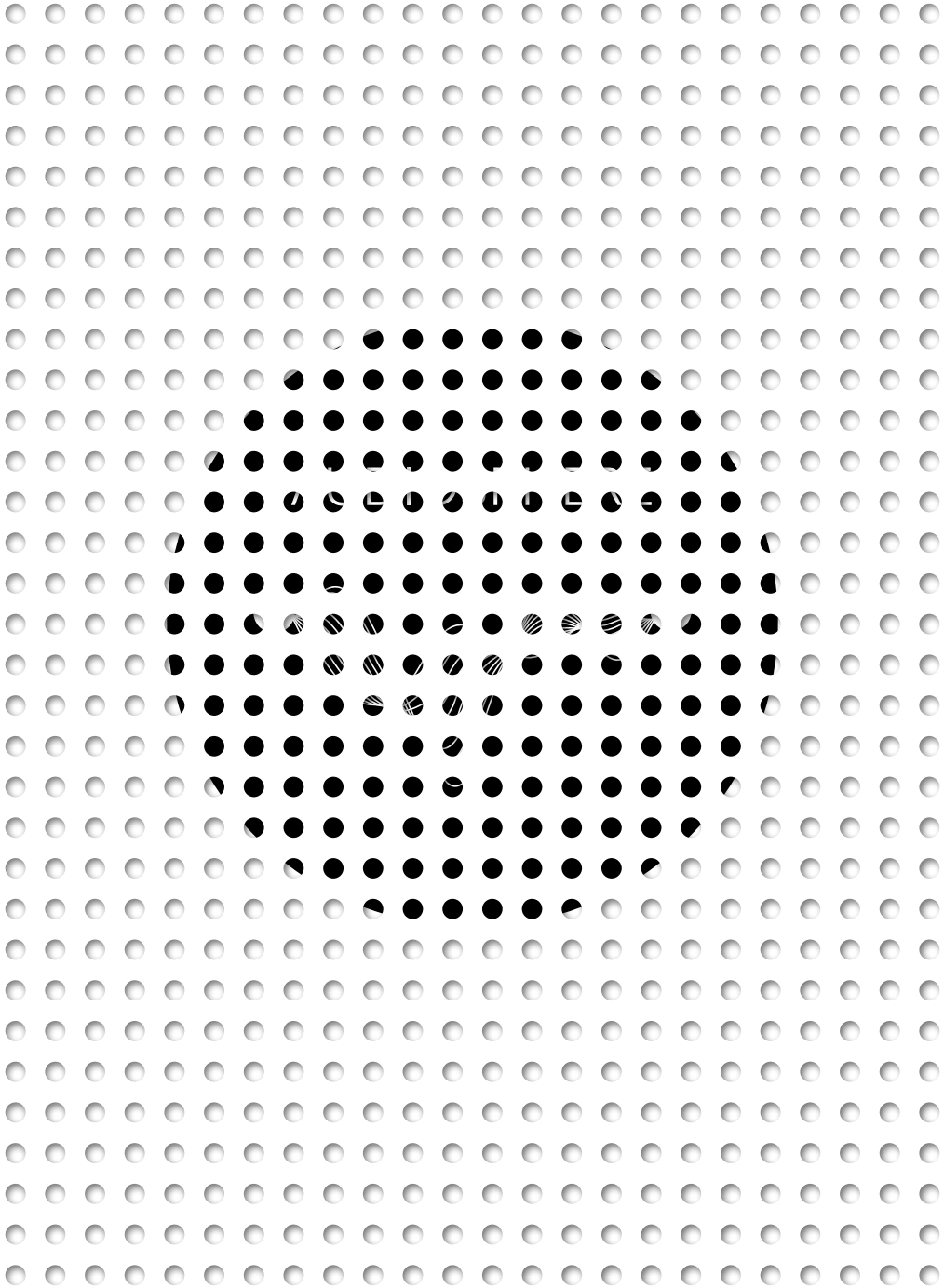

AUDIOSPHERE:
SOUND EXPERIMENTATION
1980–2020

MUSEO NACIONAL CENTRO DE ARTE REINA SOFIA
GOBIERNO DE ESPAÑA
MINISTERIO DE CULTURA Y DEPORTE

José Manuel Rodríguez Uribes
Minister of Culture and Sport

Over the last few decades, the field of sound creation has undergone a process of socialization that has led to the emergence of an "Audio-sphere," a term that suggests a kind of utopian space in which no particular point on the surface is more important than any other. The exhibition curated by Francisco López encourages us to enter the Audio-sphere and explore our reality exclusively through sound. Without objects, without images, just a selection of immaterial aural works by artists and creators from around the world. By means of active, on-site listening, we discover the political, aesthetic, and sociocultural implications of the emerging creative scene that generates it: "social experimental audio."

Although this creative, inclusive impulse has so far gone largely unnoticed in the field of contemporary art, social experimental audio involves a vast network of individuals and collectives that are often linked to cultural and geographic peripheries—in the physical sense, but also symbolically. This socialization process is by no means recent, as its roots go back to the counterculture movement of the 1970s. In fact, the Audio-sphere community appropriated some of its strategies, such as mail art, and updated them from the 1980s on. With mass access to the new music production and editing technologies that allowed autonomous management of sound works—from cassette tapes to synthesizers—the technological progress of the 1980s led to the democratization of the production of artistic works. However, the turning point was the advent of the internet and hyperconnected society, both of which were catalysts for the socialization of experimental audio.

This exhibition brings together works by a large number of audio creators in an extensive selection that is only a small sample of the vast wealth of creativity generated by this community. The exhibition space has been redesigned and adapted to prolonged listening, and the free Audiosphere app created specifically for the occasion allows

visitors to enjoy a personalized experience. We can choose how to find and connect to the works, and go on a virtually unlimited number of journeys through the galleries, in an immersive listening experience without mediation or interference.

Audiosphere offers an exceptional opportunity to discover the fascinating universe of experimental audio. It not only presents a heterogeneous compilation of sound art works produced to date, but also manages to convey the particular idiosyncrasy of an artistic community in which the social aspect—collectivity—is inherent to the creative movement. To begin with, this allows us to enter a singular (but often overlooked) cultural sphere that reflects recent changes in the artistic conception of creative sound work, as well as this community's crucial role in the world of contemporary art and culture. But above all, the exhibition presents the positive face of the interconnectivity that characterizes our global society: social creation. *Audiosphere* brings us the formidable result of a decentralized, social, and inclusive creative dynamic. In doing so, it reminds us that collectivity is and will be the essential tool to combat the fearsome liquid society predicted by Zygmunt Bauman.

I would like to acknowledge Francisco López's great curatorial work in this exhibition, and to thank the Museo Reina Sofía for its efforts in producing an exhibition that will almost certainly mark a watershed in research into the recent history of sound creation.

Manuel Borja-Villel
Director, Museo Nacional
Centro de Arte Reina Sofía

Over the past decade, the information society has contributed to a process of deregulation and democratization of the cultural field in which the traditional system of unidirectional consumption is gradually being replaced by a multidirectional model. To paraphrase Luis Alvarado in his essay for this catalogue, while this dynamic does not entail emancipation from the capitalist structure—which still determines the "distribution of attention in the world of the internet"—it does open up the opportunity for a different situation to emerge, generating certain conditions of autonomy that may continue to grow.

It is this context that has given rise to what curator Francisco López calls "social experimental audio," a global phenomenon with implications on many levels—technical, aesthetic, philosophical, and organizational—that has emerged from the profound transformation of the sphere of sound creation in recent decades. This process is the result of the increasing socialization of creative work with sound, and its catalyst and central element is a dispersed but closely interconnected network of sound artists from very diverse cultural and geographic spaces. An open, hybrid, decentralized community that is not governed by the demands of the industry and does not seek legitimation by any external artistic regulatory authority.

By positioning itself outside of commercial logic and of the mandates of the academic, institutional world, this community has programmatically addressed the need to redefine the figure of the audio-artist or audio-creator. Because, as Francisco López points out, in this community "the audio-creator is not the one who is in possession of a credential or has a commercial impact, but instead the one who asserts himself/herself that he/she is an artist and then proves it by exercising it."

An analytical approach to the phenomenon of social experimental audio and to the fertile creative ecosystem that has sprung up around it (the "audiosphere" to which the exhibition title refers) cannot ignore the fact that although the internet has been crucial to its expansion and development, it actually began to emerge and take shape much earlier. Its beginnings date back to the early 1980s, with the arrival of new technologies for creating and editing music, and it was also a (re)embodiment (through the adoption of the DIY ethos of the counterculture spirit of the 1960s and 1970s. Naturally, such an analysis must also consider its links with the turbulent history of the experimental sound practices that precede it. These are critically reviewed in the exhibition *Disonata: Art in Sound up to 1980*, which looks at the many different ways in which sound entered the visual arts throughout the twentieth century, as music gradually broke free from its own rules.

Social experimental audio is both a continuation of and a departure from these practices. As Thomas Bye William Bailey suggests, in its desire to function as an autonomous space, the audiosphere can be seen as the "legitimate successor" of mail art, an international movement that was also characterized by decentralization. In both cases, critical appropriation of the existing technology enables direct, individualized communication between creators and their audiences. To some extent, it also allows the resulting artistic work to avoid being co-opted by the market and the official culture industry. The emergence and expansion of communication tools—first physical and then virtual—that favor unmediated interaction between creators, and between creators and their audience(s), has played a significant role in the art of recent decades. This can be seen in the exhibition *Ignacio Gómez de Liaño: Forsaking Writing*, which revolves around the personal archive donated to the museum by the writer, poet, and philosopher Ignacio Gómez de Liaño. It clearly shows how the network of contacts that he developed in the 1960s and 1970s—using the postal service as one of his main strategies—was instrumental in the introduction of the ideas and trends of the international avant-garde to Spain at the time.

In addressing the phenomenon of experimental audio, which emerged with the expansion of production and internet technologies, we must take into account the reconfiguration of the social sphere itself. As Greg Hainge points out, this reconfiguration is giving rise to what Siva Vaidhyanathan calls "surveillance capitalism," which has social networks as its paradigmatic operating system. According to Hainge, experimental artistic practices can serve as a "laboratory for investigating other modes of being-in-the-world," and help to create mechanisms of resistance that allow us to escape the perverse algorithmic logic—that restricts and tries to monetize social experience—in which we are increasingly immersed.

With the intention of constructing a narrative that illustrates and embodies the idiosyncratic singularity of experimental audio, the exhibition presents works by a large and diverse group of artists that reflect the "atomization" and decentralization of the scene. The show also seeks to redirect visitors' attention to listening—a deep and prolonged listening, not just referential and documentary—through immaterial aural works that are "exhibited" as its main (and only) artistic objective, as well as by establishing the conditions that facilitate this with a scenographic spatial design and a specifically created app. By placing listening at the center, it seeks to transcend the realm of the exhibition and transfigure itself into an experiential space that functions as a gateway to the multiform universe of experimental audio, while allowing visitors to openly and directly interact with its content.

SOCIAL EXPERIMENTAL AUDIO

Francisco López

Virtually unbeknownst to the general milieu of contemporary art practices, as well as to most conventional musical realms, an ongoing worldwide-scale revolutionary shift has taken place over the past few decades in the multiform universe of creative work with sound. Intertwined with—but going well beyond—now familiar fields such as sound art, experimental music, noise, or electronica, and spreading over a creative territory—largely unpredictable and out of control—with "underground," unorthodox, intuitive, paradoxically popular-minoritary and adventurous defining features, this is a process of gigantic proportions that amounts to a cultural socialization of the creative work with sound.

This socialization is technical and aesthetic, as well as organizational and philosophical. Rather than a "democratization"—a term that somehow implies an intentionality and direction in the spread of governance power—this process is to a large extent the unintended consequence of a collection of undirected and uncontrolled factors related to technocultural changes and market forces that are vastly wider than those related to purely creative artistic work. It involves many thousands of artists and other creators worldwide, most of them virtually unknown, as relevant and decisive agents of this change. This is in fact the manifestation of a fundamental redefinition of the figure of what we could call as the *audio-artist* or *audio-creator* of today, as well as the paths for becoming—and the criteria for the acceptance of—such a sociocultural category. All of this naturally with no intention of becoming normative

or defining: surely for substantial reasons and with good judgment, many of these audio-creators do not identify themselves with the figure of the "musician/composer" (even if "experimental") or with that of the "artist" or "sound artist," or with any of them.

This process of socialization has generated significant bypasses and operative alternatives to the traditional organizing forces of the academic and the industrial/commercial. Among those are the plethora of "independent," "alternative," "underground" collectives, individuals and noncommercial micro-labels that act as a constellation of very small units of publication, distribution, presentation, and exchange of largely uncontrolled cultural products. This socialization has also promoted constructive forms of meritocracy (in the best possible sense of the term) and intuition, which need little or no certification at all from any artistic or normative authority, thus drastically changing the status of the right to create, in terms of both presentation and recognition. This social and political change in the right to create—not only to accomplish the practice but also to claim a cultural status—is probably one of the paramount shifts of the past few decades in the realm of sonic creative work. Yet it remains mostly unrecognized and overlooked under the pressure of more superficial paradigms, such as the now traditional "new media"/"new technologies," the presupposed "analog/digital" divide and transition, or the classic chronological perspective on the multiple histories of sound art and experimental music.

In stark contrast with most creative practices, this realm of socialized creative audio has an artist:audience ratio of virtually 1:1, as a consequence of an extreme active engagement of its integrating community. In a significant way, this amounts to a novel conflation—or a definitive boundary-blurring—of the classic figures of the "amateur" and the "professional." Similarly, the notions of "naive" and "experienced" have suffered a dramatic transformation in the system of values—both social and artistic—and in their appreciation in these communities, as aesthetics of the odd, the uninformed, the unexpected, and the awkward hybridization or the "lo-fi" have become solid, appreciated, and constantly evolving genres.

In short, this artistic and cultural socialization of audio-creation

has thus given rise to, among others, new creative mechanisms, strategies, value systems, aesthetics, networks, and affections. In view of the magnitude of this process, a crucial observation that needs to be particularly stressed is that although this socialization has naturally expanded and accelerated with the advent of the internet and the hyper-communication society, it actually started long before it and has its roots and causes in previous techno-cultural-social situations. In particular, it essentially derives from a crystallization of the spirit of counterculture of the 1960s and 1970s, which took place from the 1980s onward by an accelerated and massive socialization of tools—both technological and ethical-conceptual—of creation, cooperation, self-editing, and distribution. Tools that are as varied, surprisingly simple, and even unexpected as the photocopy machine, the audio cassette, popular electronic instruments (synthesizers, samplers, effects), the home studio, and later on the personal computer. And, of course, also as a *tool*, the post-punk and DIY ethos of the intuitive, self-taught, and visceral *amateur* as central figure, protagonist, and catalyst of the new audio-creation in a new public space, popular and underground at the same time, of micro-communities that are dispersed but functionally and emotionally interconnected.

In essence, what this realm that I call social experimental audio aims to highlight and propose is the enormous relevance and the urgent need for a social and technocultural history of sound creation. Instead of (or in addition to) the chronologies and the compendia of names and technologies, a history of processes, mechanisms, integrations, and collective coalescences; a perspective that considers socialization as a capital phenomenon of the recent history of experimental audio-creation.

My proposal to move forward in that direction aims at identifying and outlining what I consider to be key processes and realms of the socialization of audio-creation. Each one of them can be understood simultaneously as a wide, overarching question and as a territory of discussion that contains multiple critical statements that can be interpreted—which is indeed my intention—as implicit and open questions.

Genealogies

Predominant discourses on the historiography of sound

experimentation (as understood by the realms of the so-called sound art and experimental music, in their widest sense) portray a classic monophyletic image (a common, single origin) with "pioneers" and "avant-garde(s)" that apparently provide the references and the genealogical explanation of our creative present in this territory. Whereas the historical relevance of the usual grand characters (Luigi Russolo, John Cage, and so on) might be unquestionable, both the development over the past few decades and the current state of sound experimentation cannot be explained or properly understood in many of their crucial features with those references alone. Oft-repeated chronologies of artists and technologies—from the common to the obscure—albeit correct, illustrative, and naturally of interest, do not provide substantial and convincing conceptual grounds (in some cases being even counterproductive) to identify cultural mechanisms and ultimate driving forces or to comprehend the evolution of this creative realm. Differentiating themselves from elitist archetypes like that of the *bourgeois* artist or that of the *connoisseur* of "serious" music, there are already several generations of creators who have grown up and have been nourished by a popular culture *milieu*—rock, pop, punk, electronica, and so on—that have decisively shaped and informed their perspectives when they venture into less popular (or, we might say, subterranean popular) territories. A massive number of creators (a majority in many realms) began to work and evolved in their sound experimentation—and continue to do so today—by sheer contact and interaction with different types of home-based, off-the-shelf technological devices that were and are accessible to them. With no formal or structured education/training and without knowledge of any historical context: a virginal and exciting human-machine encounter without clear rules or intentions. It is therefore time to critically revise the multiple genealogies, unquestionably polyphyletic (of multiple origin), that define the current realm of sound experimentation. Acknowledging and analyzing both the social and the technocultural is essential to clarify causes, mechanisms, and driving forces of the evolution and development of this realm. *Kairology* instead of (or in addition to) chronology; social history and multiple rhizomatic genealogies as attestation of the current reality of sound creation.

Networks

One the key elements in relation to the rise and development of social experimental audio is naturally that of networked cultural and social structures. This does not solely refer to the restricted case of the current so-called social media, nor even exclusively to the post-internet world in general. In spite of the obvious differences in scale, speed, and technological basis, cultural networks with an international/global character, decentralized, without necessarily unified direction or specific ideology, generators of new coordinated creation and new collective creative paradigms, are not a consequence of the internet but have rather unfolded and manifested in a number of previous historical episodes. The multiple underground ramifications of post-punk, the so-called industrial music culture, and the global "home-music network" and "cassette culture" scenes are prominent and catalyzing pre-internet examples of the more widespread explosion of social experimental audio. These multiform international frameworks not only manifest as expressions of the classic DIY ethos, with independent networks for production, publication, and distribution, but also with the less patently recognized but equally ubiquitous DIT ("do-it-together"), which propels creative collaboration and cooperation for joint learning and production. Beyond mere communication, a fundamental consequence of these particularly active networks is the generation of a distributed and deinstitutionalized popular *tele-academy* that becomes the main framework for learning, as well as the apparition of relatively non-controlled forms of *tele-collaboration* and *tele-production*. All of them permeated by etho-aesthetics of independence, self-organization, the noncommercial, and the alternative. From the dystopias and disillusions of classic political socialist ideology to the cryptic maneuvers of neo-capitalism, from the analog to the digital, from the postal system to electronic communication, from the classic underground to a possible present "undercloud," social sound experimentation struggles, evolves, and expands in these *socially natural* networks.

Mega-Accessibility

One of the most transformative and yet least recognized processes that has taken place over the past few decades is that of the massive socialization of creative technology (what is usually called more imprecisely as "democratization"). Overwhelmingly more relevant

than the classic—and comparatively superficial—successions of "analog-digital," "new technologies," and so on, this socialization constitutes a process of simplification, atomization, redistribution, and dramatic increase of accessibility to common tools for creation and dissemination. Disorganized, to a large extent an unintended consequence of commercial interests, lacking an ethical or political project, multiform and quickly mutable, uncontrolled in its progressions and regressions, this process has resulted in a *mega-accessibility* with no precedent in the history of creation. Sound experimentation is probably the creative realm where this phenomenon has manifested more precociously and with more intensity and clarity: from the cassette *home studios* of the 1980s to the personal portable studio solely constituted by a laptop, or even just a smartphone; from the electric guitar to sonic generation/transformation software. Never before have so many people shared the same tools for creation and diffusion, the practical-use learning curve of which is virtually instantaneous. This explosive combination has given rise, in a natural and inevitable way, to the apparition of a colossal number of audio-creators and units of diffusion and exchange of those creations, in the form of micro-editions (from cassette labels to net labels), micro-emitters (from pirate and community radios to individual podcasts) and micro-publications (from fanzines to blogs), among others. Mega-accessibility has thus become a qualitative shift by means of the quantitative surpassing of a critical threshold. In the realm of sound experimentation, it has brought about the *syncretic* creative individual with the ability—limited, conditional, but present nonetheless like never before—for self-production, self-publication, and self-dissemination.

Cyborgization

The universalization and socialization of creative technologies in the realm of sound experimentation have led to a form of naturalized incorporation of those tools in the creative tissue and praxis of this territory. The immediacy and *transparency* they have acquired in the current technocultural situation appear in stark contrast to traditional paradigms like the classic musical instrument, acoustic or electronic, or the—by now also classic—recording studio. Counter to reiterative narratives on the focus on "new technologies," the result of this technocultural reality is the seeming paradox of a conceptual and perceptive dissipation of those tool-

technologies; their Heideggerian *disapparition*, the volatilization of *The Instrument* (with capital letters, in its widest sense as the epitome of musical sound creation). This intimate integration, ultimate and perhaps optimal, is what we could understand as *cyborgization*, in the best possible anthropological sense. A patent consequence of this situation is that when everyone can get access and handle those tools, traditional interpretative virtuosity loses its raison d'être in a world of common and immediate buttons, knobs, and trackpads. This is precisely the allure of the current situation in creative sound experimentation: a tabula rasa where all creators wear the *emperor's new clothes*, which in turn demands a redefinition of virtuosity, from instrumental to spiritual.

Aesthetogenics

The genealogical eclecticism, the new forms of creative interaction, and the different levels of accessibility and technological integration in social experimental audio not only give rise to structural, organizational, or ethical-social changes. Inevitably, fortunately, they also generate new aesthetics. This has been the case over the past few decades, often at a frantic pace and with the fluctuations in effervescence that one would expect from a popular culture phenomenon. This intense evolution and diversification of ideas, techniques, perspectives, and tastes has given rise to a profuse list of types, styles, categories, genres, and subgenres of sound experimentation, with and without denomination: "industrial music," "cassette culture," "noise music," "power electronics," "drone," "ambient," "dark experimental," "ritual," "isolationism," "plunderphonics," "turntablism," "laptronica," "lowercase," "lo-fi," "no-fi," "lo-res," "glitch," "mashup," "loop music," "free improvisation," "experimental techno," sound art brut, high-frequency ultra-minimalist, experimental field recordings, toyish/computer-game sound aesthetic… In addition to the formal, dynamic, timbral, rhythmic, or stylistic changes, this *aesthetogenics* also manifests in social sound experimentation in the form of radical shifts in the conceptual and referential context of the pieces created. This engenders visual aesthetics more connected to popular subcultures and with a penchant for the cryptic, for alterity, for the deliberate absence of liner/program notes, explanations, or contextualizations. All these changes take place, and are to a large extent explained, by the drastic decrease—often complete dissipation—of the traditional regulation and control

exerted in diverse ways by both the academic and the commercial forces. The relative alienation and ostracism of the experimental have in turn their advantages: an individual with no regulated training/skills whatsoever but with a good dose of intuition and talent has in fact an advantage as a potential generator of aesthetic innovation. And this is particularly relevant when the socialization of creative technology gives rise to millions of potentially creative individuals.

Recombination

Similarly to other decentralized population phenomena, such as biological evolution or the transformation of language, cultural recombination, in its widest sense, is consubstantial with social sound experimentation. The already classic notion of "remix" is in this territory just a minuscule parcel of a fundamental and defining driving force with multiple manifestations: processing, manipulation, treatment, mix, mutation, transfiguration of sonic materials... they all make up one of the most profound essences of the sound experimental praxis, particularly in its social incarnation. Beyond the usual networked exchange for listening, sound materials are shared and exchanged with the explicit intention of generating new sonic creation; anything becomes "source material." The recorded cultural heritage—one's own or somebody else's—ceases to be only memory to become the starting point of a new cultural reincarnation thanks to the powers of recombination. The "pieces" are not just final fixed endpoints but also *sonic seeds* and inspiration in an instantaneous globalized noosphere. Propelled by its collective and dynamic nature, the technological, aesthetic, and ethical capability of social sound experimentation has reached such a magnitude that we are not dealing anymore with versions, references, or allusions but rather with a true thorough reconfiguration of the sonic substance, as well as an intrinsic dynamic of constant creative evolution. Along with the traditional variations of forms, canons, inspirational frameworks, or styles, social experimental audio has additionally brought forth the collective recombination of sound matter itself.

