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Music-Making

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# "Tails Out": Social Phenomenology and the Ethnographic Representation of Technology in Music-Making

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## **Encountering recording**

There is a phenomenon known as print-through, characteristic of magnetic (analog) audio tape, whereby any stored signal is transferred through adjacent layers when the tape is wound on a reel. According to sound engineer John Woram,

Since magnetic tape is stored on reels, each segment is wound between two other segments. The tape's magnetic field may be sufficient to partially magnetize these segments, resulting in print-through: an audible pre-and post-echo of the signal on the two tape layers that come in contact with it. On many recordings, the program itself will mask the print-through, especially the post-echoes. However, print-through may be noticeable at the beginning and end of a recording, and during sudden changes in dynamic level, where a quiet passage is not loud enough to mask the echo of a loud passage immediately before or after it.

Since print-through is usually greatest on the outer tape layer it is advisable to store tapes tails out; that is, without rewinding after playing. This way, the worst print-through comes as a post-echo and stands the greatest possibility of being masked by the program itself. (1982:267)

Audible print-through has both epistemological and phenomenological ramifications for music. It places in question the autonomous status that formalist theories (such as those of Immanuel Kant, Eduard Hanslick, and Nelson Goodman), through their obsession with musical structure, have granted the musical text, performances of the text, and reproductions of performances of the text. Simultaneously, print-through elasticizes the boundaries drawn around standard conceptions of encounters with music; one's way of experiencing a given musical work needs not—in practice, likely does not—begin with the first note and end with the last.

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In my teens, I owned a few record albums with extreme print-through at the beginning. Perhaps the master tapes had accidentally been wound heads out; in any event, I would put the needle down and faintly, but very distinctly, hear a perfect, amplitudinally miniaturized replica of what I was about to hear, an auditory analog of seeing the sun through thin, high cirrus clouds before they are blown off and full sunlight ensues. That tiny audio shadow had the power to generate a visceral inner tension; I would hold my breath, waiting for the release that came with the "real" beginning of the song. Even at the time, print-through struck me as a type of effective narrative practice that foreshadowed events in small ways prior to their further revelation or manipulation in the music. And because of the very fact of foreshadowing—the building of anticipation, tension and desire attendant to the partially-known object—the eventual impact of the events was that much more intense. An unknowing pubescent disciple of Roland Barthes, I reveled in the material plaisir du texte and the boundaries of time and sensation that can be blurred by intense encounters with music.

Like the phenomenologist, then, I suspected that the ultimate significance of music resides not solely in musical texts per se, but rather in social and individual processes of musical encounter. Yet the phenomenology of music has remained largely text-centric, at least to the extent that the particulars of textual structure are implicitly positioned as the agents driving the listener-text relationship (see, for example, Ingarden 1986).2 To balance this tendency to privilege the text, one must stress the importance of the temporal aspects of experiencing music. Processes of musical encounter are, after all, inscribed in the passage of time, and local epistemologies of time are therefore crucial to understanding how concrete encounters work, and for arriving at a socially informed phenomenology. This is especially true for music, with its duality of time: the temporal relations that are established internal to the musical work by rhythmic and harmonic structures, and the flow of that internal structure through the temporal epistemologies of the social world in which music is performed, listened to, remembered, or otherwise experienced.

In this article, print-through is offered as a metaphor for cumulative listening experiences engendered in the mediated social spaces of musical encounter, whether such encounters consist of listening, performing, or ethnographic research. My use of the print-through metaphor both draws upon and opens the space for a reconsideration of the work of Alfred Schutz who, as part of a larger effort to probe the phenomenology of experience and consciousness, authored two works concerned with music and its implications for a general philosophy of intersubjectivity (1971 [1951] and 1976; see also Wagner 1983).

Schutz attributes the lion's share of the production of intersubjective musical experience to the internal temporal flow of the musical work. His

assertion of the possibility of an experiential "togetherness" derived from music's inner time is provocative and insightful for face-to-face musical encounters, but becomes more problematic when applied to recorded musical events. To pursue the metaphor, by generating pre- and post-echoes, recorded print-through disrupts the continuity of the musical work's inner time as conceived by the composer or performer. Fragments of a musical sound appear both before and after the sound's "real" placement in the recorded work's inner time, in which case perceptual instantiation no longer corresponds precisely to the inner flow of musical time. As a result, the experience of "togetherness" takes on a different character than Schutz postulates.

Similarly, the ability of the metaphor of print-through to raise questions about ethnographic representation is an issue of time and the boundaries around experience, all the more so when the ethnographic project concerns music and the human experiences involved in its creation. Researching, writing and reading ethnographies are processes inscribed in the forward and backward flows of time, yet most ethnographies submerge the reader in a perpetual ethnographic present that creates a static temporal logic. Recent admissions that the ethnographic present is a potentially fictionalizing trope suggest the utility of writing strategies that—like print-through—disrupt its inner logic, creating reading experiences that construct the implicit "togetherness" of researcher, researched, and reader in new ways. The production of music in the recording studio, with technologies and work strategies that disrupt the linear flows of musical time, is a context particularly well suited to reconsidering the temporal aspects of musical experience, and strategies for their ethnographic representation.

Think more deeply for a moment about pre-echoes, as Woram describes print-through, hearing what you are about to hear, as I have suggested. A semiotician such as Barthes would likely characterize them as a Dionysian strip-tease (evoking associations among music, the body, dance, and sex), a miniaturized, eroticized, veiled glimpse of the musical text to come that generates affect as powerfully as the music itself. For recording engineer Woram, however, print-through is a technical problem to be solved by a particular manipulation (tails out storage) of the recording medium (analog tape) in order to protect the purity and integrity of the music itself. Preand post echoes that to Barthes and my teenage self are sensual become a peril to the tonmeister; sound engineers and the industry clients they serve generally abhor this particular form of titillation unless its incorporation can be justified on the grounds of intentional artistic activity. As a researcher, I see print-through as both a phenomenon and an event, a process deeply implicated in the structuring of experiences both musical and extra-musical. In the end, Barthes, my teenage self, the sound engineer, and the academic ethnomusicologist represent competing epistemologies of the recorded musical text in the particular temporal flows generated by the echoes of print-through, and for each such epistemology there exists a different phenomenon of encounter. Print-through thus suggests the need for new examinations of the nature and description of intersubjective musical experience.

## Encountering ethnographic research

The relevance of print-through for re-examining the social phenomenology of music became evident during research on the interpenetration of music, performance, discourse, and technology that I conducted by working as a sound engineer in a professional recording studio. In relation to many technical issues, including print-through, this production role often structurally embodies the discrepancy between Barthes' subjective, sensual plaisir du texte and Woram's objectivist, technical analyse du texte. Throughout my research, such tensions are deeply structured into a tripartite subject positioning: as an engineer and researcher in the studio, and as a music aficionado both in and out of the studio. To be a proficient engineer is to balance the technically effective with the musically affective; to be an insightful researcher is to understand how the social actors involved discursively define and negotiate that balance within local and global industry, aesthetic, and ideological systems; to be an engaged listener is less scripted, but surely involves appreciating the results of that balance, without it intruding to the point where the effective dislocates or overwhelms the affective.

