1 recording and noise

approaches to cracked media

Introduction

The technologies of music reproduction are designed to be the end point of the recording industry, but in the hands of practitioners of cracked media they become the basis for the generation of original sounds and performance. Given their basis in recording technologies, it would be logical to consider critiques of the recording industry as possible starting points for the further discussion of cracked media. Initially this discussion will consider the work of Theodor Adorno and Jacques Attali, whose negative critiques of the recording industry are frequently cited in contemporary discussions of these issues.

The discussion will raise questions such as: Do the practitioners of the crack and break react against the recording industry? Is it possible to extend the commodities of recording beyond capital? The practice of cracked media problematizes the negative critiques of recording proposed by Adorno and Attali, as the very act of recording becomes an originating creative act.

Next, the discussion turns to discourses of noise. Again, it seems sensible to look directly at theories of noise, which may then

be applied to the practices analyzed in this discussion. The sounds produced by the musicians and artists considered here are, after all, based in noise. These practices are filled with noise—quiet and loud; gentle and destructive; moderate and intense. If noise is at the core of the practices of broken and cracked media, then it is necessary to locate what noise means in terms of these practices and to consider whether existing theoretical approaches to noise can be utilized for this purpose.

Noise theory, however, is itself chaotic and filled with contradictions, and as such provides an unclear path. The practice of using cracked and broken mediating devices complicate some of the reductive views on noise and also offers a major theoretical critique of noise itself.

1 The Critique of Recording Technology

> Talking machines and phonograph records seem to have suffered the same historical fate as that which once befell photographs: the transition from artisanal to industrial production transforms not only the technology of distribution but also that which is distributed.
>
> —Theodor Adorno, "The Curves of the Needle"[1]

In the quote above, Adorno commences a discussion on the development of recording and playback technology, and more specifically the changes brought about by new materials that "wear out faster than old ones."[2] For Adorno, new methods of distribution (musical recordings) actually change what is being distributed (music itself). He understands new musical technologies to actually devalue the live experience of music, replacing it with inattentive private listening. In a similar way, Jacques Attali in *Noise: The Political Economy of Music* positions new recording technologies as an example of society's shift toward capitalism and by association mass production, turning music into a mere simulacrum in the process.[3] For Attali, studio simulations of live performance (the studio recording) have caused actual live performance to disappear into simulation. The only hope for music, then, lies in its future "Composition" phase. Here, Attali argues, it will be possible to have "a revived radicalism of constructivist noise or athematic 'informal music,' all accompanied by progressive social claims."[4]

For both Adorno and Attali the shift in music caused by the technologies of recording and playback is a negative one, one that devalues the live, "real" experience of music. Although these theorists are writing in very different periods, with different agendas,

their basic assumptions about the nature and effect of recording technologies are quite similar. Adorno and Attali view recording technology as a symptom of capitalism, transforming the ephemeral nature of music into something solid, something that can be bought and sold. This is understood as a negative effect of capitalism, alienating the producer and consumer and also turning recordings themselves into items of fetish.

Adorno and Attali are certainly not the only critics to discuss this alienating effect of recording technology. Evan Eisenberg, for example, in *The Recording Angel* discusses the "music industry" in a chapter tellingly entitled "Music Becomes a Thing." He explains:

> When I buy a record the musician is eclipsed by the disk. And I am eclipsed by my money . . . when a ten-dollar bill leaves my right hand and a bagged record enters my left, it is the climax. The shudder and ring of the register is the true music; later I will play the record, but that will be redundant. My money has already heard it.[5]

Eisenberg discusses the idea of fetishism in relation to recorded music, pointing out that the product of the musician's labor is

removed from the musician as they themselves become consumers of recordings, as opposed to delivering live concerts and performances, and as such the product of their labor is beyond their reach. This alienation of labor, in the Marxist sense, works both ways: the musicians may never see the consumer, and the consumer may never see the work that led to the recording. For Eisenberg, this leads to the situation where the insatiable consumer of recordings desires the purchase of the record more than the listening experience that happens after the exchange: "money wants to be spent, and if I fancy myself a music lover it seems natural to spend it on a record. I could spend it on a concert, I suppose—but a record is tangible, like money."[6]

Adorno and Attali and the Negative Effects of the Recording Industry

Recording has arguably had a democratizing effect on music. Put simply, the recording of music has provided access to different kinds of music, to many more people, than otherwise would have been the case. The strongest example of this is radio. For the relatively cheap price of a radio a whole family can access the concert hall as well as music from around the world. Because of the reproduction of music, all strata of society have access to all types of music, including

musics that had previously been out of reach of most owing to the expense of witnessing, for example, the opera, or the difficulty of experiencing musics from remote locations.