Rights

Ultimately, perhaps the most far-reaching historical-cultural consequence brought forth by the socialization and popularization of sound experimentation might be a fundamental shift in the right to

create. Tremendously more relevant than the superficial understanding of the oft-repeated technological changes per se, this genuine *leaderless, program-less* revolution is almost virtually ignored, due in part to a reactionary perception of the consequences of the exercise of that right. When millions of people creatively produce and disseminate their work—as is the case in social experimental audio—the avalanche of "information" turns for some into a mind-boggling, overwhelming situation. Obsolete arguments then make their way in, such as the fallacious inverse relationship between quantity and "quality." Just as it happened during the early years of the printing press—with futile objections based on the fact that suddenly more books could be produced and accessed than what a person could read in his/her lifetime—the socialization of the right to create is a technoculturally natural process; inevitable, desirable, and extremely fruitful. As it is manifest in social experimental audio, this right to create is no mere ethereal principle: self-production and self-diffusion, synergized by popular judgment—majoritarian or minoritarian—and by the lack of lust for fame, so distinctive of commercial music, have given rise to an etho-aesthetic of appreciation of creation with very few remnants of classic imperatives, either academic or commercial. The audio-creator is not the one who is in possession of a credential or has a commercial impact, but instead the one who asserts himself/herself that he/she is an artist and then proves it by exercising it: a meritocracy with a social redistribution and redefinition of the valuation of what is "successful" or "interesting." In stark contrast to commercial music, as well as to the star system of contemporary art, this is the reason why the proportion between artists and public in the realm of social sound experimentation is virtually a shocking 1:1 ratio: all of those interested are also active creators themselves. Moreover, this is also the cause of the obsolescence in this realm of the traditional dichotomy between "amateur" and "professional." In social experimental audio, with astonishing frequency, those "amateurs" who lack context and traditional training are in fact the ones who spawn surprising and juicy innovations. Thus, in this realm there is a constant redefinition of aesthetics and value systems, decentralized and out of control, impossible to encompass and with pernicious consequences, but fruitful, natural, and desirable: we are all creators.

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AN EXHIBITION OF IMMATERIAL ABUNDANCE

Whereas the abovementioned processes and realms provide the framework for the homonymous sections of *Audiosphere: Sound Experimentation 1980–2020*, my conceptual and curatorial strategies for the exhibition as a whole manifest in quite an unusual outcome in terms of presentation, which is probably outlandish for many. *Audiosphere* is possibly the first large-scale, non-conceptual exhibition of contemporary art with no objects and no images. This peculiar and forthright combination of abundance and immateriality is neither whimsical nor accidental but rather a consequential and natural reflection of what I consider to be crucial features of social experimental audio.

In this framework, three interrelated essential axes, which I summarize below, articulate this exhibition.

Abundance
This exhibition features the work of hundreds of artists/creators from all over the world, to a large extent unknown for most of the public. This unusual abundance is not the outcome of an ambition of scale but rather of an argumentative and illustrative need. In fact, despite a vast geographical, generational, and aesthetic diversity (among other criteria), this group of artists represents only a small sample—naturally subjective and with absences, but carefully selected—of the immense universe of social experimental audio.

This magnitude is, on the one hand, an explicit recognition of a present reality in which a large number of creators—not just a reduced elite—have a genuine relevance, in what we could call an *atomization of leadership*. On the other hand, this abundance is also a direct reaction to a clamorous lack, which has already accumulated over several decades, in the presentation of the work of audio-creators who remain in the shadows—or the *penumbra*—and who have either spent a lifetime producing fascinating sonic innovations without virtually any recognition, or have just begun to do equally worthwhile work, subjected to similar ostracism, in many cases precisely because of their excessive iconoclasm, accompanied by an inability to manage the mechanisms of the *cyber-social cool* of today.

This exhibition thus aims at simultaneously drawing attention to an enormous historical-cultural

vacuum and advancing significantly beyond what is already an everlasting repetition of the "ABC" of sound creation (a very short list—both in number and in terms of aesthetics—of "pioneers," figures of "the avant-garde," and equivalent) in many of the historical exhibitions of so-called sound art in the field of contemporary art.

Such magnitude and diversity necessarily imply an absence of clear or strict boundaries, both artistic/sonic and temporal, to demarcate the monumental field of social experimental audio. However, this does not mean that such a realm can not be recognized as a conglomerate of centers of gravity, defined implicitly and exemplified precisely by the set of works and artists in this exhibition, which essentially reflect relatively underground, noncommercial, nonacademic territories. Established by the manifestation of the aforementioned processes of mass socialization of creation, the time period covered, fundamentally from the 1980s onward, comprises the turn of the century with a natural division approximately equivalent between a period essentially "pre-internet" in the last two decades of the twentieth century (obviously not in its invention, but in its extended social implantation) and a fully "post-internet" period, in the first two decades of the twenty-first century.

Finally, the abundance in this exhibition is obviously also a natural indication of the general abundance of the "infosphere" in which—for better or worse—we are supposed to be immersed. The overall recommendation is, therefore, not to attempt to use the obsolete strategies of exhaustivity and systematization of contents. Instead, accepting that the impossibility of an all-encompassing gaze is not a defeat against the information avalanche but rather a victory of a desirable natural diversity, *Audiosphere* unfolds as a wide micro-universe in which we can search and find but also find without searching. These searches and finds are moreover exponentially multiplied by the conception of the exhibition and its peculiar technological implementation, because each work constitutes an entry point to the immensely larger world of each artist and his/her accessible network of countless and immediate connections to other artists. This *Audiosphere* is not really contained by the walls of the exhibition rooms, but by a virtual membrane with thousands of *telematic pores*.

Listening and Immateriality

Despite appearances, listening itself is often the big absence in many exhibitions of so-called sound art. True, profound, dedicated, *penetrating*, and revealing listening, that is; not simply the referential or document-oriented version of it. This seeming paradox is in fact easily explained if we understand both the meaning and the consequences of the not-easy-at-all distinction between "things that sound" and "sounds that thing," if we allow such an expression. That is, audio in itself as creative material and as object. Not in the "abstract," but precisely the opposite: in the *concrete*.

This exhibition does not present sounding objects, installations, records, or publications. It does not show their analog or digital equivalents of representation either. It only presents, as it is indicated for the visitors, "immaterial aural works." Perhaps to the surprise of many, I do not consider *Audiosphere* to be an exhibition of sound art. Given this attention to and exaltation of listening, as well as the particular selection of works, which have fundamentally been developed and exist in the realm of listening, if it is indeed art, it would be in any case an "audio art" or an "aural art." This distinction is not just a matter of terms. A fundamental consequence of this overall exhibition approach is a redirecting of the spectator's attention from the "source-object"—the classic material construction with speakers and/or other sounding objects, characteristic of canonical sound art—to the actual audible (immaterial) "materials" themselves. This apparently simple but crucial refocusing could amount to a demarcation of an audio art as an audio-creative practice focused on the act of listening (with which the term "audio" has its etymological connection) and on the work with those paradoxical "immaterial materials." A creative practice simultaneously liberated not only from the most restrictive and traditional conceptions of music (an already classic claim) but also from the perhaps comparably restrictive tradition of visual object-based art.

For a period of time, so-called sound art established—and it was justifiably proud of it—a territory that was to some extent freed from the restraints and restrictions of the more conventional conceptions of music. In my opinion, however, it is now being phagocytized by contemporary art and thus turned into a minor parcel inside it, basically

because of the combined strength of its conceptual, epistemological, and object-based paradigms. There are already signs that the next refuge for the audio-creator interested in the aural might be back in music. Obviously, in the lawless, no-man's-lands of music's most inhospitable frontiers.

Technically, listening takes place in this exhibition via an app (*Audiosphere app*), specifically developed for it, that acts as an individual interface to access the immaterial aural works (including options for random selection from a pool of works). This access requires the visitor's physical presence in the different exhibition rooms but it allows an unrestricted individual mobility, in a form of virtuality between works and spaces. Listening takes place with very high-quality headphones, a crucial feature that attends to the weakest point nowadays—often surprisingly the least attended—of the technical sequence of sound playback, which is not digital resolution anymore, but rather the speakers or headphones that re-physicalize for perception the encoded audio at the end of that sequence.

It is important to stress that this immateriality of aural works does not imply at all to ignore or obviate all the material elements that are involved in their production and reproduction (from microphones to fiber optic cables), which we are all fully aware of. However, we should neither confuse nor conflate the unavoidable materiality of the means and intermediate processes (which also exist in a differentiated way in traditional material works, such as a painting) with the work itself, if it is considered aural. Just as some massless subatomic particles require an enormous quantity of material means and energy to be produced in their ephemeral existence, so it is with sound generation, which fleetingly manifests with an ethereal presence of instant dissipation.

Such an aurality, thus understood for the works, along with the technical-conceptual design of *Audiosphere*, provide an additional and extraordinary option for the visitor: to take with him/her – solely by virtue of his/her physical presence and his/her dedication to listening– some of the works of the exhibition. This does not refer to the typical reproductions, copies or representations (the classic *Benjaminian copy*), but rather implies literally a digital clone of the original digital work. That is, the visitor does not take a 'duplicate' in

the traditional sense, but has instead exactly the same thing than the artist has. If you like, another possible paradox of *audio-immateriality*.

From Exhibition to Experiential

A clear corollary of all the above, for this kind of immaterial creation, is the transfiguration, technoculturally natural, of the museum space, from the exhibition-related to the experiential. Instead of (or in addition to) presenting objects or referential documents of immaterial works, a new significant role emerges as that of the exceptional space of experience.

Such is the case in this exhibition: with no objects and no documents; where the spaces have been architecturally designed and reconfigured to encourage a type of profound listening, with exceptional comfort; in which visitors have at their disposal playback capabilities that are exceptional for most of them; and where a combination of temporary disconnection from the usual excess of individual telecommunication (already marketed by some as "digital detox"), together with a dramatic absence of physical elements and information, constitute an environment that is increasingly unusual nowadays. *Audiosphere* operates with a situation-strategy that I usually call *monomedia*: a deliberate temporary sensorial-informational reduction to promote the most powerful form of multi/transmedia: not the traditional one that takes place outside the body, but the one that occurs *inside* it.

In a world where all information is supposedly accessible, what has become tragically inaccessible is precisely the situation of absence of information; or, perhaps more accurately in our context, of absence of constant peripheral information. When contents are ubiquitous and universally accessible, particularly in the case of digital or digitizable works, the essential need is not the access to the object or its satellites, but the type of situation and the kind of relationship with it. The *experiential spaces* of the immediate future—like their ancestral equivalents since the dawn of humanity—can provide exceptional conditions, rarely available outside them, for such ambitious and necessary purposes as re-focusing, hyper-perception, concentration, enhancement, penetration, exaltation, magnification, and, ultimately, the profound transformation of our interaction with the world, beyond

its hyperactive superficial layers of semantic and representational fervor.

Audiosphere manifests itself as such an experiential space, to give access, as a multiple portal, to the huge, delocalized, underground, and multiform universe of *social experimental audio*.

Catalog 'AUDIOSPHERE' Exhibition

Addendum to essay 'Social Experimental Audio'

by Francisco López

[This essay, written in 2019, was commissioned for the catalog of the exhibition originally titled 'AUDIOSPHERE: Social Experimental Audio, Pre- and Post-Internet', organized by the Reina Sofía National Museum and Art Center (Madrid, Spain) in 2020 and curated by Francisco López.]

Explanation for this addendum:
The museum decided to remove the references (below) that I had researched, put together, and included to contextualize my essay. I disagree with this decision and believe these references are relevant, important and useful for the readers of my essay. I am therefore including them in this document, which I kindly ask to be added to any digital copy of the catalog of the exhibition 'AUDIOSPHERE'.

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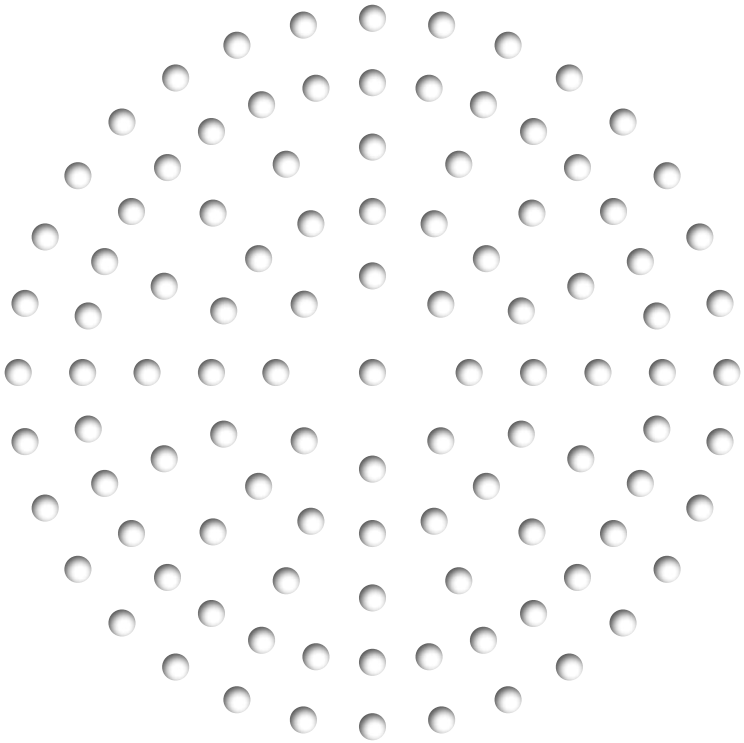

At the Core of the Audiosphere: An Investigation of Its Meaning in the Age of Networks

Thomas Bey William Bailey

From the moment that the spherical nature of the earth was first confirmed by Greek astronomy, this physical body has been gradually scaffolded over by numerous other spheres both natural (atmosphere, biosphere) and conceptual (noosphere). Even more esoteric philosophies are proposed as being contained within, or embodied by, spheres (e.g., the chaosphere), testifying further to the gravitational pull they have upon the creative mind. As these continue to multiply with technoscientific advancement in general and techno-communications in particular, Peter Sloterdijk's philosophical proposal that existence itself is a condition of "being-in-spheres" seems to steadily gain greater currency. So what kind of sphere *is* an audiosphere,[1] and why does it deserve special consideration in a landscape so crowded with other spheres that (again, following from Sloterdijk) the entire media landscape has become a "foam" of distinct, self-sustaining "bubbles" of communicative potential?

For students of acoustics, the concept may immediately bring to mind the fact—known since the mid-nineteenth-century work of Hermann von Helmholtz—that sound waves propagate in not a linear but a spherical manner. In this sense, any creative engagement with sound already has a "spherical" character to it, and causes

such engagement to easily nest into social theories dealing with topography as both a determinant of human behavior and as an abstract model of it (again, Sloterdijk's conception of the sphere as "shared space of perception and experience").[2] In this regard, the spherical object is simple to romanticize and utilize as a metaphor for a perfectly just world: if we were to mark any given spot on its surface, it could not be said to have any more importance or meaning than any other spot; any given place could ideally become the primary focus of attention without affecting the structural integrity of the sphere.

It is this latter fact that unites both the physical properties of the audiosphere and its sociocultural character. With a succession of sweeping technological changes in media reproduction and transmission technology taking place from the mid-1970s onward, this sphere became a legitimate successor to the culture of networked "mail art," and became one of the more engaging forms of a mini-media boom that also manifested as small magazines, pirate radio/"mini-FM," and Super 8 films. Even if its exact coordinates and contents were unknown to the majority of the consumer class, the sheer tenacity of those maintaining this sphere led to it being an international, intergenerational development. Official/institutional permission for new audio works was rarely sought out, and direct "1:1" communication between creators and their audiences was the rule rather than the exception, enabled once again by channels like the postal network rather than a moderated public infrastructure of shops and galleries. While not entirely without interpersonal rivalries and febrile disagreements over ethics and aesthetics, the audiosphere's emphasis on "1:1" communication was refreshingly free of unnecessary adversarial relationships between avant-garde "schools," such as the historical feud between the oscillator-based electronic music of Cologne and the tape-based *concrète* music of Paris. Nor was it unusual to transport ideas and artwork between fixed conceptual sites not

traditionally intended to have any overlap: between the respectable academy and the disdained neighborhood of "junk culture," for example (the audiosphere's underground electronic music community made a regular point of forensically analyzing forms like the B-movie or pornography, with a visceral enthusiasm that often outstrips the attempts of contemporary cultural studies departments at doing the same).

Here we have some early glimmers of what distinguished the audiosphere from others in the seething foam of the postindustrial, informational galaxy, as well as what caused it to presage the most genuinely rewarding sectors of the internet. Numerous writings on this subject (this author's included) have rhapsodized about the essentiality of decentralization to the creative process, but is it really "decentralization" alone that has provided the impetus for the worldwide growth of a movement? As an organizational model, decentralization has benefited plenty of tendencies that are more destructive than creative (i.e., global networks of crime and terrorism). We can also witness how Silicon Valley's decentralized social networks, in their present form, have catastrophically failed at their goal of "bringing the world closer together"[3] (at least insofar as that togetherness means mutual understanding and empathy). These fora have been reliant upon "content moderation" policies crafted by state actors to mirror their shifting geopolitical priorities, and have otherwise acted as virtual bunkers for factions in the Culture War, each maintaining their own subsidiary "echo chamber" of the larger network to invalidate dissenting opinion and reject the possibility of any small reconciliation between opposing viewpoints.

Lastly, we could speak of the term as it applied to the brick-and-mortar reality of urban planning, since decentralization is, after all, a spatial term transposed onto the realm of social relations. Take, for example, the Tokyo metropolitan area, which is "decentralized" in contrast with the established European capitals: whereas the latter

are concentrically structured, with zones of decreasing importance radiating outward from a central core, Tokyo is structured as a network of functional nodes, with districts for finance, entertainment, and other distinct areas of human enterprise spread out in a fashion that seems to better emphasize the integrality of one function to another. Yet not all critics of urbanism have seen this city as being a redoubt of utopia, in particular those who note that the functionality of these nodes precludes any kind of real possibility for the purposeless, ludic activities that would make the space expressive as well as functional. For example, the critic Peter Schöller in the mid-1970s criticized the vast underground developments of the Japanese city, ceding that they were "among the best and most rationally laid-out … facilities on earth,"[4] yet lamented how "these systems do not offer the opportunity to stop and rest.... There are almost no cultural facilities, and no approaches that suggest an identification of the citizen with his city, history and culture."[5]

So, after a while, it becomes abundantly clear that decentralization on its own does not provide the magic formula for a culture defined by unimpeded creative flows, authentic expression, and general *élan vital*. Much in the same way that a "globalized" process does not become more constructive or less harmful simply because it involves more of the world's total population, a "decentralized" condition can still exist side by side with various kinds of ossification or stagnancy. I would argue that this is most present in systems where the emphasis on the fixed state makes it impossible for enjoyment of, or meaningful reflection upon, the transitional states that activate and energize them. To be sure, the "internodal" life in a metropolis like Tokyo or Osaka regularly passes as a non-event, something that is made especially clear during train rides wherein a large number of passengers spend the duration of their journey sleeping.

Luckily, a not so somnolent situation has existed for decades within the "unofficial" or extra-institutional arts, whose adherents have

claimed the ability to become media themselves. More accurately, they have gained the ability to become *mediators* between different modes of expression, or between different levels and intensities of experience. The building and maintenance of a sphere that allows this type of mediation depends on an acceptance of impermanence, which comes with the commitment to work within "transitional" frameworks: there is to be a continually renewed assessment of dynamics, something like what the Utopie urbanist/architectural group suggested when they questioned the "sociological meaning of the permanent character of the constructions and cities of the past"[6] and called for "adaptability, variability [and] growth."[7] Seen this way, the true health of the audiosphere or networked audio may come from its valuation of internodal spaces over the nodes themselves: in this process, outside observers' attention becomes drawn toward certain fascinating tendencies and activities-in-progress, rather than toward individual personalities and their authoritative tastes. To a degree that is not usually seen in the "official" art world, and concurrently in digital communicational "spheres" such as the "Twittersphere," there is an instructional or informative, rather than purely declarative, nature that characterizes so many audiosphere communications: exchanges of practical information on all aspects of self-production, schematics for designing new instruments, instructions for how to participate in some sort of transnational game that makes a *cadavre exquis* of disparate audio recordings. It should also not go unsaid that genuine legal risks have been taken to keep the audiosphere operating at this level, something exemplified by one USSR-based audio networker who, in the pages of the "cassette culture" zine *Electronic Cottage*,[8] provided instructions on writing his name and address in Cyrillic so as to make cassette parcels sent to him seem less suspect.[9]

Running parallel to this is the apparent refusal to inhabit a sphere, network, or ecosystem that is an exclusively virtual space, and to this end the audiosphere's inhabitants have been remarkably proficient

in keeping this space inundated with *affect*. Thinkers such as Gernot Böhme have touched upon the degree to which atmospheres are defined by their sensory qualities: Böhme has insisted on profound differences between "phenomenological" and "mathematical" space, while at the same time arguing that a synthesis of both is possible within a realm in which "environmental qualities" and "human states" are present in more or less equal amounts, giving rise to "ontologically indeterminate quasi-objects of perception that lie between subject and object, literally in the medium."[10] It is maybe not so coincidental that, given the ontological status of the audiosphere as this kind of ambiguous medium, so much of the music produced within it would be of a variety that has a perceptibly atmospheric or "ambient" character. To say that this has been the *dominant* tendency here would be extremely disingenuous, yet neither has there been any shortage within the audiosphere of sound that reflected upon present atmospheric conditions while aiming to create new ones. Notable variants included the slowly rolling miasma of Maurizio Bianchi,[11] the elemental poetry of Étant Donnés,[12] and the oneiric drama of Phauss.[13]

As these examples suggest, the most obvious phenomenological innovation of the audiosphere has involved the sense of hearing, and specifically the reclamation of such as an "active" process; that is to say, not merely the reflexive process of eardrums vibrating in response to mechanical pressure waves, but one in which we perform the active, neurological process of grouping different streams of sound stimuli into perceptive wholes. This has been accomplished by a reevaluation of the extremes of perception, a kind of "listening to listening" that again shows how inhabiting the audiosphere means paying close attention to the processes that precede final products (while also questioning the unequivocal "finality" of those products themselves). A catalogue of sonic tendencies involving pure noise, semantic satiation, and so on, have all either germinated within or been given a dramatic boost by the

unofficial audio networks. Once these networks persisted into an age when physical storage media was less essential to the distribution of an artwork, such tendencies diversified yet more, along with the critiques animating them. Some results of these investigations included recordings that stretched the meaning of "long player" far beyond what would be acceptable for a vinyl LP, or those that exploited the lack of audible surface noise contained within a digital audio file, in the process rehabilitating the possibility of silence as a carrier of information.

In the same spirit, this culture's reclamation of sensory affect extended beyond the reassertion of sound as a resolutely physical force. The music industry concept of the standardized, two-dimensional record album cover, generally intended as a passively consumed advertisement for audio content, was often discarded in favor of portable sculptures, fetish objects, or items that fulfilled a more ritualistic, participatory function; see, for example, Daniel Menche's *Dark Velocity* cassette release,[14] the audio portion of which required power tools to extract it from its metallic casing. This penchant for customized packaging of self-released audio recordings often revealed a sense of humor that favored the absurd, encouraging ludic competitions for unorthodox design work. In this light, an unverified tale related to the author about a cassette being packaged inside a roadkill animal, and offered for sale to Seattle's Anomalous Records,[15] doesn't sound *completely* implausible.

The audiosphere, to its credit, realized that truly unique phenomenological investigations can be hampered by limitations on personal disposition. Having been freed from higher-level dictates about the timing of new products' delivery, or the quantity and quality of product needed to meet demand, it seemed contradictory to then self-impose limitations upon something as fundamental as the *attitude* with which new work was presented to its audience. Such attitudes toward reverence of the final product have been

impressive in their breadth: many creators saw an opportunity to craft objets d'art or releases of a "bespoke" nature, approaching this task with a definite degree of responsibility and solemnity. The same relative freedom also gave birth to an explosion of inspired tricksterism and to violent deconstructions of the art object and its ontological value. The former was typified by something like the unique efforts of the Argentinian group Reynols,[16] including "releases" containing no playable media whatsoever, or accompanied by a functional wooden chair (both of these reinforcing the idiosyncrasy of live activities such as using pumpkins as "guitar amplifiers" or performing with the stones of Jorge Luis Borges's grave). The latter was embodied in unplayable, nihilist "anti-records" from artists such as (yet not limited to) The New Blockaders,[17] Runzelstirn & Gurglestøck,[18] and Billboard Combat. The latter memorably evangelized such un-products as "proselytizers for NOTHING, literally … total destruction in microcosmic form," and promised that "the destruction of your stereo is a pure state, with no interference from signs, be they indicative or expressive."[19] Whatever one thinks of these statements, it is clear that such attempts at deflating the aura or profundity of art, using aesthetic terrorism to challenge the very structure supporting these activities, would hardly be permissible in most modern spheres of social influence.

The examples above hint at a type of participant whose identity was formed from their being part of interpenetrating creative networks, a fact that challenges Sloterdijk's notion of the "mutual inaccessibility" of expressive spheres.[20] Many of the most intriguing sound artists have used audio as a means of either abstracting, condensing, or amplifying their findings from research into other creative disciplines, and it is not at all surprising that creators from the realm of intermedia, whose transitional experiments occurring in the technical and theoretical spaces between codified art forms derive from movements like Lettrism or Fluxus, have filled out the ranks of the audiosphere. The Lettrist International, in particular,

reclaimed the creative *prima materia* of the written letter as "an entity of sound," providing a working model for future generations. This interdisciplinary drive was supplemented by individuals like the entomologist Irene Moon[21] or Silicon Valley worker Larry Wendt,[22] who chose to shuttle their "day job" experiences into the realm of sonic art rather than keeping these activities compartmentalized and separate from creative expression.