The roles of engineer, listener, and researcher were, of course, not entirely distinct; nor were they mutually exclusive, nor autonomous from larger social positionings such as race, class, and gender. One never dons a single identity to the total exclusion of others. Rather, I envisioned myself working through a series of cohabiting discourses within the physical space of the studio, discourses which aligned with various degrees of fixity to multiple professional roles and social positionings. Much like the musical texts being built layer-by-layer, day-by-day, performance-by-performance on multitrack tape, the relative mix among these discourses and positions built up, unfolded, and changed throughout the temporal flow of given recording sessions.

When I was most actively wrapped up in engineering duties, my discursive positioning and daily practice—what I thought, heeded, said, and did—would generally mirror that of the other engineers. But even then, a vital component of engineering is the ability to listen from multiple subject positions. For example, one must listen with technical ears for acoustic phenomena such as phase cancellation, 60 Hz rf hum from crossed audio

and lighting circuits or ground loops, tape saturation, distortion, and so on. Yet the ultimate goal of such technical listening is to project oneself into the space of the eventual consumer, making judgments about what is or is not an aesthetically (and, often, commercially) viable sound. In this role, the engineer listens as a consumer, a music fan, a radio station program director, the owner of a high-end stereo system or a boombox, a drive-time commuter, a club owner, a talent scout, and so on. In other words, the engineer (along with producers, musicians, and everyone else in the studio) projects as many listening situations and experiences onto the musical text as possible, or, one might say, experiments with multiple phenomenologies of the musical work that correspond to projected subject positions.

Beyond the multiple listening positions embodied in the role of engineer, I sought out, as frequently as possible because my research was motivated by a set of intellectual questions about making highly mediated music, the additional listening position of academic researcher. When the session slowed down, the musicians took breaks and there were no technical problems to solve, or while driving home at night, I would stress this third kind of listening and thinking, the discursive space of the ethnographer. Like Bobby, the studio's chief engineer, moving the faders up and down on the console while working on his musical mix, I manipulated the balance of my subject positioning throughout the research process, constantly searching for the best possible mix of my own.

To characterize ethnographic research by means of taxonomizing, monolithic terminology that fixes the researcher's subject position (e.g., participant-observer, observer-participant, and so on [see Junker 1960; Henderson 1994]) is to ignore the fact that, much like the phenomenological characterization of musical experience, the ethnographic experience is built around encounter. Further, the ethnographic encounter is highly dynamic, unfolding in time as does the experience of performing or hearing a piece of music. Like multiple performances of a given musical work in which numerous elements remain the same across each performance (elements that make it recognizably the same work), numerous aspects of the ethnographic encounter remain constant from day to day, and help define it as recognizably the same experience. But if ethnography is reminiscent of music in this respect, it might best be likened to an improvisational genre like jazz. The melody of encounter is not necessarily the same from day to day; the groove of participation (Keil and Feld 1994) has an enormous range of possible variations, some good, some bad, some productive, others not.

Like jazz improvisation, the success of participant ethnography is a matter of interaction and communication, shifting patterns of strangeness

and familiarity, and even practice. This very play across sameness and difference is perhaps the most instructive aspect of ethnographic work, revealing much about what is being researched and about the research process itself. Adopting the wrong mix of subject positions described above often led me to the research equivalent of an improvisation with no groove, that is, a tension-filled, frustrating day in the field. But as with a good performer, the key is to learn from one's mistakes, to replay the tape of the gig and decipher which conditions are being violated and preventing the successful establishment of the groove.

My suggestion of a parallel between music and ethnography, then, is not simply by way of remarking that both similarly unfold and emerge through time. I am also suggesting that the process of learning to do effective participant research and ethnographic writing can be similar to the process of learning to make music in an ensemble.<sup>3</sup> Both require a certain technical familiarity at the outset (knowing basic research methods, being competent on an instrument or with one's voice), but are ultimately dependent upon subsequent learning of effective, relevant, and locally meaningful patterns of coded social interaction—performance skills. For the musician, such coded interaction might consist, for example, of knowing appropriate and inappropriate performance techniques for a given musical style, of acquiring "the ability to recognize, distinguish, and deploy the musical possibilities organized in styles or genres by various communities" (Walser 1993: xii; see also McClary 1991:27). For the ethnomusicologist or anthropologist, it may involve moving beyond the abstract level of "knowing how to do field research" into the concrete specificity of knowing, for instance, that acceptable behavior in one situation may be completely out of bounds in another, or in the presence of certain persons.<sup>4</sup> Learning those codes not only occurs during public interaction, but also in moments of private introspection, in reflective time away from that interaction. The musician practices with the group and alone; the ethnographer, after time with informants, reviews and rewrites field notes. In such moments, both engage in individual analytic interpretive processes that complement social, dialogic, ensemble-centered interpretation, to aid in developing communication and improvisational skills appropriate to the performance/research context.

# **Encountering writing**

It's very late at night, almost 1 a.m. I think, but I don't have a clock on my dash. The Interstate heading north from San Marcos is nearly deserted and I settle into a comfortable ten-miles-an-hour over the speed limit in the middle lane. As I'm driving home, I slip one of today's cas-

settes into the car's tape player, and head quickly for the spots I had mentally flagged during the session for an immediate re-listen. What triggered those two sour hours in the early evening when the tension was so palpable that I almost turned off my microphone? Who made that crack about drummers' IQs that had us all on the floor? What was Bobby saying about the Lexicon's left channel? Was that split-second dropout in the rhythm guitar track during the third verse of "Pretty Little Rain" really that noticeable? I speed backwards and forwards through the tape. I listen for a second, then impatiently jab the rewind button. Niederwald slips by, and I'll be home in thirty minutes, so I'd better find what I'm looking for soon. Wrong tape? I punch the eject button, pull out a different cassette, and continue hunting and pecking. The fast forward is in cue mode, so the day squeals by, forward and backward, a high-pitched burbling of music and voices. Birds under water, I think to myself. The material remains of my day, a flock of magnetized, subaquatic birds trapped on acetate, squawking as I punch the buttons on my cassette deck.

