments, the studio sound can only be approximated in a live performance. Another sort of example is using the left and right stereo channels in unusual ways. In the Beatles's "A Day in the Life," Lennon's singing is artificially confined to the extreme right in the first two verses, then switched to the center, and then to the extreme left, and in the final verse, McCartney's vocals are on the extreme right (The Beatles 1967). In Pink Floyd's "Welcome to the Machine," the bass line jumps between the left and right speakers on each beat (Pink Floyd 1975). In addition, much contemporary pop music makes liberal use of auto-tuning. Sometimes this is used to correct off-pitch vocals, but it is also employed to create a distinctive futuristic or exotic sound. Well-known examples include music from Cher, Kanye West, Daft Punk, Rihanna, Black Eyed Peas, Madonna, Lady Gaga, and Faith Hill.[10] While this kind of studio prestidigitation is essential to the artistic crafting of the recorded sound,[11] a singer auto-tuned in post production is not at all what she sounds like live. Even such common illustrations of utilizing the recording process itself to produce sonic art put the lie to transparency. In these cases, a live performance cannot sound like the studio version, and a home listener enjoying "Welcome to the Machine," "Roundabout," or Cher's "Believe" imagines in vain that she is at a concert.

A classical music example is the close miking of the violinist in many recordings of violin concertos, especially from the 1950s and 1960s, which make the violin line, which often contains some of the most attractive

music, stand out in relief more than it does in the concert hall. On many recordings, we are happy it was done that way—when not overdone—and would certainly not want home reproduction to somehow reverse that miking and provide the balance the concert hall provides, where the soloist's line can easily be overwhelmed by an orchestra not kept in check, resulting in a listening experience without the impact it should have.[12]

Audiophiles are not necessarily excluded from appreciating music that is built by sound engineers. Not only do audiophiles care about the quality of their equipment, but also the caliber of the recording. A crackly 1928 recording of Blind Lemon Jefferson performing "Prison Cell Blues" (Jefferson 1928) has a low signal-to-noise ratio, poor frequency response, and limited dynamic range. It sounds as if Jefferson is 100 yards away playing in a rainstorm. His voice is inarticulate, and the guitar muddy and faint. One may have a nostalgic affinity for the original sound of antique Delta Blues, but there is a clear sense in which Jefferson's recording (not his *performance*, but the artifact of the recording itself) is vastly inferior to a modern, state-of-the-art recording of "Prison Cell Blues" by an audiophile label like Chesky Records.

One might think that the pursuit of high-quality recordings is captured by Andy Hamilton's analysis of perfectionist/imperfectionist ideals (Hamilton 2003). According to Hamilton, perfectionism in performance strives to attain the perfect, flawless rendition of a composition, whereas "imperfectionists find virtues in improvisation that transcend inevitable errors in form and execution; indeed, they claim, these virtues arise precisely because of the 'unfinished state' of such performances" (Hamilton 2003, p. 347). The studio engineer who embraces the perfectionist aesthetic wants the quintessential recording of a piece, with errors, glitches, and stray sounds removed by whatever studio trickery is available. Most studio work aims at this goal, with various distinct performances by an orchestra spliced together into a whole symphony. Indeed, a classical CD can contain up to 1,500 digital splices.[13] The imperfectionist values the authenticity of performances as is, and would prefer that none of Keith Jarrett's notorious vocalese be muted in postproduction, and would rather hear the creak of a loose floorboard if it were present in the original performance.

The hi-fi aesthetic is orthogonal to the perfectionist/imperfectionist debate; an audiophile might be either one. The audiophile desires the full emotional impact of the source material. Sometimes a warts-and-all recording provides that impact more effectively than an airbrushed one, and sometimes the reverse is true. Similarly, it is largely immaterial whether a recording is documentary, synthetic, or a pastiche of different performances. The ethereal chimes in the void that open Philip Glass's *Mishima* (Glass 1985) followed by crescendoing, heart-pounding violins and tympani until the entire orchestra explodes like the creation of the world—that gooseflesh experience cannot be achieved with a lossy compressed file over cheap earbuds playing a shoddily recorded and incompetently mastered source. Part of the power of *Mishima* comes from its impressive dynamic range, which is irreproducible on poor equipment with second-rate source material. Whether *Mishima* was recorded old-school in one take with microphones, or is partly digitally generated, or is a paste-up job from different performances does not matter from the perspective of audiophile reproduction. Audiophiles may be perfectionists or imperfectionists about recording, but that is an *additional* aesthetic judgment.