An interesting coda here comes in the form of creative tools that have inherited many of the characteristics of audiospheric culture, reasserting it as something special in the age of instantaneous information transfer and its supposed dearth of true "hands-on" commitment to a craft. The resurgence of modular analog synthesis as means of expression, along with the rise of open-source hardware platforms (e.g., Arduino) provide an interesting case study all on their own, since they apply to audio hardware the ethos already discussed: the building of unique modular systems is similar to distribution of one's works in the networked audio culture, in that the building process is viewed as being as much a product of personal inventiveness and expressiveness as the sonic results achieved with these hybrid creations. As the mediating individuals that comprise the audiosphere act as "social synthesizers," it seems appropriate for many of them to take up instruments that require confronting impermanence (note the lack of "preset" programs on these devices), and whose unique internodal connections (i.e., patch cables) seem as symbolic of more comprehensive forms of life organization as the interchangeable "nodes"/modules themselves.[23]

However, as this assessment of the audiosphere ends on a note about its relation to technology, a final warning about technological determinism is needed: while technology was to a large degree a facilitator of the audiosphere's activities, technology did not will it into existence. Past developments were, and future developments will be, animated not by a need to do the bidding of technology,

but by a still unquenched desire to make new languages from the phenomenal world of sound. The exceptional characteristics of those who built the audiosphere have made all the difference between its being a genuine alternative to other forms of communication, and its being another social network that amplifies existing conflicts and resentments. The interdisciplinary nature of these creators, their acceptance of purposeless play and autotelic behavior as developmental tools, and their enthusiasm for being mediators rather than celebrated "personalities," all add up to something very different from the systemic thinking that has guided other types of network. Ultimately, this has been the difference between a sphere *filled* with energy, and one whose complex, surface latticework of coordinate points conceals a hollow shell. To update a sentiment made by the Gutai[24] group in their manifesto: the technosphere has been quite successful at the transformation of raw materials, but the audiosphere has given them life.

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1 "Audiosphere" is a term proposed by Francisco López, which synthesizes the wide territory of the global underground realm of experimental creative audio.

2 Willem Schinkel and Liesbeth Noordegraaf-Eelens, "Peter Sloterdijk's Spherological Acrobatics: An Exercise in Introduction," in *In Media Res: Peter Sloterdijk's Spherological Poetics of Being*, ed. Willem Schinkel and Liesbeth Noordegraaf-Eelens (Amsterdam: Amsterdam University Press, 2011), 13; Peter Sloterdijk, *Sphären I: Blasen* (Frankfurt am Main: Suhrkamp, 1998), 45–47.

3 This was, in fact, the official mission statement of Facebook as of 2017.

4 Peter Schöller, "Unterirdischer Zentrenausbau in japanischen Städten (Construction of Subterranean Centres in Japanese Cities)," *Erdkunde*, 30, no. 2 (June 1976): 108.

5 Ibid., 124.

6 Jean Baudrillard, "The Ephemeral," in *Utopie: Texts and Projects, 1967–1978*, ed. Craig Buckley and Jean-Louis Violeau, trans. Jean-Marie Clarke (Los Angeles: Semiotext(e), 2011), 84.

7 Ibid., 79.

8 Archives available at https://www.electroniccottage.org.

9 Lord Litter, "Here Comes The Rest Of The World!," *Electronic Cottage*, no. 4 (1990): 19.

10 Timothy Chandler, "Reading Atmospheres: The Ecocritical Potential of Gernot Böhme's Aesthetic Theory of Nature," *Interdisciplinary Studies in Literature and Environment* 18, no. 3 (2011): 558.

11 Discography available at https://www.discogs.com/artist/58566-Maurizio-Bianchi.

[12] Discography available at https://www.discogs.com/artist/32096-%C3%89tant-Donn%C3%A9s.

[13] Discography available at https://www.discogs.com/artist/81278-Phauss.

[14] See https://www.discogs.com/Daniel-Menche-Dark-Velocity/release/945988. Menche's streamable discography available at https://danielmenche.bandcamp.com.

[15] This entity operated alternately as a record shop, distributor, and label. Further history available at https://www.discogs.com/label/9993-Anomalous-Records.

[16] Many of the more notable Reynols releases have been archived at http://www.ubu.com/sound/reynols.html.

[17] Further biographical information available at http://www.thenewblockaders.org.uk/.

[18] Further biographical information and relevant sound samples available at http://www.ubu.com/sound/runzelstirnandgurglestock.html.

[19] Andrew Smith, quoted in liner notes from *Metastasis*, by Billboard Combat (Andrew Smith), RRRecords, 1988, LP.

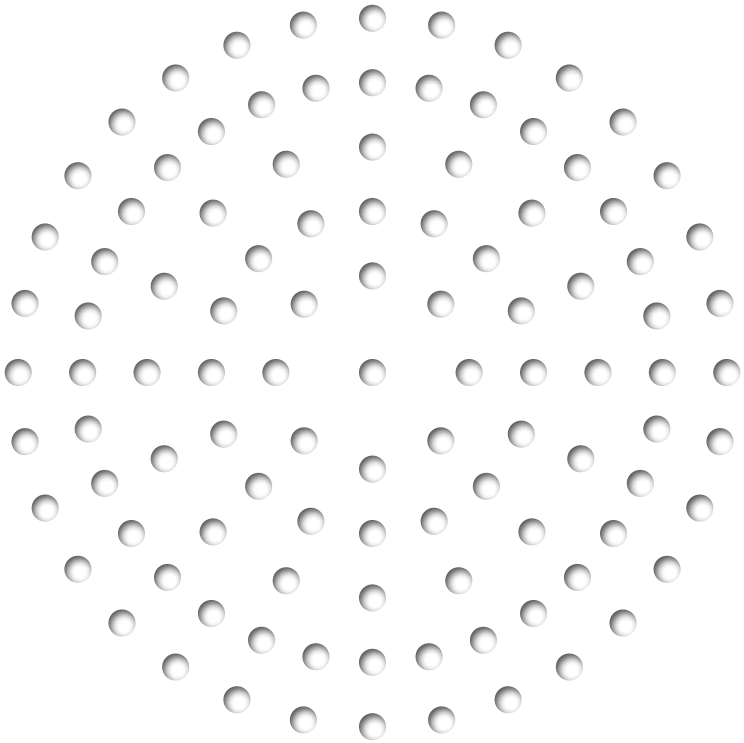
[20] "By 'society' we understand an aggregate of micro-spheres (couples, households, companies, associations) of different formats that are adjacent to one another like individual bubbles in a mound of foam and are structured one layer over/under the other, without really being accessible to or separable from one another." Peter Sloterdijk, *Sphären III: Schäume – Plurale Sphärologie* (Frankfurt am Main: Suhrkamp, 2004), 59; translated in Christian Borch, "Foamy Business: On the Organizational Politics of Atmospheres," in *In Media Res*, ed. Schinkel and Noordegraaf-Eelens, 31.

[21] Select filmography available at http://ubu.com/film/moon.html.

[22] Further biographical information and streaming samples available at http://www.ubu.com/sound/wendt.html.

[23] Curiously, *I Dream of Wires* is the name of one of the leading documentary films on the subject of the modular synthesizer revival.

[24] Further expository information available at https://www.tate.org.uk/art/art-terms/g/gutai.



Random Access Memory: Personal Collections and the Poetics of Discovery

Margie Borschke

The American artist and bohemian Harry Smith collected many things: Ukrainian Easter eggs, discarded 78s, found paper airplanes, Seminole textiles. Every surface in his room at the Chelsea Hotel in New York City was covered with stuff, some rare, some random, and Smith would protest if anyone dared disrupt his disorder. There was a method to the madness.

Smith's best-known creative legacy was culled from one of his many collections: *The Anthology of American Folk Music*, a six-LP box set made up of obscure recordings of folk, blues, and country songs from the dawn of the music industry, the late 1920s to early 1930s. Chosen by Smith from his vast collection of around 20,000 out-of-circulation 78s, the *Anthology* was released on the Folkways label in 1952. Released when the recording industry was barely in its infancy, but nevertheless was already in a period of upheaval as the era of 78s gave way to vinyl LPs, the *Anthology*'s outlook was eclectic and its impact was significant, reviving songs and styles and careers. Described by Robert Cantwell as an "enabling document,"[1] the *Anthology* was instrumental in kick-starting the mid-century folk revival in the United States and ushering in the new youth counterculture that followed it.

Smith was not really an archivist or an ethnographer as he is often described. He was not an expert on "folk" as a genre. Choosing songs that at the time most professional musicologists and folklorists would have rejected, the *Anthology* embodied the work of an artist and enthusiast, rather than an expert. His selections reflected his personality—unconventional, erudite, mysterious—and rather than follow scholarly conventions or industry norms, Smith followed his ear and his own interests and tastes. He valued the forgotten, the exotic and mysterious, and said that he selected songs not because they met certain criteria of a genre but "because they were odd."[2] It was the oddness and eccentricity of the collection that came to be valued by its listeners and why the *Anthology* could make music that was recorded just a quarter of a century earlier sound as if it were from another planet to the young people who encountered it.

What was new about this collection of old recordings was that it reconfigured musical history through its reproduction, rearrangement, and repetition. Recorded culture could be a living culture. Its power stemmed in part from offering a particular genealogy—Cantwell called it "a curriculum in mystical ethnography,"[3] one that was not definitive or representative but instead committed to promoting its own worldview. "The whole purpose is to have some kind of series of things,"[4] Smith said. A collection, he believed, was a tool he could use for "programming the mind." Like some kind of cultural alchemist, Smith turned disparate regional and minority styles from across the United States into the soundtrack for the urban avant-garde. It was access to part of this collection and its eccentricities as well as Smith's own mystical interpretation that enabled new possibilities and forged new living traditions and communities, through a carefully curated encounter with artifacts from the past.[5]

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I resurrect the story of Smith and his *Anthology*, its dissemination and its cultural impact, to draw attention to a collection that is at the heart of this exhibition: the personal collection of audio art amassed by the artist and curator Francisco López over decades as part of his own practice and participation in a global community of artists, collectors, and makers and their work. A collection is many things, literally—thousands of artifacts in this case—as well as figuratively; it is part document, part index, part resource, part scholarly assemblage, part memory theater, part enabler of scenes, part serendipity, part unfinished business. Every collection is at once a set of data, a creative expression, and a possible wellspring for unknown future use. If we consider the *Anthology* as an analog antecedent to today's networked collections and distribution practices, it reminds us that boundaries, storage, reproduction, and circulation have always been culture-making activities. All media was always already social. It also reminds us that in popular music cultures, personal collections have a long history of influence, and that our analog past has shaped many of the ideals in our networked present. Communities of experimental audio artists are also shaped and informed by their experiences in other creative communities, be they DIY music scenes or artist-run galleries. We do not leave our histories behind. To consider the poetics of discovery in the age of the internet and mobile technologies is to consider the affective dimensions of how we encounter, experience, and use collections, and why new ideals of authenticity seem to emerge around modes of discovery, storage formats, and circulation at a time when data is abundant, access is easy, and attention is imagined as a scare commodity.

In this era of abundance and accessibility, we've come to expect all the songs, all the books, all the maps, all the art, all the games, all the movies, all the data to be available on demand. We're told that someday soon all the fridges, park benches, and front doors will join them in one big Internet of Things. But the internet was never really just about things or data or nodes—recall that its very definition is

that it is a network of networks. So perhaps more transformative than access to particular artifacts, is access to multiple and competing ways of gathering, ordering, understanding, and experiencing cultural data. New social and cultural possibilities and formations arise when highly personal collections and other forms of ad hoc archiving, arranging, and interpreting cultural data become widely accessible. The use of a personal collection to seed this exhibition is not about the collector or about the experience of a particular group of works or artists; it draws attention to the multifaceted nature of experimental audio as a creative practice and community of exchange and inquiry. Instead of the individual and the work, this approach emphasizes the collective and generative practice.

López is quick to tell me that he does not identify as a collector and suggests that his vast collection of micro-editions is almost accidental, an unintended accumulation of audio art marking decades of intense exchange between himself and other artists around the world. Yet this ad hoc archive is more than the sum of its parts: it is its own kind of social network, a register for the exchange of ideas and works and a partial index of relationships between participants in the scene. To highlight the social nature of the archive is not only to ponder the process of its generation, it also points to and speculates on the existence of thousands of companion collections, thousands of alternate ways of knowing and dreaming scattered across the globe, each generating its own magic encyclopedia of social networks and audio experiments, each offering an opportunity for what David Novak refers to as "authentically remediated experience,"[6] a quality that might be thought to be missing from a more scholarly assemblage.

While networked access to collections and archives are often celebrated, this abundance can also be a cause for lament. When everything is accessible, what deserves your attention? How can we possibly make sense of an abundance of overlapping and

incomplete collections let alone all the relationships they index and all the artifacts they hold? Will ubiquity undermine the magic of discovery and the value of experience? It is in this context of digital abundance, in the sea of data and tangle of networks, that we see the rise of new ideals of authenticity build around experiences of navigation, encounter, and discovery. We seek refuge from distraction in the analog and obsolete and follow the desire lines drawn by the recently discarded. We long to reengineer serendipity in the face of algorithmic prediction and yearn for what Novak called "blind encounter with pure mystery."[7] These are human problems, not machine-learned. It is here, in the fuzzy realm of affect, that the personal collection is valorized as a creative and humane technology, one that helps us navigate the vast sea of data and might serve as a balm for the anxieties we experience about information overload. No matter if the wayfinding is unintended—any route through will do. Recall that collections are dependent on the creation of boundaries—what's in and what's out—and it is through the imposition of limits that we forge ahead.

In this exhibition, López seeks to curate a social audio experience without recourse to physical objects or relying on the rhetorical possibilities offered by various recording formats and technologies. No boxes with blinking lights or dusty vinyl to fetishize; instead López is aiming to create the conditions for a blind encounter with audio. You are asked to stop and just listen. There is a method to the madness. There will be no easy way to discern whether what you are listening to is part of López's collection or if it was commissioned by López for the show—genealogies are living things, they cross and mix and you will bring your own histories of listening with you to this experience. While López's emphasis is on the experience of audio as immaterial and ephemeral, by situating access to this personal collection and other audio art in the physical space of the museum, it also rematerializes social listening practices, by creating a new limited context for its access and use. In doing so, listening in this

space opens up this flourishing global underground of experimental audio practices to new minds, new ears, and new genealogies of listening. The physical space itself functions as an attention technology, generating new opportunities and new contexts for deep listening and encounters with mystery. The oddness is the point of it all.

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1 Robert Cantwell, "Smith's Memory Theatre: The Folkways *Anthology of American Folk Music*," *New England Review* 13, nos. 3–4 (1991): 364.

2 Hugh Barker and Yuval Taylor, *Faking It: The Quest for Authenticity in Popular Music* (New York: W.W. Norton, 2007), 75.

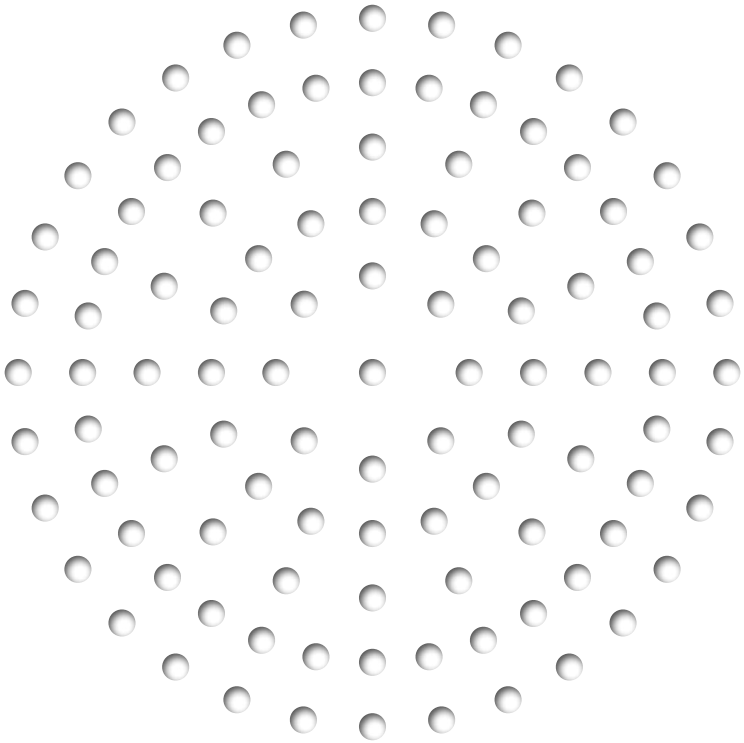
3 Cantwell, "Smith's Memory Theatre," 365.

4 Harry Smith, interview with John Cohen, *Sing Out!* 19, nos. 1 and 2 (April–May and July 1969), cited in ibid., 373.

5 For further discussion of Smith's collection, see Margie Borschke, *This is Not a Remix: Piracy, Authenticity and Popular Music* (New York and London: Bloomsbury Academic, 2017), 147–55.

6 David Novak, "The Sublime Frequencies of New Old Media," *Public Culture* 23, no. 3 (2011): 615.

7 Ibid., 614.



Declaration

Víctor Nubla

I Can Assure You That

Of the sixty-three years that I have been alive or semi-alive, I have devoted forty-three to something that may appear not to exist, unless it is clearly taken out of focus. Two-thirds of my life, exactly. Like those magic objects that are only visible when you look at them out of the corner of your eye, whichever way you look at my principal activity over the last few decades, it is a blind spot. Perhaps I do not exist either. You, dear readers, know how many hours we must hand over to the implacable theater of shadows. For this reason, it is no longer enough to unfocus: you must do so with a clear vision and a spirit quickened by curiosity, because otherwise it does not exist.

It Does Not Exist

In 1986, I was invited by the Barcelona City Council to collaborate with a team of sociologists who had carried out a survey on the cultural habits and customs of the city's inhabitants. It was a detailed survey (with interviews lasting more than an hour) conducted on quite a large sample of the population, and it was unusual in that the questions were not aimed at individuals but at human groups in various habitats (with their prior consent, of course). This included large families, shared student apartments, and other forms of cohabitation in a common space. It was a serious and ambitious

survey, and Pierre Bourdieu's spirit appeared to emanate from the team of sociologists running the project. I joined as music consultant in the data processing stage, once the interview period was over.

We did our work very well, but the results started to seem implausible. I get around, I interact, I know a lot people, this is a Mediterranean country, folks talk about their tastes, and it was surprising, to say the least, to find that most people were crazy about Luciano Pavarotti and José Luis Perales, given that the impression on the streets was otherwise. But the computers confirmed it, spitting out big printouts full of little blue and white lines.

Then we came up with the idea of going back to the protocol and checking how many people had decided they preferred José Luis Perales over Joan Manuel Serrat, who was ranked third. We found that it was a very small amount. Very few people had "voted" for any of the three. On the other hand, the rest of the names, over a hundred, did not account for much of the population. So what was going on?

The mystery was solved when we explained it to the machines, and they finally came up with a result. According to those surveyed, the most highly regarded musician, group, or composer was "none in particular," followed in second place, hot on its heels, by "don't know / no answer."

It Exists
But it is anonymous.

In an interview with *Margen* magazine, musician-composer Nick Didkovsky once said, "We shouldn't forget that most people have no reason not to like creative music."

In my experience, if people don't have a good reason to do something, they don't do it. So perhaps all that is required is a shift

in perspective. Firstly, in the globalized world, peripheries seem to become invisible. But they are only invisible to those looking from the center, which is not a geographical center, but the hologram that the hegemonic consumerist system has implanted in our gullible minds. Secondly, in this global context, peripheries have to be taken into account in order to get an idea—global of course—of the supposed phenomenon. Finally, we should not be fooled by the idea of minority or unpopular preferences in a globalized culture: we are millions.

Now, let us take a quick trip back in time.

Brief Retrospective

Mail art (or postal art) is the name given to a practice that Fluxus began in the 1960s, although its origins can be traced back to the historical avant-gardes, particularly Dada and Futurism. It consists of the worldwide dissemination of art via the postal system. Even the packaging (envelope, box, etc.) often becomes an art object, the artwork itself.

Philips began selling compact cassette tapes in 1962, and a few years later it licensed the format to other manufacturers. Audio technology entered the popularization phase in the decades that followed. And so we arrive at the 1980s, when the products had become small and affordable enough to allow people to purchase electronic equipment and create, record, and serially produce sound in the comfort of their own homes. Even though these advances seemed to offer a solution to the problems of popular music groups—expensive recording studios, the need for a record company, the pressure to produce a certain aesthetic, the lack of control over the finished product and graphics, and so on—they did not make up the bulk of users of these new media; most were young people who ventured to experiment with sound at home. It was the birth of the age of audio cassettes and domestic electronic

music. While "popular music"—under that name and concept, regardless of the cost—became integrated into the recording industry, a real popular music movement started to emerge outside, or on the margins of, the system (although it merged with it, as the best guerrilla warfare manual would recommend). Every musician, at home, was also a label and a distributor, and cassettes started to circulate around the planet via the same means as mail art: the postal service. In the music they made, "the emphasis was on the accidental, on gesture, environment, ceremonial elements, etc., as well as on the catastrophic use of the most neutral technologies."[1]

The First Network

It was a rhizomatic network that spanned the globe and stimulated active consumption and co-creation. New elements emerged to provide support, dissemination, and cohesion. Three interesting examples in the 1980s were the international *Contact List of Electronic Music* (*CLEM*), published fortnightly by Alex Douglas in Canada and mailed out to subscribers to enable the exchange of information and distribution of audio cassettes; Paris-based fanzine *Orquídea Femenina*; and *Cassette Gazette*, published in Belgium by Alain Demeure—the latter two listed thousands of solo or collective projects for production and dissemination.

In 1988, talking about the presence of Spanish projects in that worldwide network, the editor of *Orquídea Femenina*, Bruno Haumont, said, "It wasn't a question of making an exhaustive list of all new music groups to be found in Spain … the fanzine would have been as thick as a phone book!"

This leads us to one of the most interesting aspects of the whole phenomenon: decentralization. The established record industry markets offered (and probably still offer) products intended for mass consumption in the English-speaking world. In the audio cassette

network, however, production is rarely more abundant in the countries that dominated the making and consumption of popular music. Even big cities were not centers in this major twentieth-century social phenomenon. This is verifiable: the nodes of the network were in places like Boulder, Puertollano, Marseilles, and Pordenone.

While I thought it might be useful to explain this context, these words are not intended as a historical account. I therefore respectfully urge readers to make their own extrapolations to verify that, taking into account the horizontality of the internet and digital data storage formats, as well as the exponential increase in the music production features developed for computers, parallels can be drawn between the historical period I have been talking about and the present. We will find the same elements: internationalism, self-management, simultaneous interaction between nodes, heterodox formulation and practices, etcetera.

And Now...

So perhaps it never stopped. People ceased to make audio cassettes on home copying machines and started burning CDs on personal computers, and the postal system was abandoned when the internet was able to take over. But it is the same collective practice, spread throughout the world. A universe of freedom within another that seems to be both full (or hollow?) and stifling.

It is a phenomenon with many noteworthy aspects. For instance, the very interesting fact that production and distribution processes also become collective practices. I think this is crucial, and it can be easily linked to the DIY concept associated with the punk movement in the 1970s and with free radios and the world of fanzines. But it does not emulate the mechanisms of the record industry, as it is based on a system of exchange. While records by my group, Macromassa, were being sold in England, for example, here in Spain we would sell

records by Metabolist, an English group with which we had agreed to swap our self-produced releases. This was in the 1980s; it is much simpler now.

Another interesting aspect is the invisibility of a phenomenon that so many thousands of people from so many countries participate in. The key here is what I mentioned earlier about peripheries, although we can also question whether the idea of visibility and popularity that prevails in our society today has anything to offer a planetary community that is always interconnected, and is neither commercial in purpose nor grounded in academia. Yes, that's fine. But it does not mean that we are not subject to what Llorenç Barber would call an ongoing "aesthetic cleansing" operation. It is not overly conspiranoid to say that the arduous task of encouraging the development of a homogenous "single taste" has been carried out with great care and precision by the music industry, the media, and official culture over the past few decades, with unprecedented success. So by this stage we should not be surprised to find that certain sound practices are subtly silenced. What is remarkable is the fact that it is nonetheless a global phenomenon, a universal movement that consists of an intersocial, collective practice that enriches the individual and communities. It is certainly not a business, nor is it leisure. Maybe it is art, and when we say "collective (or community) art practice," several zeroes drop off its value for some, while others are obliged to add some zeroes to their spending. But I'm afraid that is the direction in which art is heading. And it is by no means disconnected from the people, given that it is made by the people (the community). To quote José Ortega y Gasset, we could say that a thing "is not unpopular because it is difficult, it is difficult because it is unpopular."[2] Or to state the obvious, if something is easy to find, it is popular. The accessibility of a product is more important than its quality. And we have reached a point where concepts like popular, unpopular, art, and distraction become treacherous reefs jeopardizing the reader's smooth sailing through this text.