I find the first spot I'm after and listen through it. I hit rewind and play it again. And again. Now I'm in control of today's recording session. I define what was significant and what was not. I can make those significant events happen as many times as I want them to. Later, on my transcribing machine, I will even be able to speed them up and slow them down. But for now, I listen to them and think. Stop. Rewind. I play what happens for five minutes before and after each event to get a better sense of context. Here in the front seat of my car, I've taken control over my informants, making them repeat themselves over and over-what did you say? what was that? come again?—until I see patterns, or imagine I'm seeing them. Stop. Rewind. Play. At home, if I'm not too tired, I'll jot down some thoughts and questions. Things to ask Bobby tomorrow if we have time. Things to think about. Places on the tape to listen to a year from now when I start writing. I pull into the parking lot, eject the tape, and break the record-safety tabs to prevent accidental erasure. This was a good day. Remember to make a backup copy of Tape 7, side A.

As I'm heading up the Interstate, Bobby is still sitting behind the Otari mixing console. Usually, if we drive separately, Bobby and I lock the studio and head up the road together until he gets impatient and punches his accelerator, pulling ahead of me on his way up to Austin. But tonight, he begs off. There's that problem with the master tape, a sudden dropout in the rhythm guitar track in the third verse of "Pretty Little Rain." It's one of those things that passes by so fast that the first time you wonder if you're imagining it. But no, it's very real. An eighth note, just gone.

If you don't know it's missing, it's nearly seamless. But once you're aware of its absence, it looms like an enormous pothole you've seen too late to swerve away from, and you cringe, waiting to smash into it. Of course you hear the drop-out before the client does, so every time you're playing through the third verse, you're desperately looking for an excuse to stop the tape before you get there, and glancing nervously over your shoulder, dreading the word, "Hey!"

Bobby rewinds the tape to the critical spot, hits stop, then play. The guitar churns along, "ch ka ch ka ch ka ch ka." Then, "ch ka ch ka... ka ch ka." Stop. Rewind. Play. "ch ka ch ka.....ka ch ka." Stop. Rewind. Play. "ch ka ch ka..... ka ch ka." Each time, the space looms larger, until its silence becomes a black hole threatening to ch ka." Stop. Rewind. Play. "ch ka ch ka" here-it-is-big-enough-to-drive-atruck-through "ka ch ka." Bobby stops the tape, punches rewind, and lets the tape wind back to thirty seconds before the drop-out. Play. The song slides by, and Bobby lets it play on, getting a better sense of context. He programs this long minute into memory repeat, and plays the tape over and over again, listening for the patterns in the music, the attack and sustain, listening hard for clues on how to patch this hole, how to stretch a tarp over the Grand Canyon. Stop. Bobby seizes control of the song, and jots down ideas for how to work through the problem. Maybe be'll have time to discuss strategies with Mark tomorrow before the band arrives. A sample from the second verse might do the trick. Or maybe just bring the rhythm guitar down in the mix. Some delay on the track might also work. Rewind. Stop. Play. Fast forward, finally, until the end of the tape slap-slaps on the spinning take-up reel. Bobby puts the tape in its box, tails out, shuts off all the outboard tube gear, hits the lights and the alarm, and heads to his car.

Heading south on the Interstate, Jon slips a cassette of today's rough mixes into the stereo in his van. Tomorrow he plans on rerecording his guitar solo in "Pretty Little Rain." Today's solo was a complete bust, he thinks; the notes were there, but it sounded like he was playing along with a record, not jamming with the band. Before leaving, he asked Bobby to make two copies of the song: one with today's solo, one without. "Pretty little rain/can't wash me clean..." As the second chorus slips into the solo, Jon leans to the right, his head hanging over the stick shift, so he can hear the stereo image of the guitar. As the bend up to the F# skids harshly into a G, he makes a mental note to be more careful tomorrow. Less finger pressure on the string, stay away from the fret, less bite with the pick. But it's the groove that bothers him most. He just wasn't

in the pocket today. Rewind. Stop. Play. "Pretty little rain/can't wash me clean . . ." One more time through his solo. Selma slips by in the rear view mirror. Stop. Fast forward. Stop. Play. "wash me clean . . ." No solo now, just the bass and drums. Concentrate on the groove. Vessie's ahead of the beat, pushing Alex. Stop. Birds burbling under water. Play. "clean . . ." Listening. Leaning over the stick shift. Pushing Alex. Remember that for tomorrow. Stop. Jon flips the stereo off before the third verse starts and drives in silence toward downtown San Antonio.

Rewind. Stop. Play. With our tapes, Jon, Bobby, and I de-linearize our experiences in the creation of the musical artifact known as the recording, and reflect on issues of participation in quiet isolation. How can Jon make his solo better; how can Bobby make the recording better; how can I make my research better? We each use our audio tapes strategically to carve up and rearrange time as we work on our respective grooves. We are able to do so as the result of interpenetrating technologically, socially, and physiologically mediated processes which meet on the medium of analog tape.

# A phenomenology of encountering

Situated in this interplay of shared and individuated moments of recorded musical experience is, I would argue, a modified version of what Alfred Schutz refers to as "musical tuning-in," the living through of a "vivid present" by experiencing togetherness as a "We" (1977 [1951]). In attempting to unpack the social significance of music, Schutz adopts a phenomenological stance favoring the socially informed experience of live performances, and suggests that one should focus on performers' and listeners' interpretations of the "signs" of a historical musical culture out of which musical works arise: "Any work of art, once accomplished, exists as a meaningful entity independent of the personal life of its creator. The social relationship between composer and beholder as it is understood here is established exclusively by the fact that a beholder of a piece of music participates in and to a certain extent re-creates the experiences of the—let us suppose, anonymous—fellow-man who created this work not only as an expression of his musical thoughts but with communicative intent" (1977 [1951]:113).

It is worth noting that Schutz occupies a position in transition from author-centered textual criticism to the poststructuralism of Michel Foucault and Jacques Derrida that trumpets the death of the author. Schutz stresses the independence of the work from the author once that work has been launched into the social world in which it is apprehended, but this does not lead him to claim that authorial intent is irrelevant. Rather, textual meaning is truly dialogic: musical experience is created in the space be-

tween the form-in-time created by the composer (the "communicative intent") and the processes of participation and experience activated in the presence of the beholder. That the social relationship between composer and beholder is comprised of the participatory engagement involved in beholding the work should not be taken to mean that extra-musical social knowledge is irrelevant, however. Rather, Schutz is suggesting that social knowledge brought to such encounters constitutes merely a ground against which participation and communication via the musical encounter are figured.

I suggested above that most phenomenological accounts of music implicitly position the text as the agent driving each encounter. Schutz is no exception here, adopting the concept of *durée*—the notion of an inner time structured differently from outer or objective time—and applying it to the arrangement and flux of tones within a musical work (c.f. Qureshi 1994). The movement of the musical work through these tones in inner time draws the beholder into "an interplay of recollections, retentions, protensions, and anticipations which interrelate the successive elements" (Schutz ibid.).