No original sound: Modern recordings are often a collage of distinct musical contributions recorded at different times, or they are heavily modified and altered in the studio. As we have seen, the consequent lack of an original performance poses a challenge for

the transparency thesis. What's worse is when there is not only no originary event, but no recorded sound at all. The transparency ideal is nonsensical in such instances, for example, cases of procedural sound—the spontaneously composed, computer-generated sound commonly used in video games. Andy Farnell, a computer scientist and sound designer, explains:

> Procedural audio . . . is highly dynamic and flexible; it defers many decisions until run time. . . . Perhaps the most interesting advantage, from an overall game development view, is the idea of automatically generating sounds. Because the growth of sound assets is combinatorial, the increasing size of virtual worlds means it's becoming hard to generate enough assets for a game. A procedural audio engine that derives from the physics engine and model attributes like material, shape, velocity, etc., can provide sounds automatically. This doesn't remove the sound designer, but it provides a "background," a basic set of default behaviours for all objects. The sound designer can then derive special cases where sound quality is important, picking key scenes or events to elaborate on. This means that no sound is accidentally missed because an asset was not bound to an event. . . . A recorded sound always plays precisely the same way, whereas procedural sound may be interactive with continuous realtime parameters being applied. (Farnell 2010, p. 321).

In the case of procedural audio, there are no musicians and no composer, just a computer building soundscapes out of equations. There cannot be a performance archetype when it never existed at all. Now, one might be tempted to argue that the computer's extemporaneous composition *is* the performance, so that there is a performance but no *recording*. The idea of transparent playback goes haywire on this understanding, though. No longer is the audiophile experience supposed to be an audio isomorphism between what the listener hears in the living room and the concert experience. What one hears in the living room just *is* the concert; there wasn't one before that very moment. But then the very notion of high fidelity loses meaning. Someone hearing procedural audio over speakers made out of scrap plywood and a Radio Shack driver from 1975 is hearing exactly what the concert authentically sounds like. There is no loss of fidelity precisely because there is nothing to be faithful to. Such a state of affairs obviously fails to capture the audiophile aesthetic.

Transparency demands that there is something that an original performance sounded like, and that it is possible to map the sounds in playback to that sonic Eden. But in the case of wholly digital sound, there is nothing that it originally sounded like. To quote Farnell again:

> Synthetic sounds are produced by electronic hardware or digital hardware simulations of oscillators and filters. Sound is created entirely from nothing using equations which express some functions of time and there need not be any other data. Synthesisers produce audio waveforms with dynamic shape, spectrum and amplitude characteristics. They may be generated for sounds corresponding to real instruments like brass or piano, or for completely imaginary ones. The power of synthetic sound is that it is unlimited in potential, just as long as you know how to figure out the equations needed for a certain sound. (Farnell 2007, section 2.4)

Equations inside a computer manipulating ones and zeros have no sound; considered as abstract functions, they do not even have physicality, and even when empirically realized in the operations of a motherboard, electrons passing though logic gates make awfully little noise. It is only upon playback that there is any sound produced at all. In such contexts, transparency is an incoherent ideal. There just isn't any sound to which high fidelity equipment might be faithful; there wasn't sound to begin with.

Perhaps a clearer example of playback with no original performance or sound is home theater. While there is certainly a "straight wire with gain" subset of audiophiles who

eschew signal processing as much as possible, build specialized rooms with sound baffles, and listen to chamber music from the optimal seat in the house, there are also audiophiles who build serious home theater systems. Dolby 5.1 surround sound is the basic setup, with left and right front speakers, a front center speaker, left and right rear speakers, and (this is the .1) a subwoofer. There is also 7.1 surround, which adds a pair of side speakers to the above, and now there is even 9.1 surround, along with various subversions of each format.[14]

One might suppose that the more complex encoding of the source material, coupled with ever greater numbers of speakers, will bring the listener closer to the original performance. However, many modern movies are partly or even wholly generated in the digital domain. As a result, there is no such thing as the original experience of listening to Godzilla stomp Tokyo to which a transparency aesthetic might aspire. Incoming helicopters thropping overhead shooting machine guns at Godzilla as a building crumbles under the blast of his radioactive breath—these are all sounds digitally added postproduction to computer-generated images of a monster. There is no such thing as an "original experience" to be sought, no matter how sophisticated the equipment. The home theater buff isn't trying to produce the most accurate, nondistorted emulation of being there; there is no "there" there. What he desires is the evocation of imaginary worlds.