Nonetheless, I assure you that we are very distracted. For example, states continue to mix up the concepts of "traditional" and "popular" with impunity.

Visible, Displayable?

Is this an example of the curious phenomenon by which something vast becomes anecdotal? At any rate, we cannot analyze this "audiosphere" from the perspective of the market, which classifies things before it presents them because the unclassifiable cannot be sold. What exactly are we talking about anyway? Sound art? Experimental music? Contemporary music? Do we need to give it a name? I personally avoid using the term "music" to refer to this dangerous and heartfelt show of freedom. There is no reason to change anything. There is no antagonism from this part of reality. There is no need to invent something that already exists. And it is not going to change the world. The world will have to change on its own, because what we are talking about is already a change in itself. It is a major example (perhaps that is why it is invisible).

Why Not Audible?

All possible answers bring us back to square one: it is a social, collective, altruistic, constructive practice. It is like an endlessly woven fabric that mends the things of the world. We have a global network of people working with sound. They do not have business or market objectives, they are not trying to establish links with academic or industry trends, and the network is invisible. But it is audible. So instead of trying to shed light on it, perhaps we should be lending an ear. And please don't ask me about its usefulness. Art is useless, and that makes it dangerous. Then there are applied arts, like pop, rock, or whatever people can learn by heart so they can do other things at the same time, which is never dangerous even though it appears to be so. I call it "design," although depending on my mood I might also call it "suicidal continuist crap," or if I'm feeling non-verbal, "lemmingmania." My apologies, my friends, but I

grew up with punk and the struggle to avoid alienation automatically places you in the weird category of weird. As Ida Vitale said, "A child gets more and better forms of amusement from a looking glass than a tricycle. His careful attention, his newfound curiosity, will give rise to many things: for starters, his own private world. I would say civilization is reborn from it."[3]

I don't know if you agree, but I believe there is a big difference between culture and civilization.

I could be more explicit, but I know you prefer to savor the mystery, to catch glimpses through half-open doors, to read between the lines and intuit the unsayable (ineffable), so I call on Nietzsche's maxim: "He who sees badly sees less and less; he who listens badly hears more than has been said."[4]

And there is so much to hear! As long as we don't waste time listening to things, of course.

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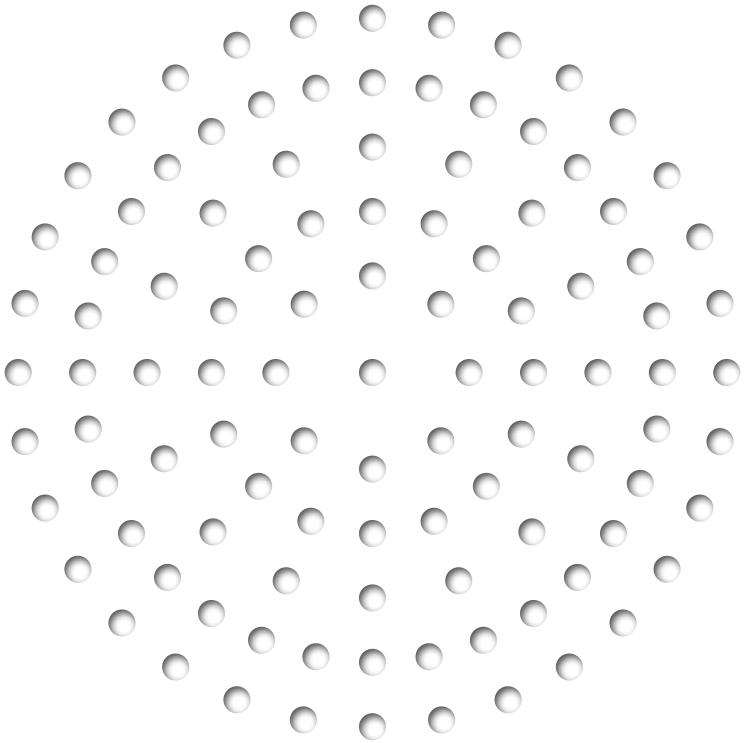
1 Llorenç Barber, "La 'nueva' música española en los noventa," *Zehar* (Arteleku newsletter), no. 23 (1993): 19.

2 "No es impopular porque es difícil, sino que es difícil porque es impopular." José Ortega y Gasset, "Musicalia," *El Sol* (Madrid), vol. 5, no. 1116, March 8, 1921, 3.

3 Ida Vitale, "Intención," in *De plantas y animales: acercamientos literarios* (Mexico City: Paidós, 2003).

4 Friedrich Nietzsche, *Human, All Too Human: A Book for Free Spirits*, trans. R. J. Hollingdale (Cambridge: Cambridge University Press, 1996), 184.



Listening Cultures and Deregulation Policies

Luis Alvarado

In Lima in the 1980s, there was an experience related to sound that I have not forgotten: all of a sudden we would hear an explosion, and the city would immediately be plunged into darkness. A total blackout. It would turn out that the terrorist group the Shining Path had blown up a high-voltage tower. This was a regular occurrence, and those of us who grew up in that decade remember that darkness as a place of uncertainty.

The sound of the explosion giving way to darkness has been a metaphor for a country on the brink of the abyss: a major economic crisis in the midst of a war between the military and armed groups. I remember another sound from that period: wandering through a popular market, mingled with the usual vendors' cries, I would hear the sounds of chicha and huaylarsh music coming from the small radios tuned to the AM signal. Amplitude modulation radio had become the medium for the dissemination of music associated with the migrant masses that had transformed the city. I remember hearing Andean-sounding electric guitars on AM mono. It was not that it was impossible to listen to recordings in better conditions, as the entire city center was full of street hawkers selling cassettes with powerful (or noisy) sound systems. But I was fascinated by the practice I came across at some markets, of people listening on the

AM band with its inherent sound limitations. The sound was poor but functional, it was there to accompany.

It is impossible not to draw parallels between this scenario and the emergence of underground culture in Lima, given that it was the backdrop to all the noise and experimental projects that arose as a result of the subversive rock and punk of the time. This is not the place to go into details about the history of Lima's experimental underground, but I would like to note that in the late 1970s and early 1980s, before the emergence of the DIY culture associated with punk, there was another context in which Peruvian artists started to produce work with experimental sounds. In a compilation that brings together some of these artists and their peers in Latin America, I wrote:

> These artists belong to an age between the emergence of hippiedom and the arrival of punk. In other words, between the emergence of an industry and the birth of the new DIY logic of distribution. And they also belong to an age between the development of the big electroacoustic music labs and the advent of affordable synthesizers and samplers for the masses. In other words, they are at that crucial stage of technological socialization, at the start of small home studios and labs. And above all, they share the status of being Latin American, and as such the difficulties of being part of that particular period in time: the ideological polarization brought about by the Cold War, which witnessed complex social processes, dictatorships, radicalizations, and also debates on the legitimacy of a music that spoke from its own place. It was a time for the incorporation of native sounds, for the use of poor or simple technologies, connected to their own context.[1]

When I started going to experimental music concerts in the late 1990s, I knew very little about what had been happening with experimental music in Peru. If there was a music that was obscure,

that was it, because hardly anybody was able to give me information. I knew there was a small movement, there were concerts, records were released, but I didn't know whether there were any precedents from the past.

My overall knowledge of sound experimentation expanded thanks to the internet. I was able to learn about international movements and I started to come up with more questions about what had happened in Peru. That was when I started to work on documenting experimental and avant-garde music in my country. I looked for the protagonists, I interviewed them, I created an archive and released records, first with international labels and then on my own label, Buh Records. And I did activist work with young artists at the same time. My interests led me to produce concerts and festivals, an activity that I have been doing continuously for the past fifteen years. There have been many records (over a hundred), many concerts, and a lot remains to be done.

Dehierarchization

One of the consequences of the information society has been the dehierarchization or deregulation of culture. It is a far-reaching and complex process, but I am interested in a particular aspect relating to experimental music cultures that has to do with the fragmentation of music consumption. By this I mean the difference between current practices and the traditional organization of consumption, managed by official "taste-makers": record labels, specialist magazines and fanzines, radio programs, music critics, and so on, both mainstream and underground. It is not that these agents have ceased to be influential; they still play a more or less important role in the music ecosystem. But the scenario they operate in is no longer the same, and the conditions of deregulation have already irreversibly affected this new scenario.

When I talk about dehierarchization and deregulation, I am referring to a process that has led to the breakdown of the traditional system

of directed consumption and its replacement by a multidirectional system. This has allowed the emergence of alternative information cells that are starting to introduce new variables, which in turn generate changes or new readings around the official narratives of music. But this breakdown has not opened up a means of escaping from the capitalist system. On the contrary, the capitalist system still determines the distribution of attention in the world of the internet. But the scenario has changed, and it is starting to generate some possibilities. Perhaps not a new system, but the creation of a certain autonomy that may continue to grow.

I first used the internet when I started university in 1998. I was eighteen, and I was on a quest for strange sounds. It was then that I discovered Ubuweb, the huge online multimedia archive that had compiled an enormous amount of limited-circulation material on international sound poetry, music, and experimental and underground film. They were publications printed in very small runs, almost esoteric and very hard to find, and it was now possible to listen to them online or download them. A clear successor to the alternative distribution logic of mail art and the later cassette culture, the internet and its mega-reproducibility became the quintessential tools for creating a ubiquitous public access archive like Ubuweb.

Those early years of the twenty-first century were also a period of intense activity on the so-called blogosphere, which revived the spirit of fanzines on the net. A very large number of enthusiasts around the world created their own online blogs, and published their thoughts on records, films, politics, and alternative culture. Some music blogs were highly influential. Other blogs, regardless of their media impact, were more important as a symptom of the deregulation and dehierarchization I am talking about. I remember, for example, Mutant Sounds, which hosted very strange psychedelic and experimental music records from all over the world and, unlike Ubuweb, occasionally included projects from Latin America. The interesting

thing about Mutant Sounds is that it had become a guide to oddities, and that it started to create a taste for "obscure" recordings.

Perhaps one of the first notable informal results of this deregulation that unearthed and liberated "obscure" content was a project called Creel Pone: a bootleg record label run by Keith Fullerton Whitman that in 2000 embarked on a kind of crusade to create an untold history of electronic music through its lesser known recordings. Creel Pone released early records that had been issued in very small runs and had been totally forgotten. And it didn't just bring them back (unauthorized), it also organized them as part of a collection. Fullerton was living the dream of all directors of experimental music labels. The project was unlikely to last long, but it would be glorious while it lasted.

I could mention many other examples, such as the users of the file-sharing program Soulseek who uploaded enormous amounts of music that others could freely download, mostly vinyl and cassette rips, and only shared the collections on this site. Although it seems elementary, it was part of a paradigm shift: many users were starting to offer new doorways into truly underground music. Subjectivity and personal taste prevailed. Not only was the music finally available, but even the marginal of the marginal could now take center stage.

DIY Archives

YouTube was probably the medium that best capitalized on all this liberation of information in the era of users 2.0. The internet was inundated with obscure recordings uploaded by users, and the record industry crisis deepened due to the new form of music consumption through online MP3 file sharing and also due to the fact that it was no longer necessary to buy music in order to listen to it, basically leaving the record business to the world of collecting. It is true that collecting has existed as long as records themselves, but there is no doubt that online markets like eBay and Discogs contributed to its expansion.

Many records started to increase in value when they were uploaded, and some achieved the status of lost masterpieces. Midori Takada's *Through the Looking Glass* and Mort Garson's *Mother Earth's Plantasia* are two examples with the good fortune to have had the algorithms on their side.

The record industry crisis, together with the opportunities that technology offered for public information storage, had consequences for the experimental music universe.

All of these factors enabled the emergence of a new kind of independent record label around the world, operating under minimum conditions. For some, the culture of net labels and limited-edition CD-Rs seemed to be a new embodiment of 1980s cassette culture, in that it was a DIY format and a network for sharing alternative information. But the attachment to aura was gone. The proliferation of these small labels was refreshing and very bold. Because they had little to lose financially, they could risk releasing radical works. I remember classic net labels like Ruidemos and Clinical Archives that worked with artists from many parts of the world, because the idea of a global consciousness had already taken hold. The world of experimental music expanded beyond the usual historical and geographical parameters, and there was a whole universe of music to discover.

The creation of music archives in the early 2000s was very significant because it implied the construction of a narrative, a story that had never been told. I can mention some interesting projects such as the Latin American Electroacoustic Music Archive run by the Fondation Daniel Langlois pour l'art, la science et la technologie in Montreal; the Peruvian experimental music project Sonoteca at Espacio Fundación Telefónica in Lima; Sónec in Santiago de Chile; and (Ready) Media in Mexico City. Meanwhile, museums started to organize archival exhibitions on the history of the intersections of art and sound in Peru, Mexico, Chile, Argentina, Brazil, Colombia, and Ecuador. And,

at the same time, a process of research and reappraisal of the origins of avant-garde music in Latin America began, filling a gap in the Latin American tradition. It was not just a matter of adding a bibliography of Peruvian avant-garde and experimental music processes. The important thing about all of this is the fact that it has led to a revision of history as a series of convergences, which now needs to be revisited within today's context of mega-accessibility. If the history of experimental music (or whatever you want to call this whole underground world of strange sounds) is a global phenomenon, then this story must be told globally.

Cannibal Museum

I think it is important to note here that technological socialization has changed museums and art institutions, not just because the increasing affordability and implementation of video projectors and sound systems in exhibition spaces has created a demand for new content, but also through the arrival of new economic powers that see potential customers in this field.

Art galleries have become an expression of deregulation, because anything can happen in them, although perhaps the important thing is that they do in fact happen. Contemporary art has the capacity to embrace everything, and as such any form of expression with sound can be exhibited. In the maximized experiential space of a gallery, amateurism, underground culture, scholarly music, pop, and native music can occur. And perhaps nobody will notice the difference in the future. In many ways, this resembles the anarchic consumption that the internet generates, and that the new generations have incorporated into their routines.

New Erosions

When Alan Bishop (of the Sun City Girls) and Hisham Mayet founded Sublime Frequencies in the early 2000s, they created a new kind of distribution of traditional music aimed at consumers of independent

music, psychedelia, and experimental music. Their concept of "sound anomalies" was a good strategy for attracting listeners hungry for new or radical sound experiences.

Today, labels like Discrepant Records operate in this field of exploration. Their most recent catalogue includes experimental music and sound art, but also Columbian cumbia, and field recordings of ritual music from Haiti and Indonesia.

The inclusion of ritual music in an experimental music catalogue recognizes that listening is an opportunity to be moved by the unknown. And perhaps it should be seen as a quest for the new in the unfamiliar, or in a dimension that can only be understood in the context of spirituality or lived experience. I see this as another symptom of deregulation, where the convergence of sound experiences appears to be waiting to be subverted.

Lastly, I would like to mention a phenomenon that is taking place in Latin America, as in many other parts of the world: the development of a movement to make visible and generate opportunities for women and members of the LGBTQ community in the experimental music scene. As part of a new feminism, artists and researchers from Argentina (Maia Koenig), Colombia (Ana María Romano), Costa Rica (Susan Campos), and Brazil (Coletivo Dissonantes), to name just a few, are opening up an important space that negotiates between music genres with exhilarating ease. Koenig's Feminoise initiative—a compilation of works submitted in response to a public call on the internet—has unearthed the work of many female Latin American experimental music artists. Feminism has been one of the clearest symptoms of dehierarchization and deregulation in the experimental scene, and also, in a sense, one of its most destabilizing agents.

In conclusion, the process I have been referring to as the dehierarchization and deregulation of culture is expressed in a series

of symptoms that are changing the conditions and the scenario of cultural production. The experimental music scene has been affected and altered by this process, and it is heading for disintegration. Not necessarily the disintegration of experimental music, but that of Experimental Music as a monolithic concept that no longer has a place in our era.

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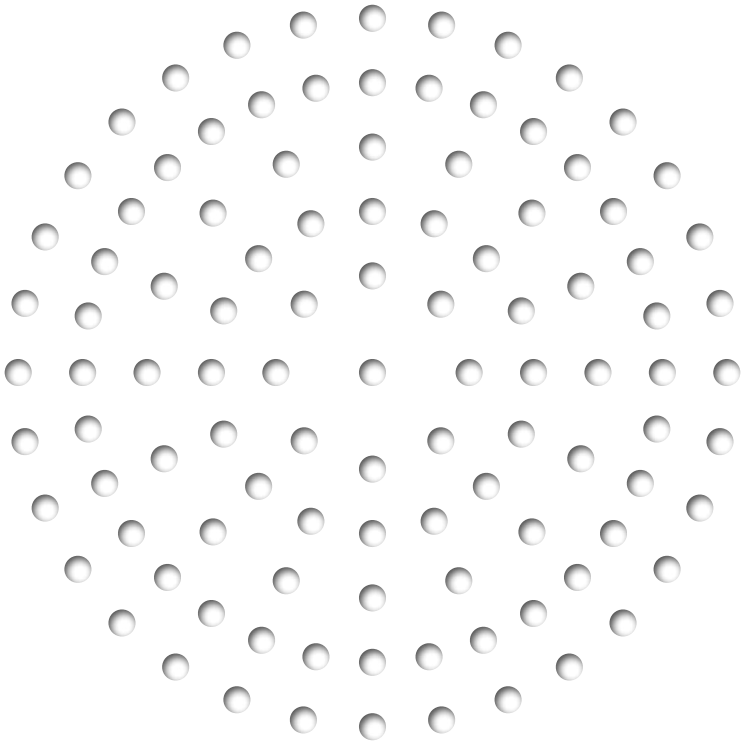
1 *Invenciones. La otra vanguardia musical en Latinoamérica (1976–1988)*, Munster Records, Madrid, 2017.



Taxonomy, Gaps, and Breaches: A Continuous Reading of the World through Fragments

Guy Marc Hinant

As I walked along I sang a mysterious hymn which I seemed to remember having heard in a previous existence, and which filled me with ineffable joy.

—Gérard de Nerval, *Aurélia*, 1855

What I would like to do here is to sketch a reflection, linked not only to my encounter with Francisco López, since we met many years ago, but also to my own work at Sub Rosa as well: on what is generally called an *écoute* or listening experience; on the ever-unique perception we have of such an experience; on the gaps that are required if we are not to diminish the prospects of our unpredictable expansions; and, finally, the acceptance of the unknowable, those things we cannot know.

Torus #1: Toward an Achronological Genealogy[1]

In the nature of the case, an explorer can never know what he is exploring until it has been explored.

—Gregory Bateson, *Steps to an Ecology of Mind*, 1972

The trouble starts when you have to classify. But that's also the point at which you begin to think. Organizing and arranging means establishing a methodology. But what kind? And in what order? Since entropy, by its nature, is increasing, to grasp things we have no choice but to classify them.

At the beginning of his *Steps to an Ecology of Mind*, Gregory Bateson engages in a dialogue with his young daughter, who asks him, "Why do things get in a muddle?... Well, people spend a lot of time tidying things, but they never seem to spend time muddling them. Things just seem to get in a muddle by themselves. And then people have to tidy them up again."[2]

Moshe ben Shem Tov de León would say that one has to avoid both the rigor of an established order as well as a formless chaos, neither too solid nor too fluid, so "it" can neither break nor slip through our fingers. For that, we have to establish an intermediate law. Between the pillar of the Law, rigidity, and the pillar of Imagination, fluidity, we have to find a median or mediating pillar. It is a question of density. To do this, we now have to embrace the knowledge we have of "it." But we can already see a first problem arising, since our future knowledge—which will force us to establish another type of classification—is not yet on the agenda. Above all, we have to see and recognize the facts, not as they are today, but as what they might be hypothetically in a near or distant future. Thus it is essential to preserve the gaps.[3] There must be holes, empty spaces, and fractions; there must be gaps.

I think back to a conversation I had with Francisco on one of his visits to Brussels. I told him that, while the English composer Hugh Davies hadn't found it too difficult to compile a complete list of the electronic pieces written in the 1950s, since then the number of such pieces had grown so large that a project of that kind had become unthinkable. Technology evolved, and seeing the boundaries between the arts dissolve (musicians/structures—visual artists/texture, to be

brief), I told him I was having a little trouble wrapping up my final volumes because of this elusive abundance. My plan had been to trace an achronological territory of this music from its beginnings to the present day—or, to be more specific, the day I stopped. What was produced is a result of my particular knowledge and a specific time. If others had constructed it, or if I would today or earlier in time, the outcome would have been different. It is compiled at that time and not in any other—not before and not today. That could render this sort of enterprise obsolete, as it fails, by definition, to arrive at a definitive solution, but in reality its beauty is capturing this formal fragility. Here is what was possible to do. Everything is in a constant flux, and every contemporary witness to these changes is marked by the trace of his or her blindness. Since blindness forms part of our survival kit, both blindness and forgetting are necessary for us. But Francisco already told me at that time that my attempts to grasp those fluxes were in vain. No doubt, I hadn't completely let go of this illusory notion of knowing things from above, from an aerial viewpoint, even if I knew it was a losing battle. After a short-lived anxiety, there was some kind of liberation. Our incompleteness is so necessary, it is so crucial that this action is unfinished, to *becoming*, on the verge of—going toward… the possibility of a force without disenchantment.

Kairology rather than chronology, multiple rhizomatic genealogies as testimony to the present creation of sound as social action. Gilles Deleuze and Félix Guattari's *A Thousand Plateaus* (1980) had had a powerful impact on us at the very beginning of Sub Rosa. This rhizomatic system saved me from my anxiety at seeing a world swept away by its unfolding dialectical logic. As a rhizome doesn't have a center, it has neither beginning nor end. A set of rhizomes establishes a plane, which Deleuze and Guattari call a "plateau." On this plateau, a given mode of knowledge takes shape, a meaning. If this knowledge is integrated or merged with other rhizomes, it changes its form and its nature. Therefore what is dry doesn't break and what is fluid doesn't slip through our fingers. We reconstruct and rearrange.

As an inevitable consequence of technology, the exponential proliferation of productions through new types of machines contributes to forming a constellation of very small units of publications, distributions, presentations, and exchanges of cultural products largely uncontrolled, and in fact that exist beyond the academic or commercial considerations that are also fostered by the era, indeed even more emphatically, but in other places. But these places are no longer contiguous There are gaps.

Let's go back. The idea of genealogy—it is inverse to that of the lost man searching his origins, of what mythology will restore his lost strength. On the contrary, it is a matter of starting from the moment where one is, in the way Nietzsche penetrates the genealogy of truth, good, evil, taboos, romantic love, and contracts. This inevitably leads to completely contradictory propositions. Nothing goes back like a fish swimming up a river, but like a meaning that gets lost amid all its beginnings.

And so, when I was at the end of my anthologies—the historical ones and the others—all achronologies and arrangements, all infinitesimal elements we will never know—the collection of all that drifted off toward the unknowable and anonymous. Because it is pointless to seek to know everything, Francisco told me, over a bowl of miso soup. Being within an unknowable and accepting it—that's what I began to do before the soup got cold.

Torus #2:
The Art of Sound is the Place of Sounds

As I am bound by more things, I become aware of the many things which bind me, for there are many different kinds of beauty. Thus, I am inflamed and bound in a relationship by one thing in one way and by other things in other ways.

—Giordano Bruno, *A General Account of Bonding* (*De Vinculis in Genere*), 1591

David Toop imagined *Sonic Boom* at the Hayward Gallery in London in 2001. It was an enormous space of sound installations, and it was an important step, both culmination and point of departure for many other similar exhibitions intermingling sound, music, moving images, architecture, and sculpture. It was the first large-scale experiment I saw that gave me a spectacular space of sound by means of an exhibition. Of course, sound had already appeared in museums and galleries (before that often associated with video art), but usually as a marginal phenomenon (Nam June Paik, Joseph Beuys, and Wolf Vostell, to name only those who were close to Fluxus). But they were always (islands) points of noise in a space of silence. The best definition of sound installations is that of Bastien Gallet:

> Installing sounds doesn't mean producing a visual installation of sounds but arranging them in a specific place. Installing sounds means composing an expanse and its encounter with a place. The sound installation is music on condition that we understand music no longer as the art of sounds but as that the art of sonic expanses (and durations) in relation to places it configures or invents.[4]

This reflection gave me a kind of key for developing a perfectly simple framework that classifies the seemingly chaotic flux of emerging phenomena. So I went ahead and imagined a possible arrangement.

1. The Forms of the Installation
Sound without a support (A)
Ambient sound interacting with the external environment **(A-a)**
Sound that interferes with the external sonic environment **(A-b)**
Production of interactive sounds **(A-c)**
Work on language **(A-d)**
Objects (B)
Material support for sound diffusion: loudspeaker… **(B-a)**
Material support for diffusion seen as sculpture **(B-b)**

Support-sculpture that produces sound **(B-c)**
Support-painting (exhibited alongside the sound) **(B-d)**
Video (C)
Visual material directly related to the sound (the video produces its own sound) **(C-a)**
Visual material indirectly related to the sound (the sound is produced by another support) **(C-b)**
Performance (D)
Related to the visual arts **(D-a)**
Related to the musical structure **(D-b)**

2. The Origin of the Concepts
Visual artists (O)
There continues to be a great variety of tendencies: from the Neo-Minimalists, whose work has a strong technological component (Ryoji Ikeda), to the practitioners of a new *arte povera* (Steve Roden) or low-tech art.
Musicians (E)
Musicians who clearly seek to transcend existing categories
Visual artists/musicians (OE)
Many musicians of the electronic scene that began in the late 1990s came out of the fine/visual arts but chose sound as their field of exploration.