Schutz argues that while musical inner time moves irreversibly forward in the flow of outer time, the composer can control this movement in ways which refer the listener backwards: "The consciousness of the beholder is led to refer what he actually hears to what he anticipates will follow and also to what he has just been hearing and what he has heard ever since this piece of music began. The hearer, therefore, listens to the ongoing flux of music, so to speak, not only in the direction from the first to last bar but simultaneously in a reverse direction back to the first one" (ibid.). Thus the inner time of the musical work, largely attributed to the textual manifestations of the composer's agency, draws the beholder into participation with the composer's stream of thought in a "polythetic" fashion, that is, as a step-by-step process.

Finally, Schutz posits that "this sharing of the other's flux of experiences in inner time, this living through a vivid present in common, constitutes . . . the mutual tuning-in relationship, the experience of the 'We,' which is at the foundation of all possible communication" (ibid.:115), and concludes "This social relationship is founded upon the partaking in common of different dimensions of time simultaneously lived through by the participants. On the one hand, there is the inner time in which the flux of the musical events unfolds, a dimension in which each performer re-creates in polythetic steps the musical thought of the (possibly anonymous) composer by which he is also connected with the listener. On the other hand, making music together is an event in outer time, presupposing also a face-to-face relationship, that is, a community of space, and it is this dimension which unifies the fluxes of inner time and warrants their synchronization into a

vivid present" (ibid.:118). Beholders may share the inner flux of tones in the common passage of outer time, but in his ultimate privileging of inner over outer time—in locating musical experience so firmly in the tonal flows of the musical work—Schutz retains, despite his desire to accommodate external social knowledge, a strongly textual bias in describing the nature of musical encounters.

Schutz's phenomenology remains a remarkable effort in describing the mechanisms by which music is capable of generating shared, intersubjective, affective experiences. However, his suggestions that outer time is necessary to unify the fluxes of inner time, that inner time unfolds polythetically, and that unification must occur within the context of face-to-face interaction are, I believe, problematized by the way that Bobby, Jon, and I use our audio recordings to fragment inner and outer time, and thereby eradicate the posited irreversibility of their flow.

Stop. Rewind. Play. In a radical reorganization of the progression of "Pretty Little Rain's" internal temporal flow through outer time, each of us wrestles control of "we-ness" away from composer and musical text by disrupting the polythetic flow of the musical work's inner time. Jon's concern in his van with the ensemble performance we-ness of his guitar solo, Bobby's concern in the studio with the service-oriented we-ness of a successful recording session, and my twin concerns in my car with how we-ness is constructed discursively and musically from the larger social processes involved in making and recording music and with how we-ness mediates my ethnographic and musical experiences, all suggest that Schutz's location of we-ness in the inner time of the musical work unnecessarily restricts our ability to discern the multiple ways in which musical experiences are actively manipulated by beholders to create multiple we-nesses.

At first glance, this would seem to contradict Schutz's belief in the possibility of shared musical experience. However, if we dislocate we-ness from the linear flow of music's inner time by disruptive use in outer time of the buttons on our tape machines, and in so doing wrestle polythetic agency away from composer, we are presented not with a complete absence of what Schutz argues constitutes we-ness (tuning in, co-performance, vivid presents/presence), but rather a malleable series of shared experiences built more equally from the internal *and* external flux of musical experience. Because of our ability to manipulate the flow of music, we can selectively and intentionally create multiple variations—partially shared improvisations—on we-ness, as opposed to the monolithic vision implicit in Schutz's description. The vivid present of Jon's guitar solo and the tuning-in to the process of making his record did not simply disappear when we disbanded for the night and listened to our respective tapes alone. Instead, each of us constructed what might be called an individuated or individual-

ly experienced we-ness that emerged from a set of previously shared, and now relived, musical and social experiences.<sup>6</sup>

The existence of a plurality of we-nesses that play among the spaces of multiple individuated and shared musical experiences suggests that weness is better described as a fluid movement between social coalescence and fragmentation, shared and individual modes of apprehension and tuning-in, and public and private beholdings of music. In contrast to Schutz's seemingly monolithic characterization, in which musical experience seems relatively undifferentiated among those present, the we-ness achieved in the recording studio often appears more tentative, experimental, and distanced: one perhaps characteristic of individual epistemologies brought into contact by audio technologies that make it easy to manipulate temporal boundaries of music, and are being used to create a shared experience from joint, though spatially and temporally fragmented, musical encounters.

Further, Schutz restricts his discussion of face-to-face musical encounters to the Western art music tradition in the concert hall setting: with its conventions of silent listening in a darkened space, with well marked distinctions between performers and audience, between musical production and musical consumption. In the recording studio, however, musical experience is shared simultaneously—if unevenly—as music, as motion, and as discourse about music and musical experience. Moments of individuation and sharedness emerge out of the interpenetration of talk, musical performance, and performative talk specifically about music, often punctuated by expressive, performed bodily motion. And especially in popular music sessions, the lines of speaking and singing get blurred and slurred as voices and instruments rip out riffs in dense layers of collaborative (or contesting and competing) ever-escalating, gyrating performances of musical, verbal, and popular cultural competence. Jamming and singing and punning and joking often flow seamlessly into one another and build thicklytextured expressive texts, layer-upon-layer, performance-upon-performance, like the musical tracks being laid on tape. Days later these heightened moments may be recalled and reanimated in talk. And often they produce specific inspirations that wind up on tape as part of the final recording. As such, they become portable and renewable experiences, rejuvenated in subsequent performances of the songs involved, or talked about long after the session is over.7 Unlike the live concerts discussed by Schutz, these studio performances are encoded onto a re-playable medium; social memory is magnetized and digitized. In the words of studio engineers, CDs, records, and tapes are "burned," "cut," "pressed," "etched," and "baked," all of which are processes that congeal the multiplicity of experiences leading up the commodity state. The de-linearized experience of music in the studio is thus partially re-linearized in its transformation into the cultural commodity that the consumer ultimately purchases as the final musical text—the recording.

It would be easy, at this point, to adopt a theoretical stance which argues that the shared experiences just described exhibit a characteristic postmodern fragmentation of signs and apprehension about positing fixed. unified referents of social experience: that these musicians and engineers have substituted the shared ownership of multiple copies of a nonexistent musical original—a simulacrum of a shared performative experience made possible by postindustrial technology—for that shared performative experience itself. And, in fact, the musical experiences which I was surrounded by during my studio research strongly exhibited such features. Nonetheless, the vast majority of musicians and engineers I have worked with strongly believe in and articulate ideas of shared musical experience virtually identical to those described by Schutz. That is, the emic discourse is firmly rooted in notions of tuning-in to shared experiences built out of musical expression, a seemingly romantic stance in light of the multiple layers of technological, social, and discursive mediation involved in building that tuning-in. Neither discursive stance should be accepted uncritically, though both are construed as equally real interpretations for their respective adherents.