The most commonly cited example of the argument for reproduction having a democratizing effect on cultural forms comes from Walter Benjamin's "The Work of Art in the Age of Mechanical Reproduction." Benjamin shows why film (explicitly) and recording (in passing) have the effect of opening culture up to the masses and are the art of the masses. The argument can be found initially in this statement:

> technical reproduction can put the copy of the original into situations which would be out of reach for the original itself. Above all, it enables the original to meet the beholder halfway, be it in the form of a photograph or a phonograph record. The cathedral leaves its locale to be received in the studio of a lover of art; the choral production, performed in an auditorium or in the open air, resounds in the drawing room.[7]

The consequence of these spatial shifts is that elements of culture that were previously unattainable can be accessed by the masses.

The choral production, once available only to those who could afford a ticket, can now be heard in the drawing room, most probably initially through listening to the radio. It is the very reproduction of the artwork that "emancipates the work of art from its parasitical dependence on ritual."[8]

Adorno, however, does not perceive this as democracy or as a positive development. In his essay "The Radio Symphony: An Experiment in Theory," he makes his position on the negative effects of radio, and by association the phonograph, very clear:

> We are primarily concerned with pointing out the fact that serious music as communicated over the ether may indeed offer optimum conditions for retrogressive tendencies in listening, for the avalanche of fetishism which is overtaking music and burying it under the moraine of entertainment.[9]

Adorno, in "The Radio Symphony," compares the live performance of a symphony to that of a recording of the piece broadcast via radio transmission, arguing that: the intrinsic nature of the live performance is bound up in variation, an aspect that cannot be reproduced via the medium of recording; the "absolute dynamics" of the concert hall are not adequately reproduced via recording; the volume of the work in

the concert hall and the ability to "enter" the work is not reproduced in the privacy of the home; and the subtleties of the symphony are lost to reproduction. To Adorno's ears, the works are transformed into poor chamber music.[10] He concludes from these arguments that the radio in fact has no true democratizing effect; rather what is actually presented is not the work but a distorted shadow of the original.

Adorno's critique was strongly influenced by the state of recording and playback technologies at the time. Fidelity was poor and long-play records were yet to be released on the market, and as such the actual experience of listening to records, or the radio, could not compare to that of attending a concert. Nevertheless, Adorno's critique is still valid in the contemporary context where fidelity is much better, as his argument is about the democratizing effect of recording technology. Even perfectly transparent playback cannot reproduce qualities of live performance such as variation, chance, and environment; hence the masses are still getting a poor copy of the real thing.

Michael Chanan extends this argument in *Repeated Takes: A Short History of Recording and Its Effects on Music*, observing that music can now be heard anywhere a sound system is set up and that with this shift of reproduction comes the dispersal of community.

Instead of small like-minded or socially similar communities who were entertained as a group in their own localized vernacular, audiences can now listen to music of different cultures, countries and communities at the "touch of a button," and "the result is that musical experience has been radically altered."[11] Chanan reads this alteration of music through reproduction as leading to the alienation of the musician and the listener from music, as labor and consumption are alienated from the commodity.

Adorno's critique also directly addresses the phonograph in the two essays "The Curves of the Needle" (1927) and "The Form of the Phonograph Record" (1934). As quoted at the beginning of this section, Adorno perceives the phonograph as suffering the same fate as photography, whereby the art (here music) suffers through its transition to industry. In "The Form of the Phonograph Record" he dismisses any artistic potential of the phonographic disc as its very structure, its form, hinders artistic potential. It is clear from these words that he did not know of the then-contemporary experiments that used and misused the record and the phonograph to produce new phonograph-specific music. For him the record was "the first means of musical presentation that can be possessed as a thing. . . . records are possessed like photographs."[12] Music had become

a commodity, an object to be owned, collected, archived, and stored away. This is a major shift in the history of music, a shift that dramatically changes the form of music as it is molded to fit its new place in capitalist society. The record object is the mediating device between production and consumption. This mediation, however, does not simply flow in one direction. Instead the act of consumption changes the actual production and performance of music, as music is now created for the consumption of the record object. If, as Adorno argues, recordings are shadows of the real act of music, its performance, then the creation of music for the recording industry is the deliberate creation of a debased musical object. This is an inevitable negative effect of recording, and the impact on music grows as the recording industry becomes more significant within society.