One might naïvely think that the home theater enthusiast wants to recreate the movie theater experience and that a kind of transparency is still the goal: a home theater experience aims to be qualitatively identical to one at a public movie house. But that's mistaken. Public movie theaters contain chatty patrons, texting teenagers, and the ambient noise of munching popcorn. Home theater enthusiasts don't want *that* experience. Again, it is not transparency that the audiophile desires, but the best possible simulation of the film's sonic environment.

These points are not lost on audio professionals, sound engineers, and virtual reality game designers. They know full well that they are engaged in the construction of illusory, hyperreal worlds. Such designers aim to transport listeners/viewers into fully immersive factitious environments and provide them with a sense of real presence, or "being there" (cf. Nordahl and Nilsson 2014). There is no pretense of providing a transparent window to an original performance. Defenders of transparency seem stuck in a mid-twentieth-century affectation of music recording, where audiophiles try to pretend that they are at La Scala or the Royal Albert Hall. Such an image makes little sense in the twenty-first century of digitally generated ersatz realities.

When Transparency Is Not the Audiophile Ideal Anyway

When audio is artificially created or diachronically recorded, or involves certain kinds of studio manipulations, then transparent playback is impossible; there just isn't an original performance to be accessed. Arguably, most contemporary recordings fall into one of these categories. Defenders of transparency as the sole audiophile ideal are misled by the fact that hyperrealism is the dominant model for audio recording. Hyperrealism in painting and sculpture originally grew out of photorealism and is characterized by a convincing, high-resolution depiction of a simulated reality. In language that could easily describe procedural sound or home theater, Jean Baudrillard writes: "Simulation is no longer that of a territory, a referential being, or a substance. It is the generation by models of a real without origin or reality: a hyperreal" (Baudrillard 1994, p. 1).[15] Umberto Eco offers many popular examples from an American road trip: copies of mermaid

hoaxes that populate Ripley's Believe It or Not! museums, authentic duplicates that are somehow more genuine than one in a gift shop; old copies of a portrait of Napoleon, fakes now celebrated as historical and thus garbed in authenticity; art museums that are a bricolage of creative reconstruction and true antiquity but present themselves as the most realistic depiction of an imagined past (Eco 1986).

Here is a recent example of the hyperreal. As part of a charity stunt, Arnold Schwarzenegger was made up to look like the Terminator, and he went to Madame Tussaud's wax museum in Hollywood, temporarily replacing their wax figure of the Terminator. Museum-goers taking selfies were startled when the "wax" statue came to life and put his arms around them. On his walk from special effects makeup to the wax museum, Schwarzenegger encountered a street performer who was dressed as the Terminator and was posing with tourists for tips. They had a humorous debate, in character, about who was, in fact, the authentic Terminator. Of course, Schwarzenegger is no more the Terminator than the street performer, even if his portrayal is more iconic; both are men playacting at something that was never real to start with. Yet there is a clear sense in which Schwarzenegger's simulacrum of the Terminator is a more realistic, superior version of the imaginary movie character than a wax figure or a street performer. He is better at pretending to be a fake thing.[16]

Composite "performances," postproduction special effects, Auto-Tune, reverse tape effects, procedural sound, and all the rest provide a convincing simulacrum of reality, a realer-than-real (graveyard duets! flawless pitch!) sound. Someone who thought there truly was a historical performance where the musicians sounded like they do in the recording would, of course, want to recreate that experience with transparently perfect high fidelity. Mostly, though, there wasn't, and they didn't. As sound designer Vytis Puronas writes:

> By using an algorithmic reverberation processor and adjusting its virtual room size, reverb decay time, early reflections, virtual surfaces and other parameters it is possible to simulate a hyper-real space. A sense of authenticity can be further enhanced by emphasizing or removing certain frequencies, creating resonances, enriching or impoverishing a sound source, delaying, layering, and so on. These are common techniques. (Puronas 2014, p. 190)

An audiophile obsession with transparency conflates sonic hyperreality with reality, like thinking that Schwarzenegger really is the Terminator, or that there is a bona fide sound of a phase plasma rifle in the 40-watt range that one's 9.1 home theater could authentically reproduce.