3. Oscillating Phantom Axis: The Outside><Inside Relationship
Outdoor installations by definition interact with all the ambient sounds **(X)**
Indoor installations, by contrast, are isolated from the noises of the world (**Y**)

Thus, B-c/OE/Y might describe an artist trained as both a visual artist and a musician who produces sound installations that utilize the equipment of sound diffusion as a support inside a gallery or museum—this could be the work of Christian Marclay, for example.

I leave it to you to use this methodology, which is quite easy to apply in all museum spaces, known or unknown. Everything must fit in the palm of the hand (or in a book) or spread out endlessly in an unidentifiable space.

Torus #3: Hearing and Perceiving What (Perhaps) Does Not Exist

All experience is subjective … our brains make the images we think we "perceive."… The processes *of perception are inaccessible; only the* products *are conscious and … it is the products that are necessary.*

—Gregory Bateson, *Mind and Nature*, 1979

A long time ago, Isaac Newton discovered that colors don't really exist, that light is colorless, and that colors only have reality in our mind (every Kagyu Buddhist practitioner will tell you as much). It is the same with sounds—everything happens on the inside, not in the outside world, which is empty and devoid of voices.

In the beginning, at a moment whose content, intensity, and place we have forgotten, we all had this experience of listening before listening—before we knew how to hear, knew what it was—what it produced in us—to listen—not just to music created for that—but to the space in which we live—to listen, one might say, to Time.

One day, when I was a child, I wanted to preserve in memory a scene that in itself was of great banality—my father leaving from home. I remember exactly what street it happened on; I remember quite well saying to myself that I had to retain this scene in memory and preserve it forever. I walked toward the car and turned around so I would remember him well as he walked through the door and onto the sidewalk and crossed the narrow street to join me. I closed my eyes

so as not to mingle what I saw with the memory I meant to preserve. I only remember closing my eyes and the silent sounds of the street.

Like Edmund Husserl, Maurice Merleau-Ponty thought that it was impossible to know an object in itself, that it can only be apprehended through its accessibility to human consciousness. In other words, human beings can only conceive it through the means imposed by the limits of their perception. A phenomenological tautology.

One might think that listening is free of any processing—except for the processing carried out by our brains via the ear, the cochlea, the stirrup, and other precious and complicated tools. In other words, what we perceive, wherever we are, with the tools we possess, it is here that our whole plot is hatched; it is here, in fact, where all is weighed and invented—here and nowhere else. Let's listen again.

Sonic description of a path: the Soldaten trail (Stora Sjöfallet National Park in northern Sweden) climbs toward a stream whose source is at the top of a mountain. At first, one hears its dull, distant roar; then, as one penetrates deeper into the forest, the sound gradually disappears, giving way to the clearer and more nuanced flowing of a brook rushing over a bed of stones. As the trail moves closer and further away from the stream, the sound changes in a particular way. Every time the path hits upon the stream for a while, the sound of the water seems different—the steepness of its slope, the material over which it runs, and so on. At a certain point, a kind of stereophony seems to invade the sound when two rapids meet. As one reaches the summit, the low-pitched roar gradually drowns out all other noise.

The sound of the city—a particular city (yours, before)—this sound that changes, that we no longer recognize, that we forget (when really it faded away). Hearing it again would take you back to your distant past at the speed of light (much more quickly than looking

at a private/intimate or found photograph). One day, somewhere, elsewhere, in some region chance takes you through, there again are those same sounds, those same distant cranes, those same machines, those same voices.

On the little terrace, a redstart is trying to enter through a hole above the door; at the slightest gesture it flees, then immediately returns in a rustle of wings, the faint sound of invisible wings that we have always neglected to describe (perhaps because we have never listened to it).

A parrot imitates a rooster, a myna, a cell phone (old model ringtones thus live on in the jungle). Echoes of a distant technology, of forgotten voices.

A neighbor built a wind harp; in the evening one could hear a few vocal, moaning sounds. It was a simple wooden box and a few strings, placed in a tree. Despite the fact that we knew where it was, it was hard to localize the sounds, so that at certain times, especially at dusk or during the night, it seemed to us that the harp had been moved (though it was still in the same place).

Attempt at a description. Walking down a street in New York (it may have been somewhere else, or maybe not), in the constant rumble of the traffic, after my eardrums had been sorely tested (a takeoff and landing and attending many concerts for a film on Zbigniew Karkowski being made in China)—walking up, specifically, Sixth Avenue, it seemed to me that my senses were deserting me for good. In fact, I heard, with fiendish precision, whispering coming from a backyard that I estimated to be thirty meters away. The rest, by contrast, resembled what you perceive when you place the pinna of your ear in an empty cup, with a little additional crackling. What I distinguished then with the greatest clarity was the various sonic planes, as if every distance was marked off by a surveyor's

tape measure and recorded with chalk. Paradoxically, it is what was most minute and furthest away that was most precise, while the indeterminate hubbub tended to dissolve into the void. Nevertheless, the experience set me reeling, half panicked at the thought that this might be the new reality of my perception. The intensity of the phenomenon vanished as quickly as it had appeared. Only some tinnitus of different timbres returned when I entered the silence of the gallery.

Once, when I was in New York for a few weeks, I stayed in Michael Schumacher's "sound" apartment. In this space, I was especially attentive to my perception of what was natural and what might have been added, with the feeling that nothing arises all at once, that nothing really starts at a definite point, but that, on the contrary, everything has always already begun without ever really having formally done so. Thus, I paid close attention to everything and had the feeling that nothing was escaping me. Only at the end of my stay did I realize that the sound installation was probably defective (even better, Michael admitted that it hadn't been set up yet; he had only been considering it).

I perceived electric frequencies through tinnitus caused by a concert I had attended the day before. For quite a while, I didn't know if this sound had any reality or not. I entered the kitchen, and there I saw a moth bumping into an electric light bulb.

When there will be nothing left to say, we will hear a din produced by the final entropy of our cells, and we will have to choose the silence and the light. Perhaps there will be something else in this silence—voices?—forget them—go toward the silence and the light. The noise is only for the living (and perhaps the dying)—but not for the dead.

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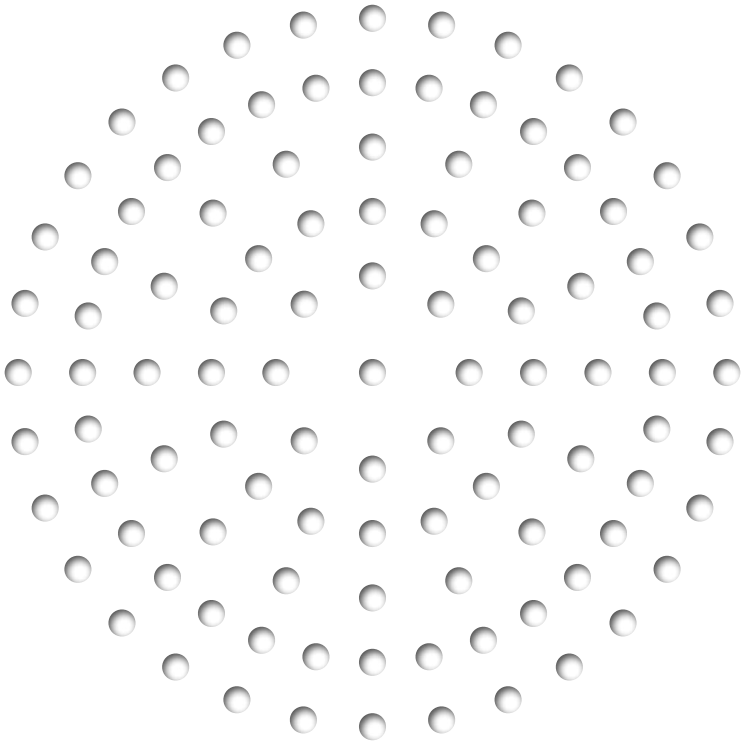
[1] Three times in this text, I replace *chapter divisions* with the notion of a torus—as a space in itself that intersects with itself and that, despite its apparent finitude, is not actually finite.

[2] Gregory Bateson, "Metalogue: Why Do Things Get in a Muddle?" (1948), in *Steps to an Ecology of Mind* (New York: Ballantine Books, 1972), 3.

[3] Gaps have two functions here: giving oneself over to a space that is still unknown and that will fill up with something of which one is presently unaware, and as the result of an intentional breaching (evocation of a work on canvas by Lucio Fontana, 1963).

[4] *Composer des étendues (l'art de l'installation sonore)* (Geneva: École supérieure des beaux-arts de Genève, 2005).



I See You Listening

Salomé Voegelin

Headphone Singing

> Put on a pair of headphones
> not attached to a playback device
> and
> sing at the top of your voice.[1]

Try to perform this text score in a gallery or museum. Note the stares of the other visitors and experience the embarrassed self-consciousness as the security guard taps you on the shoulder and warns you to stop at once.

> After receiving this warning, the girl went to the lavatory where she could be alone, for she felt quite shaken. She examined herself mechanically in the mirror above the filthy hand basin that was badly cracked and full of hairs: the image of her own existence. The dark, tarnished mirror scarcely reflected any image. Perhaps her physical existence had vanished? This illusion soon passed and she saw her entire face distorted by the tarnished mirror; her nose had grown as huge as those false noses made of papier mâché donned by circus clowns.[2]

This distortion heralds the outcome of the story and the future of "the girl" in Clarice Lispector's *The Hour of the Star*. Foretelling her life in the image of a cracked mirror, casting no reflection but showing her existence in a monstrous form.

What is the image of sound's own existence? What tarnished mirror reflects the act of our listening when there is nothing to see but the technology of audition: the headphones that enable the hearing of works which remain unseen but whose invisible expanse distorts our existence as the certainty of what surrounds us becomes tarnished with their concealed sounds. Just like the girl's appearance, sound's appearance too is monstrous, vampiric. It casts no reflection in the lavatory mirror but distorts and changes how we see the world. And "she reckoned that it might not be such a bad thing being a vampire, for the blood would add a touch of pink to her sallow complexion."[3]

Sound works, particularly those played on headphones, exhibit a certain vampirism and have the potential to add a "touch of pink" to the museum walls. To distort its certain appearance, the value and convention of its organization, and to add a clownish papier-mâché nose. This is not a trivial suggestion or a joke. This clown is not a jester but a serious curatorial strategy of introducing a performative action to achieve a different engagement. In this instance it is the action of listening on headphones in a public space that is traditionally focused on looking, that opens the normative situation of the museum to another experience. This is the experience of the invisible, of what is not in the room to be seen, and what thereby escapes the conventional curatorial project but "taints" its environment nevertheless. In that sense, the "clownery" of headphone listening to works that find no reflection in the mirror of the museum is a subversive move. It questions the norms of looking at art, as well as the newer convention of the audio guide, by being on headphones the art itself. This curatorial device is not carnivalesque however.[4] It does not inverse the museum's situation into an anti-museum: a

museum of not looking and not collecting work. Instead it expands what we think we see through an unseen sound. Thus it expands what the museum is, what it can hold, what it can display, and how it collects and mediates works.

In this sense, this curatorial "clowning" is a critical strategy rather than an act of simple foolery, dispelling a derogative reading. Its criticality lies in rephrasing our engagement with the museum, its collecting and canon-forming drive, without slipping into an anti-nomic logic. And so it preserves the architectural form but unbends expectations of engaging with work and with the institution, that of the museum and that of sound art; and it re-performs the notion of a collective artistic appreciation by listening together on separate sets.

According to Paul Routledge, "the practices of clowning (and elements of other forms of physical theatre)" are a form of subversive performance that enables commitment and participation and motivates people to take "responsibility as an act of self-constitution."[5] In the context of the museum, the art gallery, or the concert hall, such a subversive performance enables the act of constituting not only of the audience member, as a self-constitution of the art subject, but also of sound art and the museum, performing a reconstituting of the art object and its infrastructure: the exhibition, its collection and values as well as its production and reception mechanisms are being challenged in relation to expectations and norms.

Routledge talks about the Clandestine Insurgent Rebel Clown Army (CIRCA) and their appearances as political activists at, among others, G8 protests, where they perform "a series of somatic practices—manoeuvres, games, mimicry—that disrupt the 'spirit' of the protest event" and instead produce "a sensuous solidarity and ethical spectacle."[6] Pursuing his observations into the art world, I understand that the criticality of collective headphone listening in the context of the museum disrupts the "spirit" of the visual display as well as

of more standardized sound art exhibitions and concerts. Instead it enables the solidarity of our participation as performers: listening, walking, singing even, quietly and aloud, while together ensconced in separate ear cushions. And it enables an ethics of participation, a sense of listening as doing, as a responsible act of engagement that creates a sensuous solidarity not justified by the museum or any musical or artistic register, but by listening itself.

In this sense, listening is the first focus of sound art. Not what it plays—which is concealed by technology and cultural entrainment, as well as by canonical expectations and hierarchies of production—but what I see you do, the same as me but different: moving with headphones in a contingent engagement that in its form is shared, but that each generates a different heard. And so listening is what I participate in, with my own headphones, walking and singing at the top of my voice. This listening compels me into a collective performance that disrupts the visual display. It creates ethical spectacles that oblige the responsibility of engagement and do not show the illusion of the real but "demonstrate the reality of their own illusions."[7] In other words, the spectacles of a collective performance of headphone listening do not support a normative view, the expected mechanisms of the artistic display and the conventional audition of its content. Instead, they offer physical and somatic insights into the production of a different possibility, a seeming illusion of the immaterial that is however real. Thus they reveal another vista, another state of actuality, freed from instituted conventions and an expecting ear. And they invent how else we might be able to be, act and inter-act, with work, with each other, and with the world, in the space of cracked mirrors and vanished reflections: "For she gave the impression of having no blood unless a day might come when she might have to spill it."[8]

The liquid of her blood once spilt does not reflect like light. It does not replicate itself the same but "upon encountering an obstacle

breaks up and moves outwards in different directions."[9] Her blood does not retain its shape and does not produce one difference, but shatters into plural forms and different directions. And so it cracks the certainty of appearance, of Lispector's girl and of the sound art work, heard invisibly on headphones, to create plural difference moving centrifugally on diverse tracks.

Karen Barad refers to the comparison between light and fluids when discussing the diffractive optics developed by mid-seventeenth-century scientist Francesco Maria Grimaldi, whose work reframes a geometrical optics, based on reflection and refraction, through the observation of light through a two-slit pinhole. In his experiment, the differing light patterns diffuse boundaries, so that "bands of light appear inside the shadow region," "queering" the binary of dark and light, and serving as a metaphor for a nonbinary difference that does not replicate but interferes.[10]

Barad gives an explanation of this "diffraction as the effect of differences," as the effect of the different path lengths of a light to a particular point.[11] In this way she articulates difference not as simple difference of "not that," but as patterns of difference that diffract and create a reflection that does not replicate, that does not behave the same, but generates "the patterns of difference that make a difference."[12]

According to Donna Haraway, this different difference does not fit existing taxonomies or maps, the infrastructures that protect the illusions of reality. Instead, it makes new patterns that interfere with givens, expectations, and norms. It is not fixed in difference but shows its effects.

> Diffraction does not produce "the same" displaced, as reflection and refraction do. Diffraction is a mapping of interference, not of replication, reflection, or reproduction.

> A diffraction pattern does not map where differences appear, but rather maps where the *effects* of difference appear. Tropically, for the promises of monsters, the first invites the illusion of essential, fixed position, while the second trains us to more subtle vision.[13]

Sound work is waves that behave like liquid and follow the optics of diffraction into the diffuse shadow of the unseen, where we require the subtler vision of the monstrous that moves without reflection. These waves break apart and disrupt the museum and the concert hall, creating interference with a "touch of pink" without negating the architectural space.

The exhibition of sound work with the playful curatorial device of headphones has the potential to produce this interference through participation and responsibility. And thus it has the potential to make the effects of difference audible without realigning them with or against the same. Moving instead into different patterns of articulation, which invisibly manifest the infinite plurality of sound's realities that do not replicate and thus do not confirm the taxonomical canons of art or of music, but have the emancipatory power to move outward, in different directions, free from historical givens to map rather than follow the map.

And so sound art that performs the patterns of diffraction does not seek to refract as repeat, but opens upon a nonbinary diversity that is potentially endless. It sounds the possibility of art as "a threading through of an infinity of moments-places-matterings, a superposition/entanglement, never closed, never finished."[14] The headphones enable this superposition of entanglements by presenting simultaneously a plurality of works. Next to each other, filling the room and filling time inaudibly, without canceling each other out. They have the potential to present plural histories without the exclusions of a hierarchical thread. And they avoid a

single reflection, as they avoid the foregrounding of a curatorial selection: the playing of the right work, and the right sounds, and the fulfilling of historical expectation to make the future of sound art based on the value of a singular past. The headphones do not make a canonical formation or a chronological line out of invisible strands of sound. Instead, they enable our joint performance and create, at least in my imagination, a sense of inexhaustibility: hinting at an infinite production whose selection is contingent, fluid, potentially changing, and being added to continually. Including in its playlists all the works that could be included, even those we do not yet know.

The fact that we are unable to listen to all the works presented in the exhibition means that we can imagine our own choices as part of the selection, playing at this moment in somebody else's ears. The sheer number of works counteracts the idea of completeness and comprehension and invites a listening to everything, the audible and the as yet unheard. In that sense the exhibition as headphone performance re-navigates the sense of the canon as a singular history and boundaried geography that legitimizes the validity and worth of sound art. Instead, the simultaneity of works blurs boundaries and asks for their legitimacy in our listening, together but separate, creating a diffractive movement, outward, in all directions.

In this way sound unbends curatorial authority. Challenging the curator as singular bestower of value and worth, as it foregrounds the care of the curatorial process to be done by all: to take care and listen, to be curious, to expand one's ears and lean into the audible to hear more and different works. And like the Rebel Army and their appearances as political activists, listening we too form a rebel army that hears the illusion of the real and topples it through the collective performance of infinite sonic possibilities that are the reality of their own illusions. And so we avoid the value of a simple reflection and engage in the infinity of a plural song.

If I do not succeed in toppling
this tower in reality's citadel,
I will sing down to the stars from heaven
as no one else has ever done.
I will sing so that my longing ceases,
longing that never has known rest,
that it might push the lyre aside
as if the song's task where at an end.[15]

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1 "Headphone Singing," June 10, 2019, www.soundwords.tumblr.com.

2 Clarice Lispector, *The Hour of the Star*, trans. Giovanni Pontiero (Manchester, UK: Carcanet, 1992), 25.

3 Ibid.

4 Mikhail Bakhtin, *Rabelais and His World*, trans. Helene Iswolsky (Bloomington: Indiana University Press, 1984).

5 Paul Routledge, "Sensuous Solidarities: Emotion, Politics and Performance in the Clandestine Insurgent Rebel Clown Army," *Antipode* 44, no. 2 (2012): 433.

6 Ibid., 428.

7 Ibid., 432.

8 Lispector, *The Hour of the Star*, 25.

9 Karen Barad, "Diffracting Diffraction: Cutting Together-Apart," *Parallax* 20, no. 3 (2014): 170.

10 Ibid.

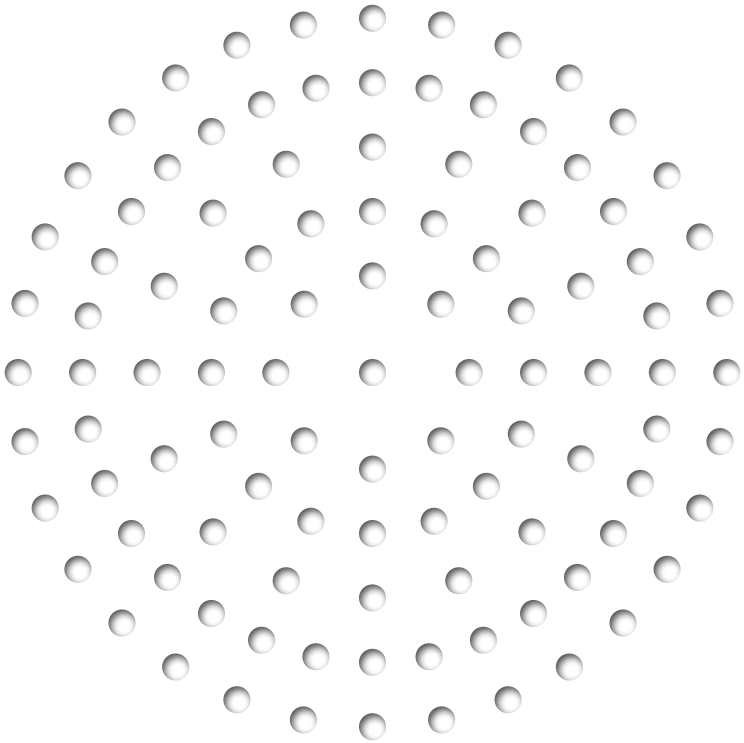
11 Ibid., 172.

12 Karen Barad, interviewed in Rick Dolphijn and Iris van der Tuin, *New Materialism: Interviews & Cartographies* (Ann Arbor, MI: Open Humanities Press, 2012), 49.

13 Donna Haraway, "The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others," in *Cultural Studies*, ed. Lawrence Grossberg et al. (New York: Routledge, 1992), 300.

14 Barad, "Diffracting Diffraction," 169.

15 Edith Södergran, "Revanche" (1918), in *Complete Poems*, trans. David McDuff (Newcastle upon Tyne: Bloodaxe Books, 1992), 104. Reproduced with permission from the publisher and the translator David McDuff.



Immateriality, Sound, and the Art Gallery

Caleb Kelly

1969 was in many ways a year of watersheds, not least in the art world, where the materiality of the art object dramatically shifted. Numerous individual works were created that turned attention away from the singular reified art object toward the audience and the experience of the gallerygoer. These installations modified the gallery environment, thereby making the audience aware of their presence and their sense of their own sensing. The works, through this repositioning, posed the question: If art could be focused on experience alone and everything could be art, then could nonvisual experience be the object of art itself?

These shifts are critical in our understanding of the contemporary sound arts as they paved the way for ephemeral art practices such as video and performance art alongside works for which the primary medium was sound. In this essay, I will look first at the experiments in immateriality that were produced in the final year of the 1960s before turning to materiality in the contemporary sound arts, an art based within our current ecological crisis.

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Artwork is generally thought to exist through time, the physical nature of which is solid and visible. In terms of sculpture, this includes traditional materials such as wood, stone, and metal. In the 1960s, the predominantly solid materials of visual art began to fall away as artists worked to gain access to the processes of production that had previously been beyond them.[1] Artists such as Robert Morris, Eve Hesse, and Bruce Nauman made things from materials that were far from permanent and that were easily accessible. Lucy Lippard called this "dematerialization," and she witnessed numerous examples of artists piling things together into forms that were far from the industrial structures of mid-century modernist sculpture. If latex, hay, and leaves could be the material of sculpture, then could truly immaterial things, such as sound, energy, and motion be the stuff of art?

By 1969, artists were regularly engaging sound itself as a material, including works by some of the most well-known artists of the era. Bruce Nauman, James Turrell, and Michael Asher all worked with sound within their installations, pieces that at times were completely objectless. Sound is a strong part of our experiential knowledge, and artists since this period have sought to engage both sound and our sense of hearing to produce works whose meaning lies in experience itself. Sound as a phenomenon is produced by an event and is propagated in waves. For us to perceive these sound waves they must enter our body. Thus, sound enters our ear canals, our mouths and chests, it vibrates our feet and travels up through our legs. This very literal entering is not like visuality; the touch of sound gives a powerful feeling of presence. Sound then is a marker of the intangible and a physical experience, both things that artists since the middle of the last century have strongly desired.

This shift also led to a refocusing of notions of experience and the role this plays for audience members, something that modernism had a disdain for and had been a secondary concern at best. Leading the way in this regard was American artist Michael Asher,

who in 1969 installed two works that were objectless. The first was produced for the influential exhibition *Anti-Illusion: Procedures/ Materials* at the Whitney Museum of American Art.[2] This untitled work was quite literally a curtain of air through which the audience moved. In doing so they experienced the work in a subtle but tactile manner. The piece was produced by an industrial-sized air blower that was installed across an existing passageway between galleries, and as they passed through it the audience felt the work in a manner entirely differently to the overt visuality expected in the art gallery. Art historian Kirsi Peltomäki explains, "Instead of seeing art, the viewers were asked to feel the faint breeze against their skin."[3] The work itself touched the audience, entered their bodies, and messed with their hair. This is very much like the way that sound engages us: touching, vibrating, and entering our orifices—ears, mouths, noses, and lung cavities. Thus, the division between artwork and audience established through the visual—in which the work is always "over there"—was crossed as the work literally entered the bodies of the audience.