Jacques Attali takes this argument to a further extreme, bringing both Guy Debord's "spectacle" and Jean Baudrillard's "simulacrum" into the critique of the production of recorded music. In *Noise: The Political Economy of Music*, Attali uses Marxist historical determinism to discuss the development of music. Music is, for Attali, a prophetic force, as it foreshadows developments in capitalism and history before other material effects are perceived. [13] He demonstrates how

this has occurred in various phases of history, the key phase for this argument being the "Repeating" phase. Through the recording process and the distribution of recordings,

> the relation between music and money starts to be flaunted . . . more than ever music becomes a monologue. It becomes a material object of exchange and profit, without having to go through the long and complex detour of the score and performance anymore. . . . Once again, music shows the way: undoubtedly the first system of sign production, it ceases to be a mirror, an enactment, a direct link, the memory of past sacrificial violence, becoming a solitary listening, the stock-piling of sociality.[14]

For Attali the development of a resource that can be stockpiled and music's new relation to consumption and capital lead directly to the situation where the process of commodity consumption reduces music to a simulacrum of its original. Thus:

> *the growth of exchange is accompanied by the almost total disappearance of the initial usage of the exchange.*

> Reproduction, in a certain sense, is the death of the original, the triumph of the copy, and the forgetting of the represented foundation: in mass production the mould has almost no importance or value in itself.[15]

What was originally represented in the recording—the performance—is lost in layers of simulation. As this loss occurs, we can argue, live performance completely vanishes; the simulacrum has no grounding, no actuality in reality. Instead the studio becomes a simulation itself of performance, and in turn the recording a simulation of that simulation.

Attali, similarly to Adorno, does not see reproduction as the emancipation of art; instead he sees it as a force utilized by capitalism, shifting performance from the public to the private sphere before turning the performance itself into a form driven by manufactured simulation. The technology itself, however, can be pulled to the front of the creative experience, as argued by Greg Hainge, who develops Attali's theories in a paper entitled "Come on Feel the Noise: Technology and Its Dysfunctions in the Music of Sensation." He describes his music collection, one that is filled with noise recordings. This collection includes: Merzbow's fifty-CD boxed

set *Merzbox*; Jazzkammer's electronic circuit noise; Reynol's *Blank Tapes*, which, as the title suggests, is a recording of blank tapes; Francisco Lopez's *Paris Hiss*, which is similarly recorded; and finally the "ambient" glitch of Oval and Pole. Hainge asks:

> What happens . . . when the primary content of the sound processed by a high-fidelity system is composed precisely of those sounds that the system is designed to eliminate? . . . What happens at the level of reception, however, is very different to the normal processes of musical receptivity, and this is due . . . to this "meta-noise," to the elevation of mechanic acoustic by-products to the level of primary content.[16]

Developing Attali's repetition phase of music, Hainge argues that repetition is only made possible through technology that allows for an infinite number of copies to be made, and these copies, though resembling the original, in fact lead to simulacra. These technologies are turned toward the development of the perfect copy of a music that no longer has an original. Noise musicians, however, highlight those elements of music production that the production process

attempts to silence, and as such they foreground the technological system itself. He argues, "In creating music from the sounds of the dysfunctions of that technology, they focus our attention on the fallibility of the systems that we have constructed and in which we believe, breaking their transcendent possibilities and ensuring the creation instead of a direct affective aesthetic."[17] These shifts occur within the technology and as such form a tactic by which musicians can utilize the technologies of recording toward an end that is not aimed at repetition and simulation, but one that foregrounds the technology itself. The use of noise within recording is a comment by the musicians as to the "medium's role as mediator within an era of repetition . . . we might say that Noise is the sound of technology's spasms as it attempts to escape itself."[18]

Cracked Media and Critiques of Recording Technology

The use of cracked media in the creation of sound and music problematizes Adorno and Attali's critiques of recording technology. It calls for a reevaluation of the potential for original and creative output from the end point of the recording industry, the point of playback. First, the flow of production and consumption is disturbed by the productive musical outcomes generated by cracking and

breaking media, and second, the fetishistic character of musical consumption is questioned by the abuse of the reified products of the music industry.

The practice of cracking and breaking playback media folds the flow of production and consumption back on itself. The imagined transparent and passive mediating devices of storage and playback are transformed into generative technologies by practitioners of the crack and break, breaking the linear flow of production and consumption.

The manipulators of playback technology are not simply consuming products, in this case prerecorded music. Instead they are actively using the end products to create original sound and compositions. In turn, the sound and performances created through this retooling of playback data are themselves recorded, often (in recent practice) to CD-R or MP3. CD-Rs and MP3s are readily traded; their value as a commodity is not monetary, but rather is found in the development of status for the artist, often only within a very small group of friends or like-minded artists. These techniques strip the products of recording of their alienating qualities, bringing the labor and the product of labor back together and clearly challenging the simple one-way production–consumption model.