Nevertheless, a supporter of the transparency thesis might regroup and concede that while transparency cannot be the audiophile ideal in many cases, it is not completely down for the count. Perhaps transparency is a legitimate goal in the case of documentary recordings, where there is clearly an original performance that sounded like something in the context of that performance—paradigmatically the recording of a live concert.[17] In other words, audiophiles should be value pluralists: sometimes transparency is the proper aim of audiophilia, and sometimes it is not. Of course, this move is already quite a concession—all extant discussions of audiophilia discount pluralism and defend transparency across the board. However, even if we grant that transparent playback is a possibility for documentary recordings, it is not always desirable.

On August 15, 1965, the Beatles performed at Shea Stadium before over 55,000 fans who "screamed, wept, thrashed, and contorted themselves in a tableau that . . . personified pure bedlam" (Spitz 2005, p. 577). A *New*

York Times reporter wrote that the concert-goers crossed from enthusiasm to hysteria to "the classic Greek meaning of the word pandemonium—the region of all demons." A policewoman at the scene groused: "They are psychos. Their mothers ought to see them now" (Schumach 1965). The fans completely drowned out the singing and all of the music except for a sporadic pulsing of electric guitars and thumping of drums. John Lennon later commented that they couldn't hear themselves sing and could barely figure out what key they were in, and Ringo Starr admitted that he struggled to keep track of the beat.

A transparent replication of that concert would sound like screaming teenagers against an unintelligible and barely audible backdrop of Beatles music. That was what the concert sounded like in person, from every seat, even for the performers themselves. An audiophile Beatles completist would no doubt want a recording of "Shea Stadium 1965," but he certainly would not want it to sound like it did live. If the music could have been pulled directly from a concert mixing board and produced in such a way that the fan noise was in the background—allowing the excitement of Beatlemania to come through while remaining recognizably a Beatles performance—that would be far preferable than a transparent documentary, to an audiophile.

For a different kind of example, consider the performance of "These Bones" by the a cappella gospel quartet Fairfield Four from their album *I Couldn't Hear Nobody Pray* (Fairfield Four 1997). In a live concert setting, the Fairfield Four would sound like four singers slightly separated from each other on the stage, singing in harmony, perhaps trading off lead vocals. On an audiophile stereo, the basso profondo lead singer on "These Bones" sounds like an enormous Moai head. The startling power of the opening line "O have you heard it brother—indeed, I told you so—these bones gonna rise again" is not the experience of a live concert, but it is the rumbling invocation of an earth elemental. The pursuit of strict documentary fidelity would reduce the singer to a mere mortal on a stage, a much less impressive listening experience.

Is transparency *never* possible, or *never* a legitimate audiophile ideal? No. However, by this point, it should be clear that transparency is often—perhaps even usually—impossible, and even when it is possible (as with documentary recordings), it may not be desirable. So how should we positively characterize audiophile aesthetics?

Broadly speaking, given a musical event, the aesthetic goal of audiophilia is the evocation of its Platonic ideal as understood by the listener. The desired experience is not necessarily transparency, but transcendence. The audiophile is the last link in an artistic chain that begins with the composers (who select the notes, key, tempo, and instrumentation), then the instrument makers (who pick the wood and varnish for the violins or the circuitry and programming for the synthesizers), and then the musicians (who provide the interpretation, phrasing, and improvisation). No one doubts that recording engineers are also complicit in producing audible art; in Gracyk's words, they are virtuosos of production (Gracyk 1997). On their palette is the mixing board, digital splicing, dynamic compression, Auto-Tune, ProTools, MOTU Digital Performer, Dolby ProLogic. But audiophiles are also auteurs, if to a lesser degree; their task is less the reproduction of sound than it is the production of sound. They craft what the final sound will be according to their own tastes (and budget). How speakers are placed, the way in which the room acoustics are addressed, what gear best generates the sound that the listener seeks given the source material—these are the decisions that the audiophile must make. Moreover, they are *artistic* choices.

Understanding audiophile aesthetics in this way helps to shed some light on debates and choices within the audiophile community.