Instead, I would suggest that it is more profitable to characterize the tension between the romanticized emic and the overly cynical postmodernist theoretical discourses as a simultaneous problem of epistemology and representational practice. Understanding why Schutz would frame we-ness as an undifferentiated experience is not a difficult task if one recalls his explicit indebtedness to G. H. Mead and other writers of a generation for whom it was relatively easy to imagine homogenized cultural wholes. Schutz's *Making Music Together* was originally published in 1951, when anthropologists were doing ethnological research that sought to explain and integrate all domains of experience under the master rubric of Culture, when unified, undifferentiated, non-stratified, raw, small-scale societies still appeared to exist in remote uncooked corners of the globe. One might argue that finding we-ness in musical experience was no more difficult in 1951 than seeing it in any other cultural domain studied by anthropologists, such as kinship, religion, or economic reciprocity systems.

### **Encountering representation**

The representational practices of anthropologists who painted such neatly sewn-up, totalized portraits of social experience—usually based on ideological claims to objectivity that have since been demonstrated to be no less socially contingent than those of any other culture—have come

under increasingly explicit scrutiny in the past twenty years, but especially since George Marcus and Michael Fischer's *Anthropology as Cultural Critique* and James Clifford and Marcus's *Writing Culture*, both published in 1986. These works strongly problematize the relationship between research and writing, reminding us that anthropology—and certainly ethnomusicology—are as much the latter as the former, are representational practices as well as a strategies for investigating Others' understandings of the social worlds they construct and inhabit.

One recent strategy for creating viable alternatives to totalizing narrative representations of cultural experience has been the adoption of more fragmented, experimental, exploratory, and tentative ways of writing about culture, methods which background attempts at making objectivist truth claims, stressing instead the central importance of multiple local cultural "reals." Kathleen Stewart's ethnographic account of "just talk" in West Virginia coal camps, for instance, adopts an avowedly "nervous" shifting between story and analysis which evokes not only a local cultural poetic, but also her congruent desire to "reopen stories, and spaces of cultural critique, that are . . . continuously being slammed shut with every new 'solution' to the problem of culture and theory" (1996:40, 6). In Stewart's definition, culture is a process, a continual working-through, enacted in multiple performances which, rather than creating fixed meanings and epistemologies, continuously problematize, pile up, densify, accumulate, and work on local ways of knowing. "Roaming" among texted genres (ibid.:210), the processes of narrative representation can take on a fluid, processual character not unlike that of a culture as seen through its multiple forms of mediation and performance. Instead of seeking to resolve the dialogics inherent in local epistemologies and ethnographic research, written representation can seek to highlight them, or, at the very least, to present their complexity and texture in new ways, and perhaps therein to convey their lived experience as a cultural poetic.

Similarly, though reacting against a different set of theoretical issues (recent suggestions that all representation of Others is a form of real or symbolic violence) and with a sense of teleology not present in Stewart's account, Mark Whitaker offers that ethnographic writing should adopt the form of a series of "tries,' acted experiments of gradually increasing complexity that move one ever closer to simply living a form of life" (1996:8).9 Derived from Ludwig Wittgenstein's solution to the paradox in which it becomes impossible to make meaningful statements about given epistemologies without either using—and thereby validating—them or creating new equally contingent ones, Whitaker suggests that the scholar's focus should be less on the finalized, neat epistemological constructions conveyed in published works, and more on the learning processes that accompany eth-

nographic research. Such tries, which substitute the uncertainty, mistakes, and tentativeness that characterize early phases of field research for the relatively more tidy explanations of cultural order that we often claim to have arrived at by the end of our research, I would offer, leave epistemological and representational doors cracked open, actively resisting totalizing narratives of cultural experience.

A recent collection of manuscripts that apply such critiques of field research and representation directly to ethnomusicology specifically highlights an experiential perspective that emerges in musical ethnographic research which should, it is argued throughout, be more openly encoded in ethnographic monographs (Barz and Cooley, eds. 1997). Most of the contributions explicitly address field research rather than writing practices, but Michelle Kisliuk foregrounds their interpenetration, suggesting that "there is no definable border between the field and the space of writing we write when we are doing research, and we research while we write. An awareness, therefore, that field experience and ethnography are inseparable must infuse both" (ibid.:41). Kisliuk's point is well taken, especially with regard to field notes and other forms of in situ writing. Yet the practicalities of academic authorship (often very real distances in time and space from the physical site of field research and the people we work with) generally insure that the majority of our published ethnographic material will be produced in contexts well separated from our research, when the borders between the field and the space of writing have once again grown all too defined.

In his contribution to the volume, Jeff Todd Titon argues that "knowledge is experiential and the intersubjective product of our social interactions," and that fieldwork experiences are, as a result, "intensely lived" (ibid.:95); phenomenological accountability demands, Titon suggests, that such experiences be included in representations of field research. Acknowledging the spatial and temporal distances inherent in writing an ethnographic monograph, however, he points to a very real problem that arises in seeking to encode experience through the use of documents (texts, photographs, and so on) created in the field during research: "When we are with our friends, these documents appear—at best, and when they do not get in the way-not so much as objectifications but as extensions of our relationships. But when we get back from the field, in the university, in the library, or study, alone, particularly if our friends are far away, these field artifacts take on a very different cast. They substitute for experience by evoking our memories of it. Like a photograph taken or a brochure brought back from a holiday abroad, they are documentary and evocative at the same time. They traffic in nostalgia" (ibid.). In other words, away from the field, the documents too easily turn into objectifications, and too easily become icons of the very objectivist tropes of social science that experiential phenomenology seeks to counteract. Titon suggests the need for representational strategies that, at the very least, resist such objectification, strategies such as narrative nonfiction writing, interactive and reflexive film, and weblike interactive multimedia (ibid.:98).

The recording studio is a particularly appropriate research site in which to work through such experiments in representation, because it is a music-making context that is virtually defined by a refusal of narrativizing (musicalizing) closure. In the recording studio, the continual work performed on constructing moments of tuning-in, the densely layered performances of musical, verbal and cultural play and competence enacted in a clearly circumscribed space of intense artistic collaboration, where music launches talk and talk launches music, and the fluidity of inner and outer time, coupled with the consequent movement between the individuated and distanced we-nesses that Jon, Bobby and I have enacted by manipulating our audio tapes, are all lived "tries" in Whitaker's, Stewart's, Kisliuk's, and Titon's deeper sense of refusing to totalize experience. Such "tries" are not mere artifacts of the postmodern fragmentation of experience, to be read as a cultural text of pastiche, leaving in their wake a shallow surface of free-floating social signifiers glued together only by a publicly displayed historical narrative of what their significance once was (see Baudrillard 1968 and Nöth 1990:444). Rather, they are strategic, intentional, deeply felt forms of performed cultural activity, and living embodiments of multiple local epistemologies enacted in the flow of internal and external time in and out of the recording studio.