With the breakdown of alienation comes the breakdown of the fetishization of recorded music. Musicians at the center of the use of recording technologies for productive creation use the crack and break to transform the recording. This is sometimes carried out through destruction of the media of music playback (the vinyl record or CD). Through the destructive act, artists directly question the value of the media itself and the way we have been taught to carefully handle it. This act contravenes any reverence held toward the fetishized object and thereby challenges Adorno's view of the fetishization of music and the value of consumption itself, as it does Attali's idea of the spectacle of music and its very consumption.

2 What? I Can't Hear You Over That NOISE!

Noise is filled with "complexity and unpredictability" and is a particularly desirable area for the experimental musician interested in new sounds and possibilities for performance. The sounds of noise are vast and varied; it is just as likely to produce deafening rupture, chaotic static, and screaming feedback as it is to generate extremely quiet sounds, subtle clicks and snaps, and vinyl crackle and pop. Although initially noise appears to be the perfect direction from

which to approach the practice of cracked media, it soon becomes clear that many theories of noise do not adequately address the subject. Perhaps the practice itself calls into question conventional understandings of noise.

Noise fills the audio output of cracked media: cracked lines, lost data, static and hiss, broken signals, chaotic production, earth hum, piercing tones, and digital glitch. All these sounds are made up of what we call noise, and many of the approaches taken toward the crack and break seem to fit into the numerous definitions of noise. Noise, however, eludes simple definition. Noise has been theorized in discrepant disciplines such as information theory, acoustics, musicology, and "everyday meanings,"[19] yet none seems adequate to fully account for noise in music.

There is also a need to distinguish between aural noise (the sound of noise) and theoretical readings of noise (conceptual or abstract noise). Noise theory of recent years has focused heavily on Japanese noise music, a genre of music that comprises extreme sonic practices. This focus causes numerous complications in the understandings of noise, including the very possibility of the seemingly self-contradictory genre of noise music. Noise theory looks to noise as a disruptive and excessive area of sound practice

and finds within it a joyful transgression. Following a discussion of theoretical readings of noise, this section will relate these ideas to the practices of cracked media. However, the practices of cracked media present more pitfalls for these theories; in the final reading the practice exists largely beyond this area of theory.

Noise Theory in Practice

Noise theory is full of excess, making bold, semipoetic statements about noise's ability to displace calm and prolong "disquietude by opening up the divide between crisis and restoration, certainty and uncertainty."[20] Noise is often heard as excessive and transgressive, as being loud and disruptive. The theory is also often caught up in this excess. David Cunningham in "Goodbye 20th Century: Noise, Modernism, Aesthetics" alerts us to this connection and its accompanying reaction:

> *noise* as a specific figure of *excess*—with its accompanying metaphorics of the "ear-splitting," the "over-powering," or even the "unlistenable"—has often seemed particularly liable to provoke a concomitant *rhetorical* excess on the part of its would-be theorists.[21]

Noise is widely considered to be situated within excess, as a transgressive act that exceeds managed data. Noise is "out of control," and as such its theorists are pulled into its chaos with ringing ears. The excessive and seemingly transgressive nature of music that utilizes noise as a key component of its content is exemplified in the ultraextreme subgenre of noise music, Japanese noise. Discussions of Merzbow (Akita Masami), the leading figure in the subgenre, are full of these trends.[22]

Japanese noise music is a subgenre of noise music and is the most excessive and extreme version of the genre to date. Centered in Osaka and Tokyo, it can be divided further into power electronics (musicians include Merzbow, Aube, Masonna, and KK NULL), and psychedelic and free noise (musicians include Haino Keiji, Hiroshige Jojo, and Incapacitants), with numerous permutations occurring in between. Power electronics has received the most attention from the academic community. The subgenre itself was most active from the early 1980s through to the mid-1990s, after which it dissipated, with only a few remaining exponents continuing to produce music in this style.

The music created by the two most frequently cited noise musicians, Merzbow and Masonna (Yamazaki Maso), is produced to

be heard at massive volume in a barrage of noise. The music utilizes analog feedback as a central device and produces sounds grouped around low-frequency throb and screeching high end. Merzbow and Masonna could not be more different in performance, however: in his contemporary practice, the quiet and introverted Merzbow sits in front of two laptops, staring blankly through his sunglasses at their screens. Masonna, on the other hand, makes a massive display of condensed energetic ruptures in a violent and chaotic performance, before either breaking something or hurting himself, bringing the brief performance to an end.