Which is a better speaker system: full range electrostatics by Martin Logan or a pair of comparably priced horn-loaded speakers from Klipsch? There is no absolute answer to this question. It is largely dependent on the music and listening that one does. Martin Logans are very inefficient, highly directional, and have relatively weak low bass response. On the other hand, they are incredibly precise, accurate, and seem to disappear behind the sound. What Klipsch speakers lack in finesse they make up for with ringing clarity, tremendous efficiency, and stentorian bass. Someone planning to sit and listen to Arvo Pärt's subtle, spare piece "Sarah Was Ninety Years Old" (Pärt 1991) will find the Martin Logans to be mesmerizing. But the Klipsches are a better choice for someone intending to host a party and play Kanye West's thumping "Wack Niggaz" (West 2005). Which are the superior speakers depends on one's own musical choices.

A useful analogy is to car enthusiasts. Which is the better car? A Corvette or a Mercedes? A 1963 Jaguar XKE or a brand-new Jaguar XJ? A Smart car or a Ford F-150? There is no universal answer to these questions: an answer will depend on the kind of experience that the car owner/driver wants to have. Sports car lovers want to feel the bumps in the road, with tight turns, rapid response, and plenty of power. Luxury sedan drivers want power, but also comfort, amenities, and a more gliding feel on the road. Classic car collectors may be nostalgic for the cars of their youth, or they may merely appreciate certain artistic styles. City drivers will prefer a tiny, easy-to-park Smart car to a giant pickup truck. It's clear that no one car can be all things to all people, no matter what kinds of technological innovations engineers develop. That's not to say that those innovations don't matter—a rising technological tide raises all boats. All new cars are safer and more reliable than older ones, no matter whether one drives a Hyundai or a Porsche.

Similarly with audiophile equipment: New developments in material science and audio engineering offer across-the-board improvements, but that does not mean that all listeners will want the same gear. Audiophiles debate tube amps vs. solid state, and vinyl vs. digital, and they couch those debates in terms of "what sounds better." Yet that is misguidedly simplistic; it is like arguing that a Ford F-150 is better than a Smart car. Yes, for some things, it is (like hauling gravel), but not for all things (like parallel parking). The right question to ask is "given the source material and the listening environment, will this gear produce the aesthetic experience I consider ideal?"

The broadly pluralist position defended here does not lead to pure subjectivism. Audio can still sound objectively better or worse. The 1971 Plymouth Hemi Barracuda, Ferrari Daytona, and Ford Pinto were all designed for highway driving. No one thinks that the Pinto is the pick of that litter. The Pinto is objectively worse than the other two: it is more dangerous, flimsier, slower, and uglier. Nevertheless, a car buff might prefer the Barracuda to the Ferrari because of her own aesthetic preference for the styling of American muscle cars. Likewise, no attentive listener thinks that a 15 watt Akai receiver from 1982 sounds better than a brand-new Krell Duo 300 solid state amplifier or a pair of Bob Carver Crimson/Raven 350 tube monoblock amplifiers. While the Krell and the Carver cost about the same ($9,000), different audiophiles might still prefer one to the other depending upon the kind of listening experience they find most euphonious. Other artists do not agree about what the best tools of their trade are (oil vs. gouache, Nikon vs. Leica), and we do not expect them to. We should not expect agreement from audiophiles either. Asking which sounds better—the Krell amp or the Carver—is like asking which is better—Picasso's *Guernica* or Rubens's *The Consequences of War*. Even though they are both paintings and both

critical commentaries on war, the question is at best an artificial choice. Likewise, Monet's paintings of water lilies were never supposed to be photorealistic images of his gardens at Giverny. To criticize them on that basis would be to miss their artistic point completely. It is a mistake to expect convergence about what constitutes perfect sound, even given God's own technology, no less than it is misguided to expect agreement about what constitutes a uniquely perfect painting.

Fred Kaplan, a writer for magazines such as *Stereophile* and *Absolute Sound*, asserts that high-end audio aims to provide time travel—"feeling transported to the place where the players laid this music down" (Kaplan 2015). If Kaplan means that the goal is always for the playback to sound just like it did at the studio or the concert, then he is mistaken because, as we have seen, transparency is neither always possible nor is it always desirable. If he means that audiophiles want a kind of virtual reality where they feel transported to an idealized sonic paradise that may not have ever existed, then he is right. Audiophilia properly aims at the production and appreciation of sonic art, and it is on that basis that it deserves appraisal.

Bloomsburg University

NOTES

This paper is the direct result of conversations with Tim Johnson, and would have not been written without his insights. I am also grateful to Jeff Dean, Aaron Meskin, Jay Newhard, and Michael Simonetti for helpful comments on an earlier version.