The presence of such lived tries in the form of multiple musical "takes" in the studio suggests the appropriateness of a writing strategy that incorporates similar tentative, experimental tries, or roams among representational genres of writing; the learning process that Kisliuk encodes in her ethnographic writing parallels her experience as a researcher, while the notion of "tries" encodes both my learning experience and the actual work processes and human experiences involved in the making of technologically mediated music in a recording studio. "Roaming" and "tries" as forms of experimental writing acknowledge the researcher's presence in the experience and representation of local epistemologies and cultural forms, at least to the extent that the learning process in the field is acknowledged as a viable, indeed necessary, subject of discourse. My presence in this text, then, where it intrudes, is a type of print-through, mediating my own learning about, experiencing, and subsequent representations of the building of collective and individuated we-nesses in the flow of internal and external discursive and musical time.

In elasticizing the boundaries around the (musical) text, print-through calls attention to

In elasticizing the boundaries around the musical text, print-through calls attention to the temporal unfolding of music. Like Jon, Bobby, and me punching the fast forward and rewind buttons on our respective tape decks, print-through also challenges a simple, linear temporal model of musical ontology and experience. Albert Einstein and others have argued that space is curved; Schutz suggests the possibility of a curvature of musical experience in which tuning-in is built from a series of forward- and backwardlooking tonal moves operationalized in the space of face-to-face interaction; audio tape allows temporal transformations of both inner and outer time in which spatial, musical, and temporal experience can alternately be distanced or narrowed, individuated or collectivized, forwarded or backgrounded; ethnographic representational tries suggest that the echoes of tentative epistemologies arising during cultural research should be audible in the final mix of ethnographic writing; and magnetic print-through suggests the possibility of an electroacoustic, temporally equivalent curvature, which puts the beginning before the beginning, and the end after the end. after the end.

In his Outline of a Theory of Practice, Pierre Bourdieu suggests the need to reintroduce the concept of time into the study of practice: "The detemporalizing effect . . . that science produces when it forgets the transformation it imposes on practices inscribed in the current of time . . . is never more pernicious than when exerted on practices defined by the fact that their temporal structure, direction, and rhythm are constitutive of their meaning" (1977:9). His caution is equally true whether one studies chemical reactions or musical performances; it is equally true for the act of writing as for that of researching, both of which are acts firmly "inscribed in the current of time."

The pernicious effect that Bourdieu seems most concerned with is a misapprehension of the nature of the phenomenon under investigation. That is, he suggests that to adopt a research lens that detemporalizes a practice constituted by its very temporality is to establish an irrevocable barrier to arriving at a valid understanding of the conditions of its existence. As ethnomusicology has moved away from comparative, historical, and primarily textual analysis into a more direct investigation of music as a dynamic, emergent cultural process (see Titon 1997), the risk of representational distortions that accrue to misapprehending musical experience with atemporal models increases. In this sense, Bourdieu provides ethnomusicology with a return to the phenomenologists' emphasis on incorporating processes of interaction, a position more open to acknowledging temporality than is the epistemological reflection often characteristic of the hard

sciences and much social science which, whether quantitative or qualitative, position themselves as essentially objective in nature.

Bourdieu's insight thus forges a link between the social phenomenology of music and questions of ethnographic representations of musical experiences. If, as I have been asserting, ethnographic research and writing are both fundamentally caught up in flows of time, then it is not only the researcher's apprehension of the conditions of existence of an event that may be adversely affected by the detemporalization process; it is equally their eventual representation in written interpretation. To ignore or background time can thereby result in a cumulative effect in which representation magnifies the atemporality of epistemological reflection.

I do not wish to suggest that the complexities of incorporating the temporal flow of practices or events into research and writing strategies can be entirely resolved through an oversimplified strategy such as making one's interpretive text somehow mimetic of the temporality of that which is under investigation. Too many layers of practice and process intervene between event and representation (minimally those of researching, writing, and reading) for one to blithely assert even the possible accuracy of such a mimetic attempt. Further, I would argue that the very notion of mimesis is predicated upon a fundamental separation of practice from its later representation; that is, mimesis presupposes two distinct objects characterized by a common set of traits. A less absolutist position suggests the possibility of creating representational structures which are, at best, strategically evocative of the particular temporal flows involved in a given practice. Such structures undermine the fundamental distinction between practice and its representation by questioning the boundaries between event and text. If these representational structures involve the evocation and incorporation in the text of the temporal structures of the event or practice, then the boundaries between text and event have been rendered permeable. The event may be over, it may have happened two years ago in a different geographical location, but in the sense that it is present as an echo in this text, it is in fact not over. Its beginning was before the beginning of what I have written, and its end is now being replicated long after its end in outer time. That event, those practices, have printed-through onto this document you now hold in your hands.

# Encountering performance and production

Imagine for a moment that you are the first note of Jon's failed guitar solo on "Pretty Little Rain." You are being listened to simultaneously in my car, in Jon's van, and back in the studio with Bobby. Your existence at this moment is the result of a complex series of electronic, acoustic, and social transformations.

Your genesis is an idea in Jon's mind, an idea about your attack, articulation, intensity, duration. Electric currents in Jon's brain are transmitted to the cerebral cortex, then travel to the nerves and muscles in his hands and arms. Neural electrical energy is converted to muscular impulse, and your acoustic embodiment begins when the plastic pick in Jon's right hand strikes the metal string of his electric guitar, exciting a particular frequency which is a result of the thickness and tension of the string, as well as its length, controlled by the placement of the fingers of Jon's left hand on the guitar neck. Your timbre varies with the type of string (metal composition and gauge), the material of the pick (plastic, metal, fingernail) and its thickness, as well as the composition of the neck and body of the guitar (maple, ash, or ebony woods).

Struck in a meeting of mind, flesh, metal, wood, electricity and tissue motion, your organic existence is now transformed. Electronics take over where flesh and wood and metal leave off. The vibrating string lies above a magnetic pickup, and its movement through this magnet's force field generates an electric current. Jon's double-humbucker Fender Stratocaster thus turns your acoustic energy (the vibration of the string) into an electric current that carries you via a cable to his amplifier. Run through a series of tubes or transistors, resistors, capacitors, transformers, or circuit boards, you are modified by the amplifier's circuitry, before being routed to a loudspeaker embedded in a wood or fiberglass cabinet. Your electric current arrives at a large magnet, and this "voice coil" moves a nearby paper or thin metal diaphragm, exciting the surrounding air molecules and thereby converting you from electric signal back into a modified version of your original acoustic form.