For Nick Smith, noise music is a genre that attempts to be dissonant with contemporary consumer culture.[23] This dissonance is sought via a number of tactics, including: exceedingly brief performances (Masonna performs sets as short as forty seconds); the release of large numbers of individual recordings (Merzbow's fifty-CD boxed set is the perfect example of this); and most obviously "unmistakable" music. By seemingly driving all commodity value out of the production of this music, Japanese noise artists go against the dominant capitalist trends in contemporary society. They also resist the analyses of Attali by subverting the connections between performance and recording, as well as the market for

stockpiled recorded product. Smith argues that the tactic does not work, however, as "Once noise is no longer inscrutable . . . it is assimilated into popular culture and becomes commercial novelty."[24] Smith posits that "Masonna's cultural reception thereby demonstrates the mechanism by which modernity absorbs artistic attempts to critique it, and noise is ultimately understood as a desperate but spectacular failure."[25] It is partially the result of its assimilation in the mid-1990s that Japanese noise music is no longer a developing form.

Given the extreme nature of Japanese noise music, it is clear that this is not the most useful area to look to in discussing cracked media. This is, for the most part, the result of the excess of Japanese noise and the perceived desire for transgression. Cracked media practices are often neither excessive nor transgressive. In terms of volume, for example, they can be quiet or even barely audible. The subtle manipulation or the pop of a scratched record do not compare with the extreme nature of Japanese noise. Practitioners of cracked media are, however, part of the historical trajectory for noise that began with Luigi Russolo, and as such the use of noise in experimental music is a possible approach to further elucidate these practices.

Historical Noise: Russolo to Cage

As illustrated above, Japanese noise music has been widely regarded as the most extreme articulation of noise in music. It can be slotted into a trajectory of noise in music that began with the futurist call for the use of modern technologies in arts practices. There are numerous pre–World War II composers who have written influentially about noise in music, often as a call for music to allow noise to flood in. Although this line of history has been discussed by many authors in recent years, it is nonetheless useful to present a brief outline of this history here, as it provides context for future work in the area of cracked media.

The most obvious starting point for noise in music is Luigi Russolo's manifesto *The Art of Noises* written in 1913.[26] In it Russolo, in an overtly futurist fashion, hails the modern noise of the industrialized urban environment, calling for these noises to enter music:

> For many years Beethoven and Wagner shook our nerves and hearts. Now we are satiated and we find far more enjoyment in the combination of the noises of trams, backfiring motors, carriages and bawling crowds than in rehearsing, for example, the "Eroica" or the "Pastoral."[27]

He concludes the letter by calling for futurist musicians to "enlarge and enrich the field of sounds."[28] This was to be done by substituting the limited sounds produced by the orchestra with the infinite sounds produced by noise. Russolo's idea of noise is initially heard in the machines of modern industrialization.

Russolo's manifesto and his book published in 1916 were highly influential on a number of composers of the time, including Claude Debussy, Igor Stravinsky, Darius Milhaud, Arthur Honegger, Edgard Varèse, and Henry Cowell.[29] He is also now recognized as a key precursor to much of the "noisy" experimental music produced in the second half of the twentieth century.

Historical noise, here defined as the set of sound practices initiated by Russolo, encroached on Western art music and culminated in the noisy, Cage-influenced Fluxus movement. We can certainly hear noise in the commotion of Dadaist performances, and we hear the raucous joy of noise in the music of composer Henry Cowell. Cowell writes of his enjoyment of percussion instruments and the punctuation they produce through cymbal crashes and bass-drum rolls, and he calls for the further employment of noise in music as heard in the compositions of Edgard Varèse.[30]

It is John Cage and his influential paper from 1937, "The Future of Music: Credo," that truly signifies a filling out of the sound

spectrum and of possible sounds available for use in music. He asserts:

> Where ever we are, what we hear is mostly noise. When we ignore it, it disturbs us. When we listen to it we find it fascinating. The sound of a truck at fifty miles per hour. Static between the stations. Rain. We want to capture and control these sounds, to use them not as sound effects but as musical instruments.[31]

In the paper Cage predicts a future music that will utilize all sound for the purpose of music. This future will use electronic means to create a music that will be much richer for its extended materials.

Cage's music is filled with noise, including the noise of cracked media. His formative influence on the use of cracked media is no more clear than in regard to the subsequent Fluxus movement. It was the Fluxus movement of the 1960s that took on and expanded Cage's exploded view of the field of music, and as a movement it was the first to truly crack and break media using the noisy process of sound creation.