The second piece by Asher was produced for the exhibition *Spaces*, which opened in late 1969 at the Museum of Modern Art (MoMA) in New York and was perhaps the first installation-based exhibition staged there. The exhibition included five discrete galleries, which were occupied by works by Robert Morris, Dan Flavin, Larry Bell, Franz E. Walther, and Michael Asher. For his installation, Asher had the walls that ran along the adjoining corridor constructed so that they would jut out into the corridor's space, leaving two entry points for visitors. Inside the gallery itself he lowered the ceiling to a height of eight feet (2.4 m)—from the original fourteen feet (4.26 m). Inside the existent gallery, Asher constructed the room with walls filled with fiberglass sound insulation to heavily dampen the reverberation of the gallery space. In addition to this, the walls themselves were constructed on rubber wedges so that they were isolated from any vibration coming from within the building itself. Two layers of textured acoustical paneling were also installed on the floor and

ceiling. Of the various spaces in the exhibition, Asher's was the closest to a void, as it was literally an empty room. Jennifer Licht, the curator of *Spaces*, states,

> Actual space is, of course, immaterial.... In the past, space was merely an attribute of a work of art, rendered by illusionistic conventions in painting or by displacement of volume in sculpture, and the space that separated viewer and object was ignored as just distance.... The human presence and perception of the spatial context have become materials of art.[4]

Originally, Asher had planned to play a sound into his space but decided against this, leaving the exhibition room empty of both sound and light. The effect of the empty space was one in which the audience member is alerted to their expectations for the sound of a gallery. As they ventured further into the gallery, they were confronted by increasing silence and an increasingly deadened acoustic.

Furthermore, as Julie Reiss describes, "In *Spaces* there was an attempt to make the museum experience a more relaxed one. The guards were given special instructions to allow people to sit or lie on the floor and to stay in any of the rooms as long as they wished."[5] In some ways *Spaces* might be understood as a precursor to the use of massive postindustrial art spaces of today. These environments, such as the Turbine Hall at the Tate Modern, are voluminous and filled with people who do things once deemed improper within the confines of the art gallery. Faced with little in the way of art objects, the audience work to make their own fun.

This moment in 1969, the moment when a tangible shift occurred away from industrial modernist production practices toward a focus on the experience of the audience, must be understood to be of its time. Immateriality was best thought to be the conceptual basis

from which arose intangible practices, such as performance art, but materials themselves held a different place within the psyche of the time to that of ours. While sound is of course immaterial, the stuff that produces sound is not. Materiality has come to be a preoccupation within contemporary art and music practices, but from a perspective wholly different to that of the New York art scene of the late 1960s.

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In the twenty-first century, there has been a tangible turn toward materials in the arts, and in part this must be understood as a reaction to our ecological/environmental crisis. We are continually aware of materials and the role they play in our world, affected as it is by climate change. This awareness has for many become a preoccupation. Things in the world are part of a complex ecology, one of energies and materials. Sound is correctly understood to be immaterial, but within the confines of the art gallery the sounds that form artworks are always bound to material objects, including speakers, headphones, and media players.

Media theorists Kate Crawford and Vladan Joler produced an "anatomical case study of the Amazon Echo as an artificial intelligence system made of human labor."[6] The case study modeled the labor involved in producing and running the Amazon Echo, a device that allows for voice-activated commands and answers to questions. Behind the seemingly simple tasks that "Alexa"—Amazon's virtual assistant—can achieve, is a "vast planetary network, fueled by the extraction of non-renewable materials, labor, and data." From the geological, such as mining of minerals including copper and coal, to the massive network of container ships that are at the core of the global logistics of supply chains, from the energy consumed by the systems (both the device itself and the massive networks of hardware that run the cloud storage) to the systems of payment for staff that

run the call centers through to the CEO himself. Crawford and Joler paint a deeply disturbing picture of the costs of producing and running this seemingly singular device, and as such this constitutes a necessary stage in our understanding of the global nature of energies and material and their use and consumption.

This approach to unraveling the systems of global capitalism resonates with political ecology, a field of critical research "predicated on the assumption that any tug on the strands of the global web of human-environment linkages reverberates throughout the system as a whole."[7] Instead of understanding materials through singular manifestations, a piece of e-waste such as a circuit board for example, the political ecologist might look simply at the specific and singular item of e-waste, but also the entire political assemblage that surrounds the item. Questions then arise in relation to the item of e-waste, as to where it ends up and how it came to be there, who handles the waste, what is the economic situation of the worker, what effects does the waste have on the families of those scavenging through it, who economically benefits from the processing of the waste, and how do the piles of trash affect the surrounding communities.

With these things in mind, in the sound community we too need to consider the expanse of energies and materials that are consumed within our ecology. At the most basic level, this requires that we do not imagine the tools that are employed are invisible and immaterial. Media players, amplifiers, and headphones are all material objects. In terms of production, media is material, forming microphones, hard disk recorders, digital studios, the internet, and so on.

A materials-based approach to understanding media, and the sound arts, is more closely aligned with the conceptual than with the abstract, and engages not only the sounding elements of a work but also its historical and political contexts, especially regarding

the materials themselves. Materials, after all, are never innocent. For example, Sydney-based electronic artist Emily Morandini produces electrical components out of raw materials rather than the highly refined and often minute objects that we expect. Her series *Components* (2017) explores the materiality and history of electronic technologies. The sculptural objects that comprise the installation are made from raw materials, as delineated in their titles: *Inductor: copper, magnetite*; *Capacitor: copper, mica*; and *Resistor: copper, bushfire carbonised rock*. The works were developed out of a deep interrogation of the histories of these minerals and their connection to the mining industry. Morandini states,

> While most modern electronic devices obscure nearly all discernible connections to their source, they are always intertwined at multiple levels with the energies and materials of the environment.... The artworks themselves consist of handcrafted, open, raw, functional, and hypo-functional electronic circuits using a minimal collection of substances such as fabric, rocks, salt, and minerals.[8]

Through the work of Morandini we are made aware of the materials of electronic components that are usually hidden from us, both in their miniaturization as well as in their encapsulation within the "black boxes" of contemporary technologies. Yet in the shift of our attention to sound itself or sound in itself, to listening, it may be that we have forgotten the material origins of that sound. Even speakers are things. They may play digital audio, but they are made out of cardboard, wooden casing, copper wire, and magnets. They are things, and their materials have a history.

In the field of the sound arts there is a propensity to celebrate the immaterial, the impermanent, and the boundless nature of sound. Within the gallery, sound unshackles the audience from static sight lines, from sedentary viewing positions, and allows them to move

freely through museum spaces. The audience, once freed in this manner, can wander through the galleries experiencing works through movement. What is crucial is that the immateriality of sound experience is not decoupled from the materials that produce the experience. The hardware and software that form the majority of sounds played into the spaces of the art gallery are themselves configured from long chains of energies and materials within a global network of production and consumption. Even when dematerialized, materials really do matter.

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1 The processes pointed to here were industrial and reflected the modernist propensity toward industrial materials. These processes removed artists from the physical labor of art making.

2 I have written at length about *Anti-Illusion* in Caleb Kelly, *Gallery Sound* (New York and London: Bloomsbury, 2017), 112–17.

3 Kirsi Peltomäki, *Situation Aesthetics: The Work of Michael Asher* (Cambridge, MA: MIT Press, 2010), 37.

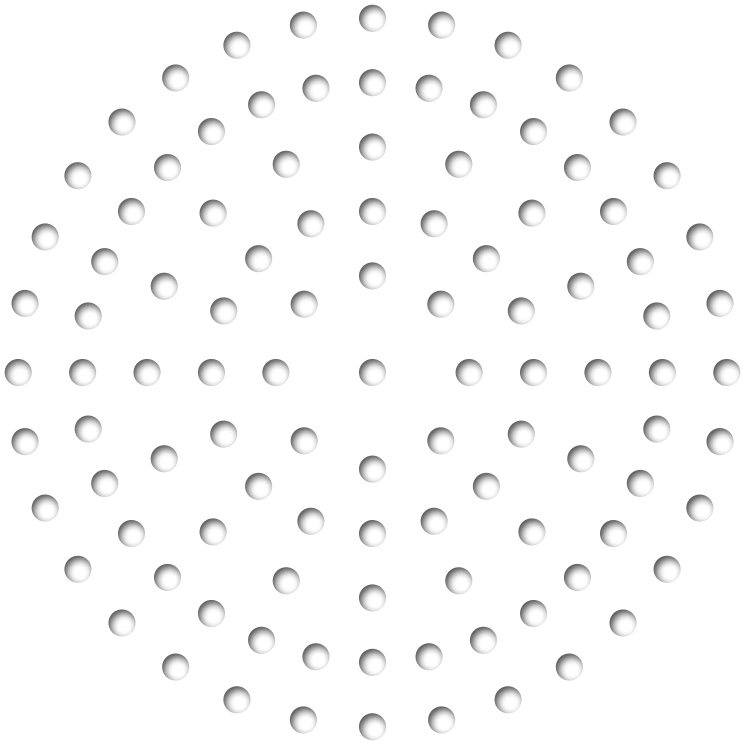
4 Jennifer Licht, *Spaces*, exh. cat. Museum of Modern Art (New York: Museum of Modern Art, 1969), n.p.

5 Julie Reiss, *From Margin to Center: The Spaces of Installation Art* (Cambridge, MA: MIT Press, 1999), 99.

6 Kate Crawford and Vladan Joler, "Anatomy of an AI System: The Amazon Echo as an anatomical map of human labor, data and planetary resources," https://anatomyof.ai (2018).

7 Paul Robbins, *Political Ecology: A Critical Introduction* (Malden, MA: Blackwell, 2004), 13.

8 Emily Morandini, "Source and Return," exhibition statement, Firstdraft, Sydney, 2017.



Detaching Noise: Singular Sonic Space and the Single Noise

Paul Hegarty

Noise is everywhere—seeping into good sound, in the crack between conversation, in the spaces of nature, in the ears, in the air, in society, in nature, in life, in space and through time. Noise is a value in the making of art, and since Luigi Russolo and a host of canonical sound-thinker-makers that came after, noise has had a positive as opposed to its habitual negative value. For many, noise is the sound of rebellion, the prospect of the radical, and its being noticed by those who would shun it. By extension, noise is a mode for recalibrating excludedness as critical social presence. Noise becomes the bedrock of all creation—from Big Bang to the sound of your favorite music, noise is in the air. Where else would it be? Noise, though it is not the same as sound, and even if, in space no one can hear you scream (unless they are so close your dying exhalations provide enough of a medium for sound waves to ride, or if helmets are pushed close together, ramping up bone-vibratory sound, and all that is presuming we are talking about humans with almost no prosthetics), that does not preclude either sound or noise from happening "there." When Russolo imagined a world (in the early twentieth century) where music would be made from noise, he did not just mean "made of sounds," but he did include many sounds that could be musical, or imagined as such. Instead of the restricted range of notes available on musical instruments and through composition, the world of the

future would not just be suffused by the sounds of nature, industry, and a humanity massing in cities, it would take those sounds and shape them. That these sounds were at the time considered noise was only temporary, as they would transform through use and audition. What was "noise" would become "noises" then "sounds" and then "music." Such is the trajectory imagined by those who track a history of music as the progression of the unheard, the unexpected, the loud, the atonal, the amusical as they are crunched into shape as music. As if noise never was. As if it were only a way station, an error checker. In that sense, histories of music that abuse the word "noise" imagine the sonosphere as nothing more than a functioning machine (sound > composition/structure > music > unprepared listener > good listener > repeat). The procession of avant-garde bleating about who is really the edgiest, the newest, the most vanguard is the kind of war-time-loop that Tom Cruise and Emily Blunt find themselves in while reliving one day of a war between humans and aliens in *Edge of Tomorrow* (2014, aka *Live. Die. Repeat*). Cruise's smug eventual survival is the sound of the noise overlord listener proclaiming that they can see their way through the thicket of experimentation to see the true path. But noise is not a path, nor is it a succession. We can think of its acceptance in music as a historical sequence; we can even think of a steep climb of mounting extremity. But these are parodic narratives—*they always have been*. If there is noise, anywhere, it is unwanted, and judged to be such. That this judgment passes in no way annuls the moment of noise. So noise is negative, other to what is positive. But more curiously, it is a negativity—that is, it exists in relationality, in fact it is relationality—as figure and ground. But to step aside from the endless learning of *Edge of Tomorrow*, it might be a better idea to leave the idea of noise behind, and think about how it relates to sounds, and how these relate to music, because for all the acceptance of the use of, say, field recording in music, this is an internal, connoisseur acceptance, an aural jargon to many. Unaltered, unimproved, unmusicalized sound is still something mobilized in places where music happens and also in sound art.

When Erik Satie came up with the idea of "furniture music" in the 1890s, he imagined a music so repetitive and tranquil it would blend into the surroundings (an inverse field recording), mildly enhancing the experience of other art in a gallery, if that's where it was being played. In a perverse illustration of the disruptiveness of sound in the galleries that lay in his future, the music failed to be inaudible and people paid it too much attention—in an early example of a properly radical "noise," this music sought in its form to not be music: the repetition went against most of the aims of development proper to orchestral music, and the presence of music as incidental was, well, unheard of. But there's still more to the noise of "furniture music," because the complete failure of the music to fail signals the sequence of explosive noises of the twentieth and twenty-first centuries. Rather than an arms race, or a cold and pitiless sonic war, the encounter of music with its own other in the form of its undoing, or its evisceration, is a set of moments, many of which may never have been heard, or were designed not to be heard. More than incorporating noises, the story of noise, or one of the stories, is the coming into being of moments of opposition—where music is deemed "not music," typically. Or has something else wrong with it. And there are many things that can be wrong with music, so if there is a positive side to noise, it is this permanent potential (to come into being). Once again, we have "noise" and we have "noises." This latter can be quite neutral, while the former does seem to carry more weight, more judgment, even if, some imagine, the judgment flipped from noise = bad to noise = good at some point, to be determined by the fan/musician/writer. "Noise" is more than "noises," as it contains this sense of judgment, whether aesthetic, legal, moral, tasteful, or on health grounds. But noise has also referred to the spread of sound, the spread of words in gossip, or to specifically quiet sounds. It has always been attached to rumor as well as cacophony. So noise is also the dissemination of noise, and the moment when actual noises are distributed through the air. Infrathinly, "a noise" would just be one of "the set of all noises," or as an instance of categorial/categorical

noise. But while it may be some sort of instantiation of noise, what if "*a* noise" could be conceived as something totally singular. Music fills time, or shapes it. Sound too is always spatiotemporal: it takes durational time, it occurs in empirical space, yes, but it can only be heard as spatial, as temporal. The evolution of human ears has developed as a mode of deciding where other things are in the world (like prey or predators), though the use of stereo to distinguish distance and positioning, which functions on the basis of small differences in the time sound takes to travel to ear 1 and ear 2, and also on the capacity of animal hearing to guess distance from sound volume. The hearing system processes inputs and separates out the detail. That's all in principle, and suggests the capacity for each hearing of a sound to be individual. That something passes through median ears, or through a human subject thinking about or reacting to what they hear, is neither here nor there. Beyond this, the sound of "a noise" is, or can be, a singularity. This is something like an event, an occurrence that is almost outside of time and space. Such is the redistribution of value to the noise, as experienced by some sort of ear (remember: we do not share "an" ear, we cannot say "we hear"). Noise is a type of singularity that disrupts—like actual black holes: real, present, active, detectable, but actually not quite perceptible, not quite here, not quite actual. The singularity of a noise is not about its novelty; it is not about the first time something happened or the elitism of having been there for it; it is not about specialness, as determined by an expert ear; it is not necessarily isolated. A singular noise is not outside of all music, rather it grows from within music, by a process of transduction, always negotiating its way between inside and outside of itself. This "a noise" is only separate by virtue of not being *separate* (unlike any particular piece of music that claims to be in some way individual). Its isolation is only in response (and therefore intimate relation) to that which it is not, and being a singularity is not special, not the cause of a canonical feeling. Transduction, especially when presented in the gathering form of the crystal (see Gilbert Simondon and, more hazily, Bernard Stiegler) is fruitful, liable to

spawn ideas about noise, but it is too organic: "a noise," if there is one, one alone as not the all-alone, grows as an impurity in the solution. Its growing is the singularity. So "a" noise can occur as singularity, but perhaps the event of noise is mostly only separate yet connected to the noise "we" hear, the noise being made, or the sense of noise induced by the "noisy" sounds. In other words, it happens exactly where standard ideas of noise are happening, or are present—whether in the use of noise as music or sound art, or when theorized in some way as noise. This "a noise" is a parasite that accompanies all noise, all noises, if not all sound. It is always connected, even if it seems far. Often it will not be heard, or in its hearing the other noise falls away. This singularity emerges, and once it has gone, the leftover residue (likely to be some sort of recording or musical or sound art experience) can be understood as ground, origin, form, genre—some of this is in play with Gary Hill's video work, such as *Incidence of Catastrophe* (1987–88), which is based on the writings of Maurice Blanchot. Emergence does not create a straight and causal sequence, or even a perverse line. The singularity that is "a noise" indents the surface of its surroundings, bulging awkwardly across the range of possible noises (it would be nice to think of this as being on, in, and through a capital *N* noise-manifold). Can this be instanced, evidenced? It is tempting not to betray the model by inserting pragmatic concerns, but what I have in mind by "events" and singularity such that "a noise" is both outside of noises, noise, and music, is also where isolation occurs literally, with Sachiko M's microscopic attention to durations as well as the more obvious pitch, attack, and delays, in her electronics, or with Morton Feldman's slow fields, or the absence of any event in droning. Then a synonym for singularity could be incident as opposed to the more epic-seeming, Romantic idea of the heroic Ereignis/event where the human tussles with death, the world, and all the Big Things. It can also be artifactual, a side effect, a radiation as opposed to the all-consuming singularity. Marja-Leena Sillanpää's *bring new life to 33 of them* (2012) documents thirty-three performances of clinking glasses and

background noise, and "celebrates 33 dead writers." Each single performance is tied (enigmatically/arbitrarily) to one well-known female writer and the whole is edited into one unsmooth piece. Each writer is thus brought into the space of an event—where the drama is lost in the "background" such that figure and ground, content and form, Sillanpää's act, conceptualization, and original writer all become hazy doubles, a repetition in one single location: this combination, heard in total, is the singular (heightened through only being encountered as long past and re-edited). To strip away the individualism of the "event," we can also note that a singularity can repeat. For Gilles Deleuze, the fact of actual repetition was itself singular, as every instant automatically repeats forever, as in Friedrich Nietzsche's version of the eternal return. Whether doubled or repeated, emptied or mirrored, the incidence of noise is not those things, or because they happen: it is the thing that happens just outside their horizon, close by, brought close as an always-one, always-not-one "a noise." Any noise, all noise, a noise, or "noise"—these all structure all other music through its mass, dark matter to music's starfield, the exception hiding behind every moment music heard as music (imagine someone repeating "it's not noise" at *every* moment they feel they are in the presence of music—this is the sovereignty of the exceptionality of noise as not-music). The sound in sound art has to work in the other direction, a centripetal pull of art into the sonic—instead of centuries of "no noise here, clear the space for contemplation," it feels almost normal to hear sounds in galleries. This has in turn opened up ears to the sounds of galleries, the sounds generated by them, by visitors. Nestling in a gravity-generating hollow in the noise-space or N-noise-manifold, there it is: sound as art, sound in the place of art. This is a perfect and parallel rendering of noise in the place of music, a topological substitution. Not that sound is content to stay in place in the gallery—unmoored, it builds sonic bubbles in and around the always reconstructed spaces of a gallery. Sound artists have played with the spatial freedom of sound, whether the soundbleed that comes with all sound art (these were

not spaces that expected to allow sound, let alone *accommodate* it). But beyond that, artists like Janet Cardiff took sound further out while keeping it in place: in her soundwalks, a walker-listener (walker as listener) would follow the sounds and instructions around an urban location that is always changing; and her voice and the sounds of the original recording act as an increasingly uncanny version of the place you listen through. Just as sound shapes space, and shapes time, particularly in defined chunks of musical time, sound art can also map one space onto another time, in the soundwalk, as its actuality becomes archeological and ever more perverse in relation to the space it claims to describe. While sound is freed, the listener often has the sounds clamped to their ears in a didactic remake of the figure of the 1980s roller-skating Walkman user, and new poses of attention have to be devised. At least sound art has been preparing us for the melancholy fumbling that is 2010s–2020s VR art, where one person shuffles around pinioned to a massive ceiling-moored headset. The speakers and headphones that have invaded the gallery do not wait before releasing their sound—instead their inevitable sonic bubbles spread and drift into encounters with the visitor. The gallery frees sound to bleed over the edges of allocated space, and also frees the listener. Unlike the concert format, or even the music bounded in file, disc, or chemical surface, this is sound (or music) that plays without you, and has to accept the listener's willful inattention—or the aleatory and partial consumption of what can be heavily composed fields of sounds. This passage is the mobility described in depth by Juliane Rebentisch in the context of installation art. It means that sonic artworks have to be built on the understanding of incompletion and that their shape will be determined in the co-incidence (or apparatus-based entanglement) of listener and work: this is the singular, the "a noise" that arises in unique moments, and exceeds them. This singularity is in the specific pre-emption (you can hear it over the sound or silence of something else), the access to a part of the piece, or even just the listening from midway as opposed to from the start, as if sound were music. "A noise" arises as

singularity in the infrathin instance of a move between just hearing and only listening: the listener (whose viewerness is compromised at this precise point) who encounters sound adrift, sound as radiation, moves to the singular point just as they switch to attention and listening is engaged. At that point, it is all good, all is as it should be and "we" would be following the correct path, as opposed to the friction of trying to move beyond just hearing when the space "we" are in is reconfigured by migratory noise, noise from elsewhere, elsewhere as noise, the complete "a noise" that is always singular, always part of a real context that subtends the surface uniqueness. So every proper singularity is double, that is what makes it singular. The twisted thickness of a braid that gives the enigmatic clarity to "a noise," more and less than sound or noise, sounds, noises, and within which the listener is complicit in performing the singular.

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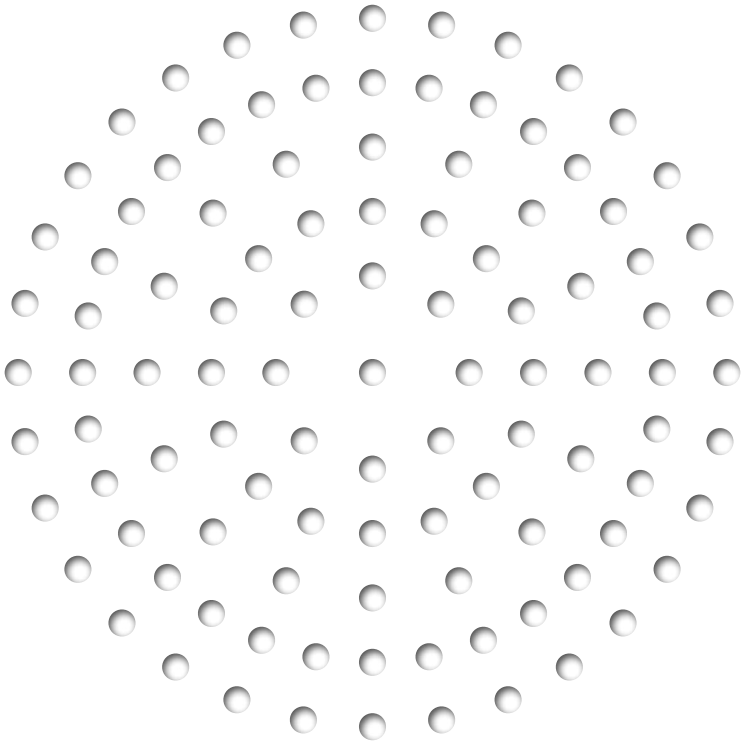

Anti Social Media
Social Music[1]

Greg Hainge

The core premise of this exhibition, *Audiosphere: Sound Experimentation 1980–2020*, lies in the ways in which the artistic practices presented here demand a reconfiguration of the dominant *épistémès* that govern our conception of music—a term that I use deliberately to augment the exhibition's avowed focus on "audio" or "creative work with sound," because I believe the implications of what is deployed here via audio works that may, for some, resist categorization as "music" must infect our understanding of music more generally. Moving away from the "source-object" understanding of music that is closely allied with an auteurist perspective that tightly constrains the parameters of the creative act (a monophyletic image rejected by the exhibition curator, Francisco López), the emphasis here shifts toward the expanded realm in which music is not only "composed" but always necessarily produced out of a recombinant logic that enfolds into the originary conception a vast genealogy of forms, movements, practices, media, and technologies that are then recombined in different locations, contexts, and times via the various technological assemblages required for the emission, amplification, and reception of an audio signal—which is to say all of the agents implicated in the materialization of sound whether acoustic, electronic, or organic.