In front of Jon's speaker cabinet, Bobby and I have placed two microphones, waiting to capture you. We have carefully selected them from among the numerous types of microphones (dynamic, ribbon, condenser, tube, FET), polar patterns (cardioid, bipolar, supercardioid, omnidirectional) and brand names (Telefunken, AKG, Beyer, Shure) available. We have talked with Jon about what he thinks you should sound like, we have listened to him creating all your siblings in earlier rehearsals, and we have formed our own opinions about your strengths and weaknesses. The microphones we eventually chose to represent you were positioned with excruciating patience in order to capture your most flattering attributes. Bobby in the control room listened through his monitors, while I was out in the reverberant hallway with headphones on over my earplugs. Jon flailed away on dry runs of his solo, and the sound pressure was strong enough to push uncomfortably on my chest as I crouched by the speaker, straining to hear Bobby's shout through the console's talkback microphone, "About 2 centimeters toward the edge of the cone!" The microphones we chose earlier just for you will convert your acoustic form originating from the loudspeak-

ers back into an electric current that will send you via cables through the wall of the hallway into the console in the control room, where we are now waiting for you, all ears.

Once you are in the console, we may channel you in any number of ways. Today, we have decided to send you immediately out of the console to the outboard effects rack. We divert you to the patch bay, and then you zip behind us, under the floor, into a solid-state parametric EQ where we enhance your good points and dampen your weaknesses. Listen to us talk candidly about you: we want you brighter, but with a rounder bottom. We joke about you, anthropomorphize you, sexualize you, humiliate you, praise you, caress you, make you a slave serving our aesthetic ends. Now, in addition to being flesh, metal, wood electricity, magnets and tissue motion, you are constituted discursively, socially.

When we're happy, you get sent back to the console's patch bay, and then out to the analog multitrack tape machine. Here, your electric current arrives at the recording head and causes you to excite yet another electromagnet. Tape with magnetic particles coated in an acetate backing runs at fifteen inches per second past this electromagnet, and as the particles pass this head, you magnetize them—force them into particular alignments that are magnetic representations analogous to your prior existence as the electronic current which has so transfixed them.

Approximately 0.07 of a second later, when the magnetized tape passes the playback head, the inverse process occurs; the magnetic particles generate a new electric current, you are sent to a set of amplifiers, then to the console, and are finally split into two paths. The first goes to the control room loudspeakers where Bobby listens to you, and the second is sent to Jon's headphones. In both cases, your electric current is passed once again to an electromagnet which excites a diaphragm which pushes air and thus converts you back into the acoustic energy that we now experience as the recorded sound of the first note of Jon's guitar solo on "Pretty Little Rain."

### **Encountering mediation**

The technical transformations and mediations that you were subjected to along the way are, of course, inscribed within a series of social mediations, many of which themselves revolve around issues of technology and the technological mediation of musical sounds and experiences. These social mediations pertain to musical and stylistic concerns that may go well beyond the specifics of this recording session; everything from the particular instruments and peripheral technologies used by each band member to the politics of composition, performance, and decision-making rights within the band and between the band (and its management and producer), socially mediate the sounds and the music.

But the social mediations of sound also reach far beyond the internal politics of Jon's band and its stylistic affiliations. For instance, Bobby and I know that in this session no one else possesses the technical knowledge that we do, which gives us certain rights to speak, judge, and act on particular realms of Jon's music—especially those involving the multiple layers of transduction from acoustic to electric to magnetic representations of musical sound. We can exert these rights because we have exclusive knowledge over signal flow, signal processing, and, perhaps most importantly, over the language of audio production. With this exclusive knowledge comes power, and a certain degree of aesthetic autonomy over the highly technical means of music production. In stark contrast to our position of relative strength is Vessie, Jon's drummer. The lone woman in the studio throughout the session, and the least active member of the band in arranging Jon's songs, she is rarely looked to for advice. In the highly male world of popular music, the studio and its sophisticated technologies are forcefully constructed as male domains; when women are present, it is usually as singers (background singers at that), and they are generally expected to take directions, not give them.

Thus the social relations internal to the band are themselves inscribed within a larger context of musical and nonmusical social relations. Despite Bobby's exclusive knowledge of recording technology in this session, his agency is constrained by the fact that studio engineers work in a service industry; they are present to assist a paying client. Thus Bobby may have leeway in a session like this to make technical decisions which will have serious effects on the sound of the client's music, but the client will always be the final arbiter of those decisions. (The client may be an individual, group of individuals, or a corporate entity. It may be a band leader like Jon, a producer, an Artist and Repertory representative, or a record label owner. Some will have a great deal of musical knowledge, and some very little. Some will be technically fluent, and others may see the music simply as an investment opportunity.) Just as Bobby's agency is ultimately constrained by this larger industry structure, Vessie's agency operates within a set of expectations about the role of women both in the music industry and more broadly in Western society. In the studio (and throughout the popular music industry), historical ideologies of women's technical incompetence are deeply entrenched. While a different woman in this band, or Vessie perhaps in a different band, might have had a somewhat more active decisionmaking position than was the case here, my larger point is to suggest that all musical performances, and all music production, are implicated in a social arena beyond the musical event per se. In the end, the way you sounded in "Pretty Little Rain," your internal flux of musical tones and corresponding polythetic flow that governs our living through of a vivid present by experiencing togetherness as a "We," resulted from more than just Jon's compositional idea, materialized on his guitar, and recorded on tape.

Music is framed by technological, social, and physiological mediations, but individual and collective experiences of music are not reducible to these mediations. Tonight—around 1 a.m. I think, but I don't have a clock on my dash—Jon experiences music as an issue of time, texture, timbre, groove, finger pressure, flesh on metal and wood, the recorded acoustic and physical materiality of his individual performance within the ensemble's larger groove. Tonight Bobby lives it as a technical problem, but one which must be addressed at that level in order to prevent it from overwhelming the aesthetic experience of the final recorded product—balancing the technically effective with the musically affective. And I listen to my tape, attending to the complex moves among musical and discursive events, cohesion and dissension, work and play. With our tapes, Jon, Bobby and I pass fluidly, seamlessly, between shared and individuated moments of musical experience, highlighting them differently as suits our needs and wishes. Tomorrow we go back to work together.

As I'm heading up the Interstate, Bobby is still sitting behind the Otari mixing console. Usually Bobby and I lock the studio and head up the road together until he gets impatient and punches his accelerator, pulling ahead of me on his way up to Austin. But tonight, he begs off. There's that problem with the master tape, a sudden drop-out in the rhythm guitar track in the third verse of "Pretty Little Rain." It's one of those things that passes by so fast the first time, you wonder if you're imagining it. But no, it's very real. An eighth note, just gone.