Given the importance of noise in the developments of experimental music in the twentieth century, it is necessary

to integrate these historical approaches with a theoretical understanding of the nature of noise. It will be shown that noise signifies an abundant source of material in that it is full of possibilities (perhaps all possibilities) and aids in furthering the understanding of the potential of sound practices. Noise is complicated, however, and a number of possible understandings of this area may be further utilized in determining the intentions of producers who use cracked media in their sound work.

What Is Noise?

That noise is a difficult concept is an understatement. Conceptions, much like noise itself, are often filled with misconceptions and discrepancies. There are at least four distinct categories for defining noise: acoustic noise, noise in information theory, subjective noise, and material noise. Noise, however, is not at all easy to tame, as it traverses the boundaries between these four categories in chaotic and insensible ways, remaining somehow neither/nor.

What are the properties of noise as a purely physical phenomenon? What is the difference between noisy and non-noisy sound? Herman Helmholtz, in his seminal text *On the Sensations of Tone*, describes the difference between noises and musical tones: "The soughing, howling, and whistling of the wind, the splashing

of water, the rolling rumbling of carriages, are examples of the first kind, and the tones of all musical instruments of the second."[32] Put simply, irregular vibrations of the air constitute noise, whereas regular vibrations produce tones. Helmholtz continues, "The sensation of musical tone is due to a rapid periodic motion of the sonorous body; the sensation of a noise to non-periodic motion."[33] The complex irregular sound of noise overloads the listener's capability to understand sound, presenting a chaotic and unstable set of relationships engulfing the order and simplicity of pitched sound.

Noise, however, cannot simply be understood as solely an audible phenomenon. In information theory, noise is defined as an intrusion into the process of communication. Information theory was originally formulated in 1948 by Claude Shannon, a mathematician at Bell Labs, a division of the Bell Telephone company, in a paper entitled "A Mathematical Theory of Communication."[34] He developed the theory in an attempt to rid telephone communication of excessive noise. His theory uses mathematics to calculate how much information a given channel can carry and the ratio of signal to noise within that channel. The signal in the line is understood to be the message or what is being communicated and noise is anything extra to the intended message.

Thus in information theory noise is understood as anything extraneous to the message: this includes everything from pauses in dialogue (for example, “umms” and “errs”); to a smudged newspaper text; to even the interesting people at table nine who make your current conversation hard to follow.

Noise enters the channel of communication between the source and the receiver. In the case of music playback there are numerous points in the production chain at which noise can become present, for example a poor recording of a live event, or a scratch formed on a record’s surface.

Clare Taylor in her paper “Noise Is OK” makes a distinction between noise simply created through the limitations of the media and accidental noise that is introduced further down the line of communication.[35] She gives the example of the medium of the newspaper and its inherent noise that exists in the drama of headlines, photographs, journalistic writing styles, layout, and advertisements. This noise is taken by us as being inherently related to the medium itself and has become almost completely accepted. The noise here is of such a constant nature that we can easily navigate our way through or around it.

Our much played favorite vinyl record is a good example of Taylor’s distinction. Even though it has come to be filled with the

noise inherent in the media—its many ticks and pops and the haze of ingrained dust—we continue to listen to it. In fact we forgive vinyl media for this flaw and even hear these noises with a sense of nostalgia, as they are marks created from listening to the record and remind us of times in the past when we played the music.

Paul Hegarty begins his book *Noise/Music* by bluntly stating that "Noise is not an objective fact."[36] For Hegarty the perception of noise occurs in relation to a historical, geographical, and culturally located subject, one whose listening

> is brought back to hearing through processes of rejection (as noise), confusion (through noise as change), excess (including of volume), wrongness or inappropriateness, failure (of noise, to be noise, to not be noise, to be music, not be sound, not be). Noise is where all this listening goes when it has had enough.[37]

Subjective noise is the most common understanding of what noise is. Put simply, it is the sound of the complaint from a stereotypical mother screaming to her teenage son to "turn that noise off." To the parent, the aggravating noise is the sound of the music, while

it is his mother's voice that is noise to the teenager enjoying his music. Subjective noise is any sound that annoys, irritates, or hurts a particular listener. There are certain types of sound that more people will find to be noise, for example, high pitched sine tones, extremely loud sounds, brutal or aggressive music, and so on. Although this may be the simplest category of noise to understand—we all find certain types of sound or music to be noisy to us—it is also the hardest to set rules for.

By this definition music and noise are made distinct by the individual who separates the two by subjective and contextual means. If this is so, then noise can only exist in the ears of a subject who feels that the sound he or she is hearing is in fact noise. However, this becomes paradoxical when we consider the issue of noise music, a genre that is made up entirely of (acoustic) noise and yet is actually enjoyed by many. In addition, subjective noise does not account for the actualities of noise in terms of information theory, nor does it account for the acoustics of noise. Noise, in these cases, is not accounted for through the subjective experience the listener. That is, these noises are quite simply noise no matter what the subject feels about the sound he or she hears.