The move exemplified here is then akin to that diagnosed by Roland Barthes in his essay "The Death of the Author."[2] Given that this work first appeared in 1967, it is perhaps only natural to ask why it is that a similar shift away from such a dubious conception of the reproducible intentionality upon which the creative act would be founded has not taken place in the realm of music. Indeed, that this shift has not come to pass in the realm of music seems all the more surprising when we think of the ways in which a song can be transformed or even co-opted by the supra-subjective desire of the crowd at a gig or, even more fundamentally, the fact that in and of itself sound has no body and needs to co-opt a material medium in order to leave the virtual realm.[3] The suggestion that this shift has never been effected, however, is not quite correct, for—as exemplified by the works curated here—there have been many attempts to reconfigure music along lines that would dissolve the petrified contours that prescribe the limits of music when this is reified and cast into the sacrosanct realm of "the work," instead to understand it as heterogenerative, as *work*. One might suggest, indeed, that the downgrading of the social or participatory nature of musical creation is in fact a very historically and culturally determined constellation—which is, of course, precisely the point made by Michel Foucault's deployment of the concept of *épistémè*.[4] Accepting this, however, we would be mistaken if we were to believe that there had been no attempts to expand the conditions of possibility of music under such an *épistémè*. For instance, apart from the examples found in this exhibition, the very operational principle of improvisation foregrounds precisely the heterogenerative mode of production that the elevation of sociality brings into the fray. Similarly, the Futurist conception of music—when this is examined through more than the narrow lens generally employed in critical commentaries that focus almost entirely on Luigi Russolo—sought to dismantle the sanctity of the musical work, to break down the barriers erected between high culture and culture, the aesthetic realm and the everyday by privileging dilettantism, amateurism,

primitivism, and improvisation, and to expand the definition of music beyond the solely auditory realm.[5]

To give but one more example, as well as being implicit in the emergent modes of production, distribution, and reception via which the experimental audio practices that this exhibition brings out from the shadows (or, perhaps better, anechoic chamber) come into being, there have been explicit attempts to deploy and theorize audio art in such a way as to deterritorialize our normative figurations of music, to relax the stranglehold of our capitalist epoch and thus catalyze the sociopolitical potential of art. Indeed, this is the avowed intent of a collaborative project entitled *Social Music* involving Brandon LaBelle, Michel Henritzi, Giuseppe Ielasi, Minoru Sato, and Achim Wollscheid. For this project, the artists involved each produced a work to be broadcast on Vienna's Kunstradio in 2001, these being commissioned specifically to "question, rethink and invade radiophonic space as an aural, social and architectural infrastructure" and, thereby, to examine the "contextual environments of both personal space and cultural framework as an input into the actualizing of artistic processes and their ultimate output."[6] As LaBelle explains in his introduction to the book and CD produced to document and augment the project, the ambition here was "to consider music (and by extension, artistic process) not as a produced object, but rather as a set of parameters embedded within specific localities," to reconceptualize music itself, this is to say, "as a kind of 'location' itself and subject matter, not with the sole intention of arriving at a kind of critique, but to reinvest in the very potential of music as an experimental framework."[7] Going on to draw on the thought of artist Joseph Beuys, LaBelle describes their project in a way that resonates strongly with the theoretical intent of López's exhibition here and that helps us understand the ways in which the visitor is deeply imbricated in the *work* of art staged here—work being understood in its processual rather than nominal sense. LaBelle writes:

> The artist Joseph Beuys proposed the concept "social sculpture" as a way to redefine the creative process as one which arises from broader and more dynamic situations necessarily beyond the individualized vision of the singular artist. This expanded view ultimately invites the uninitiated, from the stranger to the passer-by, into the creative process, thus insisting that the art object is only made apparent through greater, and more democratic, conversations and interactions. Through this the very cultural framework in which artistic gestures are comprehended and experienced is brought into the creative act, as a kind of determining and public ingredient.[8]

Taking its lead from this kind of approach, the experimental methodology deployed by *Social Music* (as explained in the project description) brings into the realm of musical production

> a leaving behind of the traditional view of "artist as individual," and instead demands an alternative understanding whereby "context" and "art-object," and by extension, "audience," converse in such a way as to produce artistic effects.[9]

My intention in pointing out these precursors is not to infer any unoriginality here, nor to invoke a tired maxim according to which there can be nothing new, far from it. These forebears are brought into the fray to suggest, firstly, that if resistance against the epistemic constraints of our time have not managed to gain the kind of purchase that would obviate the need to state what should be obvious again and again, then this is in part a problem of scale, of the minoritarian space within which this resistance is generally enacted and thus to address the importance of the venue in which this exhibition is taking place—the Museo Reina Sofía being beyond doubt one of the foremost art institutions in the world. Secondly, however, and equally if not more important to the location of this

exhibition, is its *timing*, an element explicitly invoked in its title, which bridges the pre- and post-Internet worlds. If this is so crucial and marks the fundamental difference between what is presented to you here and now and what others have experienced in other times and places, it is because a fundamental shift that has come to pass in the internet age has externalized and weaponized the *épistémè* that delimits our conditions of possibility, in the process redefining or, rather, dismantling the very idea of the social. What this means, quite simply, is that it has never been more important to rethink, as here, the precepts via which we engage the world and each other, to understand how experimental artistic practices may provide a mechanism or laboratory for investigating other modes of being-in-the-world.

As you may have guessed by now—since I telegraphed the point in my title—the reconfiguration or dismantling of sociality that I am referring to is intimately related to the social media platforms that have come to dominate our interactions with the world and each other in the latter part of the post-internet age. The political ramifications of this, that arise out of the problematic symbiosis between the operational and business models of these platforms (and specifically Facebook) and the ways in which their users engage with them, have been brilliantly unpacked by Siva Vaidhyanathan in his book *Antisocial Media: How Facebook Disconnects Us and Undermines Democracy*.[10] Vaidhyanathan's argument, in essence, is that Facebook's business model, a form of surveillance capitalism, relies on users to create a data profile of themselves that emerges as an artifact of their online activity and can be used to target users with directed advertising, presenting them only with the products and services likely to appeal to them specifically. Relying on users' activity to create these individual profiles, Facebook's algorithms promote news items in users' feeds that are more likely to provoke a response—even if this is a negative one—which, in turn, drives a logic that tends to promote extreme views over others. This, for Vaidhyanathan, is where such

platforms pose a fundamental threat to democracy, because they give disproportionate visibility, weight, and credence to extreme views that are published in an environment with none (or few) of the control parameters or moral or ethical frameworks that governed the prior information channels of democratic society.

A similar logic is unfolded by Bernard Stiegler, who goes further than Vaidhyanathan insofar as the condition that he diagnoses extends well beyond Facebook and into the algorithmic logic of computational capitalism to such an extent that we can qualify our epoch as the age of disruption. As Stiegler explains:

> The automatic power of reticulated disintegration extends across the face of the earth through a process that has recently become known as *disruption*. Digital reticulation penetrates, invades, parasitizes and ultimately destroys social relations at lightning speed, and, in so doing, neutralizes and annihilates them from within, by outstripping, overtaking and engulfing them. Systemically exploiting the network effect, this *automatic nihilism* sterilizes and destroys local culture and social life like a neutron bomb: what it dis-integrates, it exploits, not only local equipment, infrastructure and heritage, abstracted from their socio-political regions and enlisted into the business models of the Big Four, but also psychosocial energies—both of individuals and of groups—which, however, are thereby depleted.[11]

The issue for Stiegler is then not simply that the individual becomes little more than a data provider and agent of their own consumerist exploitation, but that, due to the speed at which the predictive logic of computational networks operate, our own capacity to be an autonomous agent in the production of that data is radically attenuated because, quite simply, our own cognitive processes are surpassed and outpaced. What this means, for Stiegler, is, in effect,

that the faculty of Reason via which the individual subject determines their place in the complex fabric of civilization through the expression of free will within democratic societies is outsourced to computational processes determined by preprogrammed algorithms. As a result, what we are witnessing in this age of disruption is precisely what Max Horkheimer and Theodor Adorno foresaw fifty years ago, namely the emergence of a new form of barbarism that signals nothing less than the end of civilization.

In the shadow of this diagnosis (a term I use deliberately for this is a decidedly dark vision of the pathological realm toward which we are headed), an exhibition such as this becomes all the more important, for it provides a glimpse (or whisper) of an alternative, of other modes of operation that do not conform to the dominant logic of our time, a time in which creativity may be one of the first causalities in this war on Reason.[12] Indeed, the greatest innovations that have taken place in the musical realm broadly defined over the past ten years have, arguably, impacted the commodification, monetization, and distribution of music far more than the production of music—although the increasing number of products in development that seek to produce music via purely algorithmic processes and machine learning may soon require this claim to be reformulated, an adjustment which would only strengthen rather than annul the argument made herein. Like the social media platforms already discussed, the major music streaming platforms also give the impression of an unprecedented level of access to a seemingly infinite library while, in fact, narrowing the bandwidth of possibility by making or promoting choices according to a mercantile logic that has nothing to do with the creativity inherent in the act of curation and everything to do with market segmentation. This, then, is the muzakification en masse of the sphere of musical production for the twenty-first century, in which music serves to make of the individual subject not a more efficient laborer (as was the case following the transformation of the Muzak Corporation under the leadership of

president U. V. "Bing" Muscio), but, rather, a more efficient consumer and, to boot, provider of data that is fed back into the cycle of music production in a loop that can but bring about a certain banality that erodes music's capacity to act as a catalyst in the formation of new forms of social kinship.

The modes of production and distribution showcased (and indeed exemplified in its own staging) by *Audiosphere* are diametrically opposed to every aspect of what I am describing here. Beyond this, however, if the twenty-first-century Muzak I am kicking against operates according to a logic that effectively destroys sociality by outsourcing desire, supplanting affiliations between individuals with a replicant relation obeying a higher power, what *Audiosphere* enables us to intuit also is a new form of sociality fit for the post-internet age, with its atomized, alienated, yet networked subjects. For what is envisaged here, and embodied through you as headphone-crowned sovereign listeners cocooned in the fleshy materiality of your sentient being, collectively mainlining audio content via a streaming protocol to produce the *work* only as an aftereffect, is a new mode of relationality that emerges out of the wonderment awakened by the recognition of your self as but one being engaged in an act of creation for which you are at one and the same time integral and yet ultimately expendable.[13] This is not to introduce a theological dimension to the experience; on the contrary, this is to suggest that, in the face of new master narratives and codes that function not via internalization (as with *épistémès*), but, rather, a replicant operationality, we need to reconfigure our engagement with the world around us in such a way as to reaffirm our eminently creative and thus relational nature, to become, this is to say, *active listeners*.

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[1] With apologies to Neek Lurk.

[2] Roland Barthes, "The Death of the Author," *Aspen Magazine*, nos. 5–6 (1967), available online at http://www.ubu.com/aspen/aspen5and6/threeEssays.html#barthes.

[3] For more on this, see my chapter "Sound is Silence" in the forthcoming *Oxford Handbook of Sound Art*, ed. Jane Grant et al. (New York: Oxford University Press, 2020).

[4] See Michel Foucault, *Les Mots et les Choses. Une archéologie des sciences humaines* (Paris: Gallimard, 1966); Eng.: *The Order of Things: An Archaeology of the Human Sciences*, trans. Alan Sheridan (New York: Pantheon, 1970).

[5] I am grateful to Jennifer Rumbell for these insights that she is meticulously unpacking in her doctoral thesis, "Music in the Italian Futurist Movement: A Re-examination of its Role and Functions" (University of Queensland).

[6] Text taken from the back cover text of *Social Music*, ed. Brandon LaBelle (Los Angeles: Errant Bodies Press, 2002).

[7] Brandon LaBelle, introduction to *Social Music*, ed. LaBelle, 3.

[8] Ibid., 5.

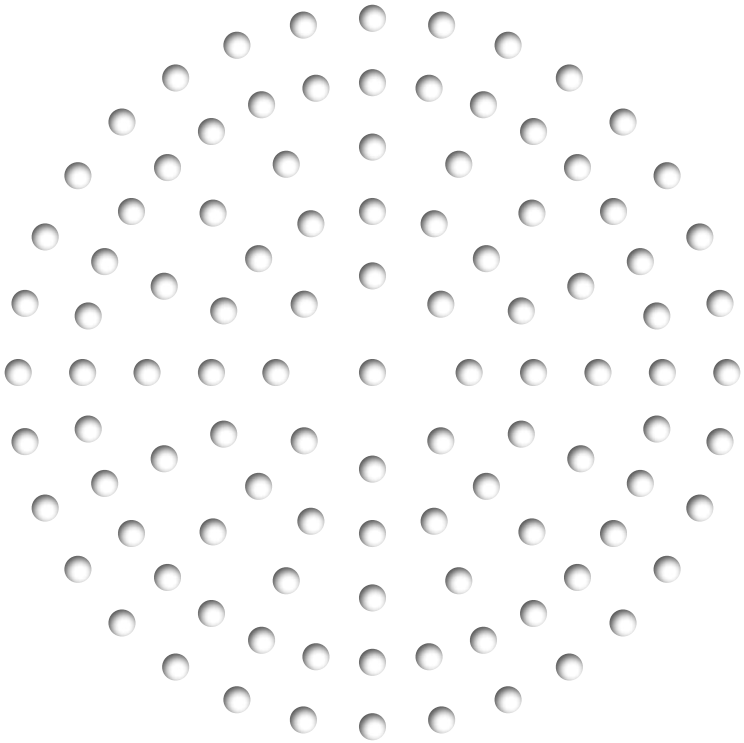
[9] Brandon LaBelle, "Curatorial Statement," in *Social Music*, ed. LaBelle, 47.

[10] Siva Vaidhyanathan, *Antisocial Media: How Facebook Disconnects Us and Undermines Democracy* (New York: Oxford University Press, 2018).

[11] Bernard Stiegler, *The Age of Disruption: Technology and Madness in Computational Capitalism*, trans. Daniel Ross (Oxford: Polity Press, 2019), 7.

[12] Or perhaps it is already too late, for it is noticeable that in the past few years there has been a massive proliferation of reports published by consultancy companies analyzing future employment trends that claim employers are critically short of graduates demonstrating creativity, intercultural understanding, communication skills, and the ability to work in teams—this being a problem created not only by a change in demand as a result of disruption but also of supply. See, for instance, Institute for the Future, *Future Work Skills 2020* (2011); Mitchell Institute, *Preparing Young People for the Future of Work* (2017); Bloomberg Next, *Building Tomorrow's Talent: Collaboration Can Close Emerging Skills Gap* (2018); Deloitte, *2018 Deloitte Millennial Survey: Millennials Disappointed in Business, Unprepared for Industry 4.0* (2018); World Economic Forum, *The Future of Jobs Report 2018* (2018); McKinsey Global Institute, *Skill Shift: Automation and the Future of the Workforce* (2018).

[13] For a different take on the idea of sociality as an aftereffect, see Minoru Sato, "Sociality as Aftereffect: [two testing cases]," in *Social Music*, ed. LaBelle, 17–27.



Capture and Release: Capitalism and the Flows of Sound

Christoph Cox

I.

In 1985, the Canadian composer John Oswald complained that "although more people are making more noise than ever before, fewer people are making more of the total noise."[1] The proliferation of turntables, tape recorders, samplers, and other consumer electronics was enabling clever amateurs to create astonishingly experimental music; yet, to Oswald's dismay, the soundscape of the mid-1980s was dominated by a handful of pop stars supported by a few corporate record labels. Oswald responded to this situation with what he called "plunderphonics," a creative *détournement* of pop songs that subjected them to parody while appropriating some of their cultural power and unleashing their experimental potential. At the same time, Oswald fostered alternative modes of distribution for creative audio. A key figure in the "cassette culture" of the 1970s and 1980s, he joined a global network of musicians and artists who traded one-off or small-batch recordings and mixes on cassettes via zines such as *Op*, *Option*, *Sound Choice*, and *Unsound*.[2]

An eminently portable read/write format, the cassette lent itself to piracy and samizdat purposes. Recording industry associations in the United States and United Kingdom were sufficiently worried that they mounted media campaigns against "home taping," initiated lawsuits

to halt the practice, and sought a tax on blank tapes. For the most part, these efforts proved unsuccessful. Nonetheless, over the course of the 1980s, the cassette became the most lucrative format for the music industry, which, by the end of that decade, was dominated by five multinational corporations whose revenues from recorded music (in the United States, at least) were steadily rising by nearly a billion dollars annually.[3]

By the first decade of the twenty-first century, however, the industry had all but collapsed, thanks largely to the emergence of MP3 and digital file-sharing networks, and later to YouTube, SoundCloud, and other platforms that delivered an enormous amount and range of free music on demand to anyone with an internet connection. Again, the major labels fought back, successfully shutting down the file-sharing network Napster, suing individual users, and flooding peer-to-peer networks with "spoofed" files. But the unregulated flow of digital music continued unabated. CD sales plummeted, as did overall revenues for recorded music. By the 2000s and 2010s, major label artists such as Prince, Radiohead, Nine Inch Nails, and U2 were giving away their music for free; and in 2017, Chance the Rapper won three Grammy awards for a hip-hop mixtape he distributed online free of charge and without the support of any record label.

All this prompted cultural theorists to speak of "post-economic music," a phrase registering both that recorded music had become essentially free and that, as a result, musicians and composers could no longer make a living through their music.[4] Some economists agreed, arguing that the advent of MP3 inaugurated a post-scarcity culture in which recorded music lost all economic value while retaining its cultural, social, and affective power.[5]

Once again, however, capitalism found a way to contain the flow. By 2016, recording industry revenues were once again on the rise,

thanks largely to Spotify, a music-streaming service founded and funded by former pirates.[6] Spotify's solution was to stop *selling things* to consumers and instead to *rent streams* to subscribers or to pay for those streams through advertising, on the older model of commercial radio or TV. Despite Spotify's promise "to inspire human creativity by enabling a million artists to live off of their art," just over a quarter of artists made any money from streaming in 2018; and the median amount was $100.[7] Oswald's complaint seems as true today as it was in 1985: "although more people are making more noise than ever before, fewer people are making more of the total noise."

And yet much has changed. Recorded music travels faster and lighter, with less contextual baggage and less monetary value than ever before. All this facilitates the proliferation, mutation, and circulation of hybrid and synthetic micro-musics that combine global influences with local or indigenous forms. Digital platforms and networks provide easy access to these micro- and experimental musics, which are often homemade and produced with cheap, readily available equipment. More people are making more noise than ever before; and, for those who seek it out, most of this noise is easily found.

II.

How can we make sense of these technological shifts and their effects on the circulation of sound and music? How do we map these expansions and contractions, the escapes and captures of sound in the context of global capitalism? We could adopt a classic Marxist analysis, focusing on the contradictions between existing power relations and the political and economic effects of the technologies they unleash. In his preface to *A Contribution to the Critique of Political Economy*, Marx summarizes this process:

> At a certain stage of their development, the material productive forces of society come in conflict with

> the existing relations of production, or—what is but a legal expression for the same thing—with the property relations within which they have been at work hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an epoch of social revolution.[8]

In other words, every economic system sews the seeds of its own destruction. It develops tools and technologies ("material productive forces") that challenge its own structures of power and property ("relations of production"), generating forces and capacities that undermine those structures and the economic system they support. In the musical context, for example, the technological shift from bulky LPs to more compact, portable, and mobile cassettes and CDs enabled exponential increases in revenue for the music industry; but it also soon led to the industry's near collapse, as perfectly copyable digital files were ripped from their tangible supports and began to circulate and proliferate on the internet for free through a kind of post-scarcity gift economy.

Gilles Deleuze and Félix Guattari develop Marx's account and help us to understand the circulation of music, particularly under capitalism.[9] Deleuze and Guattari conceive all of nature and culture as a set of *flows* (of matter, energy, and information) that, when captured, controlled, bound, or slowed down, become the physical and social forms we experience (mountains, organisms, species, languages, cultures, institutions, etc.).[10] These forms are only temporary coagulations or transitory hardenings of these flows, which constitute the basic reality of the world. The fundamental function of society, Deleuze and Guattari write, is to *code* flows (of food, goods, bodies, money, energy, refuse, etc.), that is, to intercept them, organize them, regulate them, channel them in particular directions, impose meanings and limits on them, and the like.

Deleuze and Guattari prompt us to think of sound as forming a macrocosmic flow akin to the other flows that constitute the natural world. As Deleuze puts it, "One can … conceive of a continuous acoustic flow … that traverses the world and that even encompasses silence. A musician is someone who samples [*prélève*] something from this flow."[11] Such "sampling" is a form of coding, an inscription or recording of a material flow (sound) that is by its very nature evanescent. For most of natural and human history, audio recording was biological and social, registered in individual bodies and in the social body of the animal or human community. Sound was seized by the ear and sorted by the brain according to evolutionary and cultural schemata that determined their significance for survival or social membership. Virtual systems (grammatical rules, song structures, etc.) formed sonic flows into memes that facilitated their replication and transmission to future generations. All these coding processes "territorialized" sound. That is, they captured and organized its flow, enabling it to accumulate as a cultural "stock."[12] At the same time, however, they facilitated a certain "deterritorialization" of sound, transporting it beyond the here and now of its transient sounding. The temporal and spatial extension of these sonic forms introduced variant repetition, copying errors or mutations that caused them to change or drift.

The traditional or folk song was a collective product, the anonymous creation of a whole community over several generations, a sort of cultural commons. The bodies and generations through which it passed served as relays, points of connection and transmission of its sonic flow. The emergence of capitalism in early modern Europe demanded new and different forms of sonic capture. It sought to fix music as a commodity, a *thing* that could be bought and sold for profit. To achieve this, it repurposed a tool that had existed for several centuries as a mnemonic device for musicians and performers: musical notation. The musical score arrested the flow of sound in the form of graphic symbols on a page, a reification of sound that

could then serve as an exchangeable commodity. No longer an anonymous, collective creation, music became a form of private property protected by a new tool of the bourgeoisie, *copyright*, which legally restrained the flow or reproducibility of the score and the performances it determined. In addition to its use-value, music was now endowed with an exchange-value, a properly economic value.

Musical notation initiated new forms of musical territorialization, submitting sound to a symbolic code that required musical literacy and thus enabled a specialized class to regulate its flow. It fixed music in the form of an authorized document and thus restricted the musical drift that characterized folk musics. Yet the score was also an agent of deterritorialization, allowing music to travel widely in space and time, to be transported far beyond the cultural context of its creation.

The advent of audio recording intensified these codings of sonic flows and initiated new forms of deterritorialization as well. Electronic inscription captured sound in exchangeable containers and thus perfected the reification and commodification initiated by the musical score. At the same time, it dispensed with the requirement of musical literacy, allowing music to be actualized by anyone with an appropriate playback device. Where the score routed music through the detour of a visual code, audio recording delivered actual sounds and performances—and not merely *musical* sound but *any and all sound*. Not only did this vastly expand the domain of sonic art, it upset linear temporality and historicity as well. Sound recording extracts a sonic surface from a segment of the past and gives it a virtual existence that is not exhausted by any playback in the present. It generates a vast, discontinuous sonic archive in which wildly heterogeneous sounds collide, overlap, and coalesce.

III.

It's 2010 in Kidal, a trans-Saharan trading hub in northern Mali traversed by Berber nomads, commercial truck drivers, smugglers, refugees, and migrants headed to North Africa, Europe, or the West African coast.[13] Many of these travelers and urban locals are equipped with knockoff cellphones that serve a myriad of functions, prominent among which is to store and trade MP3s. These collections are extraordinarily wide-ranging and diverse: American classic rock and European techno-pop share space with Bollywood and Nollywood film music, Angolan kuduro, Bamako hip-hop, Tuareg desert blues, Balani Show music, Algerian rai, Ivoirian coupé-décalé, and other regional musics recorded with cheap or pirated technology in home studios, sometimes directly to cellphones. Audio files are traded phone to phone via Bluetooth networks that don't require internet or phone service, which, in the Sahel, are spotty and expensive if they exist at all. Or they're purchased from cellphone dealers who copy songs from cellphones brought in for repair. Two years later, Islamist rebels have taken over the region and imposed sharia law, banning music and destroying cellphone towers to halt this musical exchange. Prominent Malian musicians seek exile in Algeria or move southwest to the capital, Bamako, where the Islamist presence is weaker.

With all its flows and cuts, relays and blockages, this Saharan cellphone culture exemplifies how sound moves in the early twenty-first century. The digitization of music unleashed powerful forces of deterritorialization, allowing sound to flow with unprecedented ease and speed, spreading mainstream culture across the globe while also facilitating the development of highly local, hybrid scenes and subcultures. This flow can be restrained or blocked by conservative forces such as radical Islam, state firewalls, or the occasional "content moderation" of social media platforms such as YouTube; but the tendency of global capitalism is toward massive deterritorialization and decoding.[14] As Marx and Engels put it in the middle of the

nineteenth century, capitalism sweeps away "all fixed, fast-frozen relations, with their train of ancient and venerable prejudices and opinions," "all new ones become antiquated before they can ossify. All that is solid melts into air, all that is holy is profaned."[15] Capitalism annihilates all *codes* and replaces them with an *axiomatic* that translates all concrete, particular qualities into abstract quantities and ultimately into the universal equivalent: money. Anything goes, so long as it sells.