1. http://sanfranciscoaudiophilesociety.com/results-of-2014-member-survey/.

2. On the knob, see http://www.bostonaudiosociety.org/past_pres_msg/2006/06–11_pres_msg.htm. The Tice Clock was a $20 Radio Shack alarm clock rebranded and marked up to $350. Just plugging it into an outlet in the same room as the stereo was supposed to enhance the stereo's sound. A nice discussion is at http://www.stereophile.com/artdudleylistening/listening_85/.

3. Glasgow (2007, p. 164): "[Transparency presents] for the home-bound listener a completely unvarnished sonic window onto the original performance."

4. Ibid.: "The hi-fi ideal, then is to get the perfectly transparent recording."

5. Points made, for example, by Rawson (2006).

6. Since Cole's recording, a cottage industry of graveyard duets has sprung up. See Chilton (2013).

7. Malmsteen (2009).

8. To get a sense of it, here's an excerpt from a review of a 2012 "Musicircus":

> [The musicians] decide what, when and where to play by throwing dice or tossing coins. . . . A woman in an usher's uniform will suddenly belt out a complex operatic aria. All around you are brass bands, choirs, avant-jazz ensembles, toy piano recitals. In one annexe sits Led Zeppelin's John Paul Jones, virtually unrecognised, playing a curious three-necked mandolin. There are weirder fringe attractions, too: chess grandmasters; a mycologist lecturing on fungi; two women in orange wigs playing clapping games. (Lewis 2012)

9. For a discussion of musical compositions beyond the abilities of human performers, see Collins (2002).

10. See http://top40.about.com/od/top10lists/tp/top10autotune.htm and http://www.vh1.com/music/tuner/2014-07-16/10-times-when-auto-tuning-totally-worked/.

11. Gracyk (1996) and Kania (2006) express similar ideas in their briefs for recordings, as opposed to either scored compositions or concrete performances, as being what the piece of music is in the domains of pop, rock, country, and so on.

12. Thanks to an anonymous referee for *American Philosophical Quarterly* for this point.

13. As noted by Hamilton (2003, p. 355).

14. A helpful guide to the latest formats is at http://www.digitaltrends.com/home-theater/ultimate-surround-sound-guide-different-formats-explained/.

15. Amusingly, Baudrillard's book opens with this epigraph: "The simulacrum is never what hides the truth—it is truth that hides the fact that there is none. The simulacrum is true.—*Ecclesiastes*." A transparency enthusiast would probably worry about whether the English translation accurately expresses the meaning of the original Hebrew. Of course, no such quotation exists in Ecclesiastes; the epigraph is a fabrication.

16. Here is a video of the whole affair: https://www.youtube.com/watch?v=IBCSrC0Tigo.

17. See Brown (2000) for a discussion of how best to understand documentary recordings.

REFERENCES

Baudrillard, Jean. 1994. *Simulacra and Simulation* (Ann Arbor: University of Michigan Press).
The Beatles. 1966. *Revolver*, Capitol Records, PCS 7009. Recording.
———. 1967. *Sgt. Pepper's Lonely Hearts Club Band*, Capitol Records, PCSO 7027. Recording.
Brown, Lee B. 2000. "Phonography, Rock Records, and the Ontology of Recorded Music," *Journal of Aesthetics and Art Criticism*, vol. 58, no. 4, pp. 361–372.
Chilton, Martin. 2013. "10 Musical Duets with the Dead," *Telegraph*, September 9.
Cline, Patsy, and Jim Reeves. 1982. *Remembering*, MCA Records, MCA-5319. Recording.
Cole, Natalie, and Nat King Cole. 1991. *Unforgettable: With Love*, Elektra, 9 61049-2. Recording.
Collins, Nick. 2002. "Relating Superhuman Virtuosity to Human Performance," Proceedings of MAXIS, Sheffield Hallam University, Sheffield, UK, April 12–14.
Davis, Miles. 1959. *Kind of Blue*, Columbia Records, CL 1355. Recording.
Eco, Umberto. 1986. *Travels in Hyperreality* (New York: Harcourt Brace Jovanovich).
Evans, Bill. 1963. *Conversations with Myself*, Verve Records, V6-8526. Recording.
———. 1967. *Further Conversations with Myself*, Verve Records, V6-8727. Recording.
Fairfield Four. 1997. *I Couldn't Hear Nobody Pray*, Warner Brothers, 9 46698-2. Recording.
Farnell, Andy. 2007. "An Introduction to Procedural Audio and Its Application in Computer Games." http://cs.au.dk/~dsound/DigitalAudio.dir/Papers/proceduralAudio.pdf.
———. 2010. *Designing Sound* (Cambridge, MA: MIT Press).
Glasgow, Joshua. 2007. "Hi-Fi Aesthetics," *Journal of Aesthetics and Art Criticism*, vol. 65, no. 2, pp. 163–174.
Glass, Philip. 1985. *Mishima*, Nonesuch, 9 79113-2. Recording.
Gracyk, Theodore. 1996. *Rhythm and Noise: An Aesthetics of Rock* (Durham, NC: Duke University Press).
———. 1997. "Listening to Music: Performances and Recordings," *Journal of Aesthetics and Art Criticism*, vol. 55, no. 2, pp. 139–150.
Guttenberg, Steve. 2015. "This Just In: Most Audiophiles Aren't Rich," *CNET*, February 18. http://www.cnet.com/news/this-just-in-most-audiophiles-arent-rich/.
Hamilton, Andy. 2003. "The Art of Recording and the Aesthetics of Perfection," *British Journal of Aesthetics*, vol. 43, no. 4, pp. 345–362.
Jefferson, Blind Lemon. 1928. *Prison Cell Blues*, Paramount, 12622-B. Recording.