For Michel Serres, perhaps more than any other theorist of noise, noise forms the backdrop to all communication, the air we breathe and the sea from which all life emerges. His position takes in the areas charted by information theory, acoustic noise, and subjective noise, forming a type of materiality of noise:

> We breathe background noise, the taut and tenuous agitation at the bottom of the world, through all our pores and papillae, we collect within us the noise of organization, a hot flame and a dance of integers. . . . Background noise is the ground of our perception, absolutely uninterrupted, it is our perennial sustenance, the element of the software of all our logic. It is the residue and the cesspool of our messages. . . . Noise is the background of information, the material of that form.[38]

In *Genesis*, Serres writes about hearing, immersion, and background noise. It is the sea that is heard in *Genesis* as background noise. The sea is where for Serres we become most aware of background noise in our everyday lives. This unending noise of waves crashing on the shore is not a phenomenon as such but rather the opposite. As in

acoustic noise theory, the sea, when understood as containing all possibilities, is where all life emerged and it is where all life will return. When something, information or music perhaps, comes into being it leaves noise, separated from its white chaos. Whereas information theory understands that noise is an impediment to communication, it is also a given that there will always be noise on the line; the key is abating it as much as possible. As Serres explains, noise is all around us and we are immersed in it constantly; in fact without it there can be no communication. It is the ground from which all communication is drawn and it is a constant in that communication.

Noise is embedded in information, in the object and subject of language; as the backdrop of communication, it fills the silences and gaps, often corrupting and confusing. Noise is repeatedly pushed to the background in an attempt to make it invisible and unknown. Whereas the background noise created by the ocean is all consuming—it cannot be ignored—other noises can easily be covered by the content of communication. Noise is not always loud: chaos can exist below the surface, a quiet backdrop to important rules and tidily ordered text and sounds.

In *The Parasite*, Serres equates repetition with death and theorizes that if the world fell into repetition all would be known: the

extraordinary, the rare, and exceptional would be reduced to still, "flat" waters. But noise is never repetitious. In its pure form it cannot be known or expected; it is not logical.[39] Noise is filled with chaos and chance, filled with every possibility, and as a consequence it is impossible to divide and predict it.

Noise and Cracked Media

These four ways of understanding noise can be used to account for parts of the practice of broken and cracked media. Much of the sound produced through the utilization of playback technologies is, acoustically, noise. The rasp of a needle drawn across a piece of sandpaper is acoustic noise, as is the snap of a breaking vinyl disc. This quality on its own, however, does not account for the nature of numerous breaks or cracks that are then brought together to form a piece of music or a performance.

Many of the sounds are not adequately accounted for in the scheme of acoustic noise. For example, the loss of information that causes a CD player to glitch and skip is not acoustic noise. Rather, here is something much more akin to noise in terms of information theory. If the clean playback of a CD is the aim of playback and the optimum situation for communication, then the loss of data leading

to a skip can be considered “noise on the line.” A small loss of information is completely covered by the error correction data stored on the disc, but a larger loss of data leads to a digital glitch causing the music to jump, skip, and hang. If a pop on a vinyl disc is minor enough then we can listen through this small loss of data, but a larger scratch will remove the needle from the groove, causing a screeching noise as the needle slides across the surface of the disc.

However, in the case of, for example, the broken and reconstructed records of Milan Knížák, we are faced with an extreme loss of information. These cracked and broken records do not merely carry small imperfections, they are covered in cracks—and yet they continue to be played. The phonographic medium’s inherent noise blasts over any signal originally intended by its recording artist. To put it bluntly, the sound and music created by the producers of cracked media is too excessive to be heard as merely noise on the line, well in excess of any disturbance to communication and well in excess of inherent noise.

The crux of the issue is that performance practices and the noise produced folds in on itself in the process of recording and the release of the works themselves. For example, Knížák produces music by cutting and re-forming old records, and the noisy sound of these

records generates the sound for a performance. This performance is recorded and is itself released on a record. How do we discriminate between wanted noise and unwanted noise in a recording of music that involves noise as a key part of the composition?