Bobby cues up the tape, and listens to the rhythm guitar track. "ch ka ch ka ch ka ch ka ch ka ch ka ... ka ch ka." Stop. Rewind. Play, listening, listening. He rewinds the tape to the second verse, turns up the monitors, centers his head in the nearfields, and stares absently at the control room glass, listening. Forward to the third verse, listening. Back to the second. Focusing on performance and the sound, listening for similarities and differences in attack, decay, intensity, timbre.

Suddenly he springs out of his chair, grabs two patch cables, and routes the rhythm guitar tracks into the Lexicon 3500, a digital effects processor/sampler in the outboard rack. He starts up the tape machine, swivels around to face the Lexicon, and spends a brief moment adjusting levels and punching buttons on the face of the small box. Still facing it, he gropes his right hand out and rewinds the tape machine, then starts the second verse. The guitar track churns on. "ch ka ch ka ch ka ch ka..."

He rapidly punches twice on the face of the Lexicon, snagging a perfect "ch" out of the stream, and sending it into the Lexicon's memory. Bobby quickly forwards the tape to the third verse, and as the machine shuttles ahead, he punches a button on the face of the Lexicon repeatedly. Each time, a perfect, "ch" comes out of the nearfields.

Turning quickly back to the patch bay, Bobby sends the output of the Lexicon to the input of the rhythm guitar tracks, and puts them in "record ready" mode. Now for the delicate part. Bobby starts the tape, and listens through the drop-out: "ch ka ch ka... ka ch ka." Now that he's about to execute the punch, the Grand Canyon has shrunk to the size of a small irrigation culvert, but no matter. Rewind. Play. Bobby holds his left middle finger on the "play" button and waits for the drop-out. At the exact moment it passes the recording head, he punches the orange "record rehearse" button—in, out. A half second. He listens back. A perfectly placed silence greets his ears. The tape machine is now programmed to record at the right spot.

Turning back to face the Lexicon, he again gropes with his right hand to hit play/record on the tape machine. At the precise moment that the tape machine activates "record," Bobby punches the "play" button on the Lexicon, and the sampled "ch" is dropped into the rhythm guitar track. Stop. Rewind. Play. Bobby turns up the monitors, and again faces the control room glass, listening. "ch ka ch kash... ka ch ka." Too quick with his finger; the attack of the punch cut off, the decay ending too soon. Bobby resets the tape machine and the Lexicon, and starts the process over. "ch ka ch ka punch ka ch ka." Stop. Rewind. Listen. This time, Bobby, the digital sampler, and the tape machine have performed Jon's rhythm guitar part perfectly.

Bobby slaps his hands together, congratulating himself. With the precision of a skilled surgeon performing a skin graft, Bobby has dropped the sampled "ch" from the second verse into the third, and no one except he and I will ever know the difference. In time, we'll probably both forget it ever happened, or at the very least be unable to say for sure which "ch" is live and which was sampled and transplanted. Bobby fastforwards the tape until it slap-slaps on the spinning take-up reel, slides it tails out into its box, turns off the tube gear, hits the lights and alarm, and heads down the fire escape to his car in the oppressively hot, silent, Texas summer night.

### Notes

1. Storing tape tails out is such common practice that digital tape—which bears no such magnetic properties—is often wound this way too, not out of necessity, but habit, especially by older engineers and producers who grew accustomed to the perils of print-through on analog masters.

- 2. Although he is generally considered a phenomenologist, Roman Ingarden's The Work of Music and the Problem of Its Identity (1986) is concerned primarily with eidetic questions about the ontological "essentials" of a musical work that affect the concretizations of that work by listeners (Reiser 1986 [1971]; see also Falk 1981 for a more complete analysis of Ingarden's phenomenological stance).
- 3. Michelle Kisliuk likens ethnography to performance in this respect (1997). I would offer that, especially in its early stages, it more closely resembles a musical rehearsal.
- 4. Structuralist anthropology, deeply influenced by Saussurean structural semiotics which saw language as composed of meaningful contrasts, tended to carve local epistemologies up along just such lines of difference. But in structuralist ethnographic writing, the processual aspects of learning systems of contrast are often backgrounded to description of the systems themselves (see Marcus and Fischer 1986, especially Chapters 1 and 2, for a critique).
- 5. Schutz's view is in sharp contrast to that of Pierre Bourdieu, who sees music as the ultimate marker of social distinction: "nothing more clearly affirms one's 'class', nothing more infallibly classifies, than tastes in music" (1984:18). The importance of movement through tonal and rhythmic time within the work of music is discussed further in Zuckerkandl 1973 [1956], Keil 1966, 1987, and 1995, Keil and Feld 1994: especially 151-80, Prögler 1995, and Alén 1995.
- 6. The ability to relive musical experiences points to a further shortcoming in Schutz's theory: how to account for the effects of cumulative listening experience. What the beholder "anticipates will follow" is not simply a question of tonal flux in the inner time of the musical work, but is also socially accrued from years of listening experience. For example, one's ability to anticipate the placement of a bridge or a key change in a given song owes in part to accumulated exposure to popular music conventions, not solely to musical events occurring in conjunction with the present encounter with that given work. That is, Schutz's textualism blinds him to the ways in which the experience attendant to a particular musical encounter is conditioned in part by previous similar (and different) listening experiences.
- 7. The distinction I am making between we-ness and sharedness is located in the realm of discourse. The "moments of heightened experience" are shared through talk as well as performance or recording practices. Sharedness is used to indicate moments more tightly bound to and experienced through discourse, while we-ness suggests moments, more closely bound to the music per se, that are emically considered to transcend discourse, leaving participants quite literally speechless.
- 8. Two points deserve further mention in this respect. First, the notion of "multiple local cultural reals" has a parallel at the level of individual experience in Schutz's own writing, especially in the notion of the "multiple realities" as chronicled in Wagner 1983:90-91, 225-26. Second, some recent anthropological literature on ethnographic writing is so skeptical of objectivist truth claims that the notion of "writing about culture" has been supplanted by that of actually "writing culture." The implication of the latter phrase is that the truth claims of the anthropologist are less a reproduction of cultural knowledge than the creation of new forms of culture itself.
- 9. The larger thrust of Whitaker's argument suggests less that writing can move one closer to a way of living the Other's life, but toward better representations of how that life is lived. Thus, Whitaker refuses, like Stewart, to claim that representations can lead readers to experience the Other in a transparent way.
- 10. "Record rehearse" is a feature that allows for a dry run of a tight punch. In essence, it cuts the playback signal from the track to be overdubbed without actually erasing the information on that track. With this feature, an engineer can check the timing and feasibility of a punch without erasing what already exists on tape during the space of the punch. Further, the beginning and end points of the punch are stored in the tape machine's memory, so they can be repeated automatically by the machine. This feature allows the engineer to free his hands from the tape machine during the punch if another operation needs to be performed simultaneously.

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