Kania, Andrew. 2006. "Making Tracks: The Ontology of Rock Music," *Journal of Aesthetics and Art Criticism*, vol. 64, no. 4, pp. 401–414.
———. 2009. "Musical Recordings," *Philosophy Compass*, vol. 4, no. 1, pp. 22–38.
Kaplan, Fred. 2015. "I, Audiophile," *Slate*, February 20.
Lewis, John. 2012. "John Cage's Musicircus-Review," *Guardian*, March 4.
Mag Uidhir, Christy. 2007. "Recordings as Performances," *British Journal of Aesthetics*, vol. 47, no. 3, pp. 298–314.
Malmsteen, Yngwie J. 2009. *High Impact*, Rising Force Records. Recording.
Nordahl, Rolf, and Niels C. Nilsson. 2014. "The Sound of Being There: Presence and Interactive Audio in Immersive Virtual Reality," in *The Oxford Handbook of Interactive Audio*, ed. Karen Collins, Bill Kapralos, and Holly Tessler (Oxford, UK: Oxford University Press), pp. 213–233.
Pärt, Arvo. 1991. *Miserere*, ECM Records, ECM 1430. Recording.
Pink Floyd. 1975. *Wish You Were Here*, Capitol Records, CDP 8 29750 2. Recording.
Puronas, Vytis. 2014. "Sonic Hyperrealism: Illusions of a Non-Existent Aural Reality," *New Soundtrack*, vol. 4, no. 2, pp. 181–194.
Raso, Jack. 1995. "Mystical Medical Alternativism," *Skeptical Inquirer*, vol. 19, no. 5. http://www.csicop.org/si/show/mystical_medical_alternativism.
Rawson, Eric. 2006. "Perfect Listening: Audiophilia, Ambiguity, and the Reduction of the Arbitrary," *Journal of American Culture*, vol. 29, no. 2, pp. 202–212.
Rumsey, Francis. 2008. "Faithful to His Master's Voice? Questions of Fidelity and Infidelity in Music Recording," in *Recorded Music: Philosophical and Critical Reflections*, ed. Mine Doğantan-Dack (London: Middlesex University Press), pp. 213–231.
Schumach, Murray. 1965. "Shrieks of 55,000 Accompany Beatles," *New York Times*, August 16, pp. 29, 41.
Spitz, Bob. 2005. *The Beatles: The Biography* (New York: Little, Brown).
Walton, Kendall. 1984. "Transparent Pictures: On the Nature of Photographic Realism," *Noûs*, vol. 18, no. 1, pp. 67–72.
West, Kanye. 2005. *Freshmen Adjustment*, Chi Town Gettin' Down, CTGD 8470. Recording.
Winer, Ethan. 2005. "Audiophoolery: Pseudoscience in Consumer Audio," *Skeptic*, vol. 11, no. 3. http://www.skeptic.com/eskeptic/10-01-06/.
Yes. 1972. *Fragile*, Atlantic, SD 7211. Recording.