If noise is both a distraction and an abstraction (that which is removed from communication),[40] then we have an obvious problem when thinking about noisy music and sound. The problem is of course that the noise, the interference, is a key part of the signal and the meaning of the work. The work is filled with noise, but this noise is not a distraction from the "real" meaning; it does not disturb or disrupt the flow of communication at all. If this is the case then there must be another layer of noise in the work: if all communication is affected by noise, what is the noise in this case? This argument quickly leads to a feedback loop: are we hearing noise or are we hearing the content of communication, are we hearing the noise of the noise of the content of communication?—and so on.

A possible way through the dilemma is that this noisy music, as Taylor suggests, makes "noise OK." That is, by becoming familiar with noise as music we are able to move beyond the initial desire to cover or remove noise. Continuing with the example of Knížák, once we hear his "Broken Music," we become attuned to the possibility of

hearing what we are accustomed to hearing as noise as the actual content of music, and can thus listen to these sounds beyond this single work. Although this might account for the noisiness of much contemporary music, it also removes some of the power the music has. For example, as Nick Smith argues, if Japanese noise music is situated as an anticapitalist aesthetic—as music that cannot be owned or that is made beyond capitalist exchange through extreme sounds—then we have a problem when noise is deemed "OK." Japanese noise music would, as Smith argues, then lose its power and be subsumed back into the exchange system.

Cracked media can be heard as subjective noise in a number of ways. The sound of a skipping CD played at volume is an unwanted sound to most. However, to those who utilize these sounds in the production of their compositions, or to those attuned to this music as an audience, these sounds become aesthetically interesting, and even prized. As will be discussed in chapter 3, "Damaged Sound," San Francisco music producer Lesser actually enjoys and seeks out the sounds of skipping CDs. There are also those (including myself), for example, who enjoy hearing a CD skip in a café. In this case it is the shift from music as quiet background to annoying noise that is of interest.

The practice of cracked media can also be heard as deliberately playing on the expectations of an audience for music, unexpectedly throwing them into noise. This noise might well blast them out of the comfort of a safe musical performance. This tactic can only work a small number of times, however, before an audience comes to expect the blast of sound or the noisy destruction of musical instruments. Here too we can imagine an audience split between those who find the sounds to be noisy and shocking, and those who hear them simply as sounds and an expected part of the performance.

Paul Hegarty writes, "Noise also has to contain judgement: it is 'unwanted.' Can noise be wanted—clearly that would define the noise in question as not-noise."[41] Hegarty argues that if we are to listen to noise as music, or if music is deliberately created out of noise, then we need to look at its musicality differently. Noise in broken and cracked media also takes structural form. That is, it forms the composition, or even becomes the score for the work. The known, planned accident is combined with the unknown chaos of noise. Here noise is the framework or support of a deliberately indeterminate order.

As Jacques Attali states in *Noise: The Political Economy of Music*, "Nothing essentially happens in the absence of noise."[42] In a materialist approach to noise, he argues that everything happens

in the presence of noise, and through music, which he calls "the organization of noise," we can come to better understand the nature of our society and culture.[43] Looking to information theory, Attali takes an altogether different approach from Serres, arguing that "Noise . . . does not exist in itself, but only in relation to the system within which it is inscribed. . . . Long before it was given theoretical expression, noise had always been experienced as destruction, disorder, dirt, pollution, an aggression against the code-structuring messages."[44] For Attali, noise creates meaning through the interruption of the message, and through the freed imagination of the listener within pure noise, "The absence of meaning is in this case the presence of all meanings."[45] For new meanings to be created a crisis or catastrophe must occur, or perhaps an accident, that will focus the elements of chaos into a singular focused emergent meaning. Noise is then filled with all future possibilities.

If noise is an inherent part of the systems of communication and carries all possible futures or outcomes, then the tools of mediation also inherently hold all possibilities. The practitioners of cracked media take the objects of recording and playback and generate new outcomes for them utilizing noise—a noise that is always part of the system, waiting in the background. These artists generate unique and singular sounds and performance practices out of the chaos and

disorder of noise, exploiting the possibilities present in the slightest hum on the line, or pop and crackle.

Noise has been brought forward to become the actual content of much recent work in the area of cracked media. However, this practice need not be seen as transgressive, excessive, or even chaotic, contrary to much of the theoretical discourse around it. Although at times noise utilized in this way certainly is excessive, it is just as often quiet, gentle, low, and almost inaudible. Noise need not be seen as disturbance; it need not be excess or transgression. Noise is the backdrop to all communication, but in those instances when the backdrop is brought to the fore it is simply not disturbing or blotting out any information; it is not a break in communication, but instead becomes the content of communication itself.

The next two chapters will look closely at the history of cracked media, teasing out its multiplicity of approaches. In the end we will see an extremely productive tactic in the twentieth century, one that is attuned to the expansion of sound and closely related to movements across the arts.