Yet this proviso reveals something crucial: capitalism recoils before its own inherent tendency. It tolerates deterritorialization only so long as it can profit from it, generating a "surplus value of flow." MP3s pushed the music industry to this brink and threatened it with dissolution. Marx's prophecy seemed to have been fulfilled: it appeared that capitalism had invented a technology that undermined its own property relations, a technology that fostered unlimited mobility and eliminated the scarcity necessary for the generation of economic value. Yet music streaming services revealed capitalism's power of reterritorialization. Platforms such as Spotify reasserted capitalism's ability to stockpile sound and to fabricate value hierarchies through the gatekeeping of "editorial playlists." They offered the consumer what piracy promised—easy access to a vast quantity of the world's recorded music—while enabling the music industry to extract a surplus from every stream. Moreover, music streaming exemplifies the new form of power that has been called "control society" or "surveillance capitalism."[16] Like Facebook and Google, streaming services not only derive monetary value from sonic flows; they also mine affective and behavioral data, enabling affective modulation and the sale of behavioral futures.

In response to these conditions, some artists attempt to return to the economy of the object, revalorizing the vinyl record, the homemade cassette, the limited-edition release. At the same time, artists find themselves compelled to reinvest in the aura and presence of live

performance and touring.[17] Critics of surveillance capitalism call for new legal restrictions and regulations to counteract its extraction of free labor and invasions of privacy. But there is another solution: not to return to older modes of aesthetic value but accelerate capitalism's tendency toward deterritorialization, to go further than it's willing to go. This was Oswald's solution in the early 1980s: to extract music from its commercial flow, alter it, and release it back into the sonic flux free of its commodity status. And this is how music circulates across the globe today, via digital networks, Bluetooth and cellphone connections, pirate radio stations, sound systems. The solution is not to return to earlier moments in the history of the sonic flux but to strengthen, extend, and multiply these networks and develop new technologies that liberate sound from its capture by power and capital and increase the speed and spread of its flow.

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1 John Oswald, "Plunderphonics, or Audio Piracy as a Compositional Imperative" (1985), http://www.plunderphonics.com/xhtml/xplunder.html. This text is reprinted in this volume on pp. 259—274, here 155—170.

2 On "cassette culture," see *Cassette Mythos*, ed. Robin James (New York: Autonomedia, 1992); David Novak, "The Future of Cassette Culture," in *Japanoise: Music at the Edge of Circulation* (Durham: Duke University Press, 2013), 198–226; and Don Campau, "A Brief History of Cassette Culture" (2009), http://livingarchive.doncampau.com/about/a-brief-history-of-cassette-culture.

3 See the Recording Industry Association of America's U.S. Sales Database, https://www.riaa.com/u-s-sales-database/.

4 See Diedrich Diederichsen, "Audio Poverty," *e-flux journal* 16 (May 2010), http://worker01.e-flux.com/pdf/article_143.pdf; and Ekkehard Ehlers and Björn Gottstein, "A Brief Aesthetics of Posteconomic Music," in *Audio Poverty. Konferenz über Musik und Armut*, conference catalogue, February 6–8, 2009. Haus der Kulturen der Welt, Berlin, https://ia800705.us.archive.org/4/items/AudioPovertyCatalogue/AudioPoverty_Katalog.pdf. See also Jonathan Sterne, *MP3: The Meaning of a Format* (Durham: Duke University Press, 2012), 211–12.

5 See Jacques Attali, "Ether Talk," *The Wire* 209 (July 2001): 70–73.

6 See Stephen J. Dubner, "How Spotify Saved the Music Industry (But Not Necessarily Musicians)," *Freakonomics* (podcast), ep. 374 (April 10, 2019), http://freakonomics.com/podcast/spotify/.

7 Ibid.

8 Karl Marx, *A Contribution to the Critique of Political Economy*, in *Karl Marx: Selected Writings*, ed. David McLellan (Oxford: Oxford University Press, 2000), 425.

9 See Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia*,

trans. Robert Hurley et al. (Minneapolis: University of Minnesota Press, 1983); *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987); and Deleuze's seminars from November 16, 1971 (https://www.webdeleuze.com/textes/116) and December 14, 1971 (https://www.webdeleuze.com/textes/119).

10 Manuel DeLanda elaborates this idea in *A Thousand Years of Nonlinear History* (New York: Zone Books, 1997).

11 Deleuze, seminar of April 15, 1980, trans. Charles J. Stivale, https://www.webdeleuze.com/textes/50 (translation modified). See also R. Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World* (Rochester, VT: Destiny Books, 1994), 5 and passim. I develop this notion at length in *Sonic Flux: Sound, Art, and Metaphysics* (Chicago: University of Chicago Press, 2018).

12 See Deleuze, seminar of December 14, 1971; and Daniel W. Smith, "Flow, Code, Stock: A Note on Deleuze's Political Philosophy," in *Essays on Deleuze* (Edinburgh: Edinburgh University Press, 2012), 160–72.

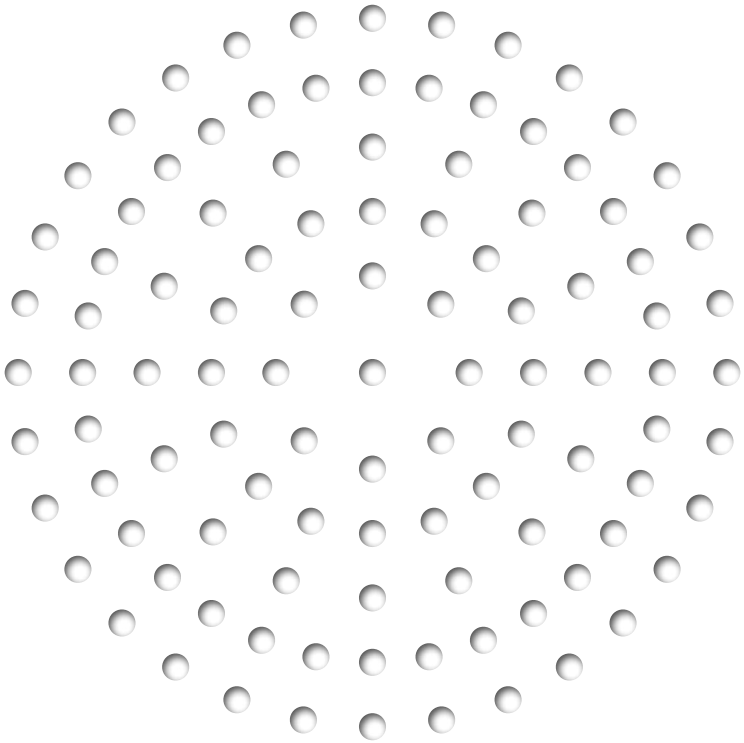
13 I draw my account from the liner notes to *Music from Saharan Cellphones* (Sahel Sounds, 2011) and *Music from Saharan Cellphones, Volume 2* (Sahel Sounds, 2013), both compiled by Christopher Kirkley, and from various online interviews with Kirkley.

14 By decoding, I mean the undoing or dissolution (rather than the deciphering) of codes.

15 Karl Marx and Friedrich Engels, "The Communist Manifesto," in *Karl Marx: Selected Writings*, ed. McLellan, ed. McLellan, 248.

16 See Deleuze, "Control and Becoming" and "Postscript on Control Societies," in *Negotiations, 1972–1990*, trans. Martin Joughin (New York: Columbia University Press, 1995), 169–82; John Bellamy Foster and Robert W. McChesney, "Surveillance Capitalism," *Monthly Review* (July 1, 2014), https://monthlyreview.org/2014/07/01/surveillance-capitalism/; and Shoshana Zuboff, *The Age of Surveillance Capitalism* (New York: PublicAffairs, 2019).

17 See Diedrich Diederichsen, *On (Surplus) Value in Art* (Berlin: Sternberg Press, 2008), 46–50.



Plunderphonics, or Audio Piracy as a Compositional Prerogative[1]

John Oswald

Musical instruments produce sounds. Composers produce music. Musical instruments reproduce music. Tape recorders, radios, disc players, etc., reproduce sound. A device such as a wind-up music box produces sound and reproduces music. A phonograph in the hands of a hip-hop/scratch artist who plays a record like an electronic washboard with a phonographic needle as a plectrum, produces sounds which are unique and not reproduced—the record player becomes a musical instrument. A sampler, in essence a recording, transforming instrument, is simultaneously a documenting device and a creative device, in effect reducing a distinction manifested by copyright.

Free Samples

These new-fangled, much-talked-about digital sound sampling devices, are, we are told, music mimics par excellence, able to render the whole orchestral panoply, plus all that grunts, or squeaks. The noun "sample" is, in our commodified culture, often prefixed by the adjective "free," and if one is to consider predicating this subject, perhaps some thinking aloud on what is not allowable auditory appropriation is to be heard.

Some of you, current and potential samplerists, are perhaps curious about the extent to which you can legally borrow from the ingredients of other people's sonic manifestations. Is a musical property properly

private, and if so, when and how does one trespass upon it? Like myself, you may covet something similar to a particular chord played and recorded singularly well by the strings of the estimable Eastman-Rochester Orchestra on a long-deleted Mercury Living Presence LP of Charles Ives' Symphony No. 3,[2] itself rampant in unauthorized procurements. Or imagine how invigorating a few retrograde Pygmy (no slur on primitivism intended) chants would sound in the quasi-funk section of your emulator concerto. Or perhaps you would simply like to transfer an octave of hiccups from the stock sound library disk of a Mirage to the spring-loaded tape catapults of your Mellotron.[3]

Can the sounding materials that inspire composition be sometimes considered compositions themselves? Is the piano the musical creation of Bartolomeo Cristofori (1655–1731) or merely the vehicle engineered by him for Ludwig van [Beethoven] and others to manoeuver through their musical territory? Some memorable compositions were created specifically for the digital recorder of that era, the music box. Are the preset sounds in today's sequencers and synthesizers free samples, or the musical property of the manufacturer?[4] Is a timbre any less definably possessable than a melody? A composer who claims divine inspiration is perhaps exempt from responsibility to this inventory of the layers of authorship. But what about the unblessed rest of us?

Let's see what the powers that be have to say. "Author" is copyrightspeak for any creative progenitor, no matter if they program software or compose hardcore. To wit: "An author is entitled to claim authorship and to preserve the integrity of the work by restraining any distortion, mutilation or other modification that is prejudicial to the author's honor or reputation." That's called the "right of integrity" and it's from the Canada Copyright Act.[5] A recently published report on the proposed revision of the Act uses the metaphor of landowners' rights, where unauthorized use is synonymous with trespassing. The territory is limited. Only recently have sound recordings been considered a part of this real estate.

Blank Tape is Derivative,
Nothing of Itself

Way back in 1976, ninety-nine years after Edison went into the record business, the U.S. Copyright Act was revised to protect sound recordings in that country for the first time. Before this, only written music was considered eligible for protection. Forms of music that were not intelligible to the human eye were deemed ineligible. The traditional attitude was that recordings were not artistic creations, "but mere uses or applications of creative works in the form of physical objects."[6]

Some music-oriented organizations still retain this "view." The current Canadian Act came into being in 1924, an electric eon later than the original U.S. Act of 1909, and up here "copyright does subsist in records, perforated rolls and other contrivances by means of which sounds may be mechanically reproduced."

Of course the capabilities of mechanical contrivances are now more diverse than anyone back at the turn of the century forecasted, but now the real headache for the writers of copyright is the new electronic contrivances, including digital samplers of sound and their accountant cousins, computers. Among "the intimate cultural secretions of electronic, biological, and written communicative media,"[7] the electronic brain business is cultivating, by grace of its relative youth, pioneering creativity and a corresponding conniving ingenuity. The popular intrigue of computer theft has inspired cinematic and paperback thrillers while the robbery of music is restricted to elementary poaching and blundering innocence. The plots are trivial: Disney accuses Sony of conspiring with consumers to make unauthorized mice.[8] Former Beatle George Harrison is found guilty of an indiscretion in choosing a vaguely familiar sequence of pitches.[9]

The dubbing-in-the-privacy-of-your-own-home controversy is actually the tip of a hot iceberg of rudimentary creativity. After

decades of being the passive recipients of music in packages, listeners now have the means to assemble their own choices, to separate pleasures from the filler. They are dubbing a variety of sounds from around the world, or at least from the breadth of their record collections, making compilations of a diversity unavailable from the music industry, with its circumscribed stables of artists, and an ever more pervasive policy of only supplying the common denominator.

The Chiffons/Harrison case, and the general accountability of melodic originality, indicates a continuing concern for what amounts to the equivalent of a squabble over the patents to the Edison cylinder.

The Commerce of Noise

The precarious commodity in music today is no longer the tune. A fan can recognize a hit from a ten-millisecond burst,[10] faster than a Fairlight can whistle Dixie. Notes with their rhythm and pitch values are trivial components in the corporate harmonization of cacophony. Few pop musicians can read music with any facility. The Art of Noise, a studio-based, mass market-targeted recording firm, strings atonal arrays of timbres on the line of an ubiquitous beat. The Emulator fills the bill. Singers with original material aren't studying Bruce Springsteen's melodic contours, they're trying to sound just like him. And sonic impersonation is quite legal. While performing rights organizations continue to farm for proceeds for tunesters and poetricians, those who are shaping the way the buck says the music should be, rhythmatists, timbralists, and mixologists under various monikers, have rarely been given compositional credit.[11]

At what some would like to consider the opposite end of the field, among academics and the salaried technicians of the orchestral swarms, an orderly display of fermatas and hemidemisemiquavers on a page is still often thought indispensible to a definition of music, even though some earnest composers rarely if ever peck these things

out anymore. Of course, if appearances are necessary, a computer program and printer can do it for them.

Musical language has an extensive repertoire of punctuation devices but nothing equivalent to literature's " " quotation marks. Jazz musicians do not wiggle two fingers of each hand in the air, as lecturers often do, when cross-referencing during their extemporizations, because on most instruments this would present some technical difficulties—plummeting trumpets and such.

Without a quotation system, well-intended correspondences cannot be distinguished from plagiarism and fraud. But anyway, the quoting of notes is but a small and insignificant portion of common appropriation.

Am I underestimating the value of melody writing? Well, I expect that before long we'll have marketable expert tune-writing software which will be able to generate the banalities of catchy permutations of the diatonic scale in endless arrays of tuneable tunes, from which a not necessarily affluent songwriter can choose; with perhaps a built-in checking lexicon of used-up tunes which would advise Beatle George[12] not to make the same blunder again.

Chimeras of Sound

Some composers have long considered the tape recorder a musical instrument capable of more than the faithful hi-fi transcriber role to which manufacturers have traditionally limited its function. Now there are hybrids of the electronic offspring of acoustic instruments and audio mimicry by the digital clones of tape recorders. Audio mimicry by digital means is nothing new; mechanical manticores from the nineteenth century with names like the Violano-Virtuoso and the Orchestrion are quaintly similar to the Synclavier Digital Music System and the Fairlight CMI (computer music instrument). In the case of the Synclavier, what is touted as a combination multi-track recording

studio and simulated symphony orchestra looks like a piano with a built-in accordion chordboard and LED clock radio.

The composer who plucks a blade of grass and with cupped hands to pursed lips creates a vibrating soniferous membrane and resonator, although susceptible to comments on the order of "it's been done before," is in the potential position of bypassing previous technological achievement and communing directly with nature. Of music from tools, even the iconoclastic implements of a Harry Partch or a Hugh Le Caine are susceptible to the convention of distinction between instrument and composition. Sounding utensils, from the erh-hu to the Emulator, have traditionally provided such a potential for varied expression that they have not in themselves been considered musical manifestations. This is contrary to the great popularity of generic instrumental music ("The Many Moods of 101 Strings," "Piano for Lovers," "The Truckers DX-7," etc.), not to mention instruments which play themselves, the most pervasive example in recent years being pre-programmed rhythm boxes. Such devices, as are found in lounge acts and organ consoles, are direct kin to the jukebox: push a button and out comes music. J. S. Bach pointed out that with any instrument "all one has to do is hit the right notes at the right time and the thing plays itself." The distinction between sound producers and sound reproducers is easily blurred, and has been a conceivable area of musical pursuit at least since John Cage's use of radios in the 1940s.

Starting from Scratch

Just as sound-producing and sound-reproducing technology becomes more interactive, listeners are once again, if not invited, nonetheless encroaching upon creative territory. This prerogative has been largely forgotten in recent decades. The now primitive record-playing generation was a passive lot (indigenous active form scratch belongs to the post-disc, blaster/Walkman era). Gone were the days of lively renditions on the parlor piano.

Computers can take the expertise out of amateur music making. A current music-minus-one program retards tempos and searches for the most ubiquitous chords to support the wanderings of a novice player. Some audio equipment geared for the consumer inadvertently offers interactive possibilities. But manufacturers have discouraged compatibility between their amateur and pro equipment. Passivity is still the dominant demographic. Thus the atrophied microphone inputs which have now all but disappeared from premium stereo cassette decks.[13]

As a listener my own preference is the option to experiment. My listening system has a mixer instead of a receiver, an infinitely variable speed turntable, filters, reverse capability, and a pair of ears.

An active listener might speed up a piece of music in order to perceive more clearly its macrostructure, or slow it down to hear articulation and detail more precisely. Portions of pieces are juxtaposed for comparison or played simultaneously, tracing "the motifs of the Indian raga Darbari over Senegalese drumming recorded in Paris and a background mosaic of frozen moments from an exotic Hollywood orchestration of the 1950s, a sonic texture like a 'Mona Lisa' which, in close-up, reveals itself to be made up of tiny reproductions of the Taj Mahal."[14]

During World War II concurrent with Cage's re-establishing the percussive status of the piano, Trinidadians were discovering that discarded oil barrels could be cheap, available alternatives to their traditional percussion instruments which were, because of the socially invigorating potential, banned. The steel drum eventually became a national asset. Meanwhile, back in the States, for perhaps similar reasons, scratch and dub have, in the 1980s, percolated through the black American ghettos. Within an environmentally imposed, limited repertoire of possessions a portable disco may have a folk music potential exceeding that of the guitar. Pawned

and ripped-off electronics are usually not accompanied by user's guides with consumer warnings such as "this blaster is a passive reproducer." Any performance potential found in an appliance is often exploited. A record can be played like an electronic washboard. Radio and disco jockeys layer the sounds of several recordings simultaneously.[15] The sound of music conveyed with a new authority over the airwaves is dubbed, embellished, and manipulated in kind.

The Medium is Magnetic

Piracy or plagiarism of a work occur, according to Milton, "if it is not bettered by the borrower." Stravinsky added the right of possession to Milton's distinction when he said, "A good composer does not imitate; he steals." An example of this better borrowing is Jim Tenney's "Collage 1" (1961) in which Elvis Presley's hit record "Blue Suede Shoes" (itself borrowed from Carl Perkins) is transformed by means of multi-speed tape recorders and razorblade. In the same way that Pierre Schaeffer found musical potential in his *objet sonore*, which could be, for instance, a footstep, heavy with associations, Tenney took an everyday music and allowed us to hear it differently. At the same time, all that was inherently Elvis radically influenced our perception of Jim's piece.

Fair use and fair dealing are respectively the American and the Canadian terms for instances in which appropriation without permission might be considered legal. Quoting extracts of music for pedagogical, illustrative, and critical purposes have been upheld as legal fair use. So has borrowing for the purpose of parody. Fair dealing assumes use which does not interfere with the economic viability of the initial work.

In addition to economic rights, moral rights exist in copyright, and in Canada these are receiving a greater emphasis in the current recommendations for revision. An artist can claim certain moral rights

to a work. Elvis's estate can claim the same rights, including the right to privacy, and the right to protection of "the special significance of sounds peculiar to a particular artist, the uniqueness of which might be harmed by inferior unauthorized recordings which might tend to confuse the public about an artist's abilities."

At present, in Canada, a work can serve as a matrix for independent derivations. Section 17(2)(b) of the Copyright Act of Canada provides "that an artist who does not retain the copyright in a work may use certain materials used to produce that work to produce a subsequent work, without infringing copyright in the earlier work, if the subsequent work taken as a whole does not repeat the main design of the previous work."

My observation is that Tenney's "Blue Suede" fulfills Milton's stipulation; is supported by Stravinsky's aphorism; and does not contravene Elvis's morality or Section 17(2)(b) of the Copyright Act.

Aural Wilderness

The reuse of existing recorded materials is not restricted to the street and the esoteric. The single guitar chord occurring infrequently on Herbie Hancock's hit arrangement "Rocket" was not struck by an in-studio union guitarist but was sampled directly from an old Led Zeppelin record. Similarly, Michael Jackson unwittingly turns up on Hancock's follow-up clone "Hard Rock." Now that keyboardists are getting instruments with the button for this appropriation built in, they're going to push it, easier than reconstructing the ideal sound from oscillation one. These players are used to fingertip replication, as in the case of the organ that had the titles of the songs from which the timbres were derived printed on the stops.[16]

So the equipment is available, and everybody's doing it, blatantly or otherwise. Melodic invention is nothing to lose sleep over (look what sleep did for [Giuseppe] Tartini). There's a certain amount of legal

leeway for imitation. Now can we, like Charles Ives, borrow merrily and blatantly from all the music in the air?

Ives composed in an era in which much of music existed in a public domain. Public domain is now legally defined, although it maintains a distance from the present which varies from country to country. In order to follow Ives' model we would be restricted to using the same oldies which in his time were current. Nonetheless, music in the public domain can become very popular, perhaps in part because the composer is no longer entitled to exclusivity, or royalty payments—a hit available for a song. Or as *This Business of Music* puts it, "The public domain is like a vast national park without a guard to stop wanton looting, without a guide for the lost traveler, and in fact, without clearly defined roads or even borders to stop the helpless visitor from being sued for trespass by private abutting owners." Professional developers of the musical landscape know and lobby for the loopholes in copyright. On the other hand, many artistic endeavors would benefit creatively from a state of music without fences, but where, as in scholarship, acknowledgment is insisted upon.

The Buzzing of a Titanic Bumblebee[17]

The property metaphor used to illustrate an artist's rights is difficult to pursue through publication and mass dissemination. The hit parade promenades the aural floats of pop on public display, and as curious tourists should we not be able to take our own snapshots through the crowd ("tiny reproductions of the Taj Mahal") rather than be restricted to the official souvenir postcards and programs?

All popular music (and all folk music, by definition), essentially, if not legally, exists in a public domain. Listening to pop music isn't a matter of choice. Asked for or not, we're bombarded by it. In its most insidious state, filtered to an incessant bass-line, it seeps through apartment walls and out of the heads of walk people. Although people in general are making more noise than ever before, fewer

people are making more of the total noise; specifically, in music, those with megawatt PAs, triple platinum sales, and heavy rotation. Difficult to ignore, pointlessly redundant to imitate, how does one not become a passive recipient?

Proposing their game plan to apprehend the *Titanic* once it had been located at the bottom of the Atlantic, oceanographer Bob Ballard of the Deep Emergence Laboratory suggested "you pound the hell out of it with every imaging system you have."

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1 This paper was initially presented by John Oswald at the Wired Society Electro-Acoustic Conference in Toronto in 1985. It was published in *Musicworks*, no. 34 (Spring 1986), as a booklet by *Recommended Quarterly*, and subsequently revised for the *Whole Earth Review*, no. 57 (Winter 1987), as "Bettered by the Borrower: The Ethics of Musical Debt."

2 Mercury SR90149. The question of user (as opposed to listener) accessibility to the recording is a bit complicated, and the answer varies from country to country. Recordings fixed before 1972 are not protected by federal copyright in the United States, but in some cases are protected under common law and state anti-piracy statutes. Symphony No. 3 was published and copyrighted in 1947 by Arrow Music Press. That the copyright was assigned to the publisher instead of the composers was the result of Ives' disdain for copyright in relation to his own work, and his desire to have his music distributed as widely as possible. At first, he self-published and distributed volumes of his music free of charge. In the postscript of *114 Songs*, he refers to the possessor as the "gentle borrower." Sometime following these offerings, Ives granted permission for the publication of his music in the periodical *New Music* with the condition that he pay all the costs.
It seems he had been incensed to find that, according to its custom, *New Music* had taken out a copyright in the composer's name for the part of his Fourth Symphony that it had issued. Ives stalked up and down the room growing red in the face and flailing the air with his cane: "Everybody who wants a copy is to have one! If anyone wants to copy or reprint these pieces, that's fine! This music is not to make money but to be known and heard. Why should I interfere with its life by hanging on to some sort of personal legal right in it?" From *Charles Ives and His Music*, by Henry and Sidney Cowell (Oxford University Press, 1955), 121–22. Later in his life Ives did allow for commercial publication, but always assigned royalties to other composers.
Ives admired the philosophy of Ralph Waldo Emerson who, in his essay "Quotation and Originality," said, "A man will not draw on his invention when his memory serves with a word as good; and, what you owe to me—you will vary the phrase, but I shall still recognize my thought. But what you say from the same idea, will have to me also the expected unexpectedness which belongs to every new work of nature."

3 The words "emulator" and "mirage" accurately describe the machines which bear their names. Window Recorder is a more ambitious cognomen for a device that can store longer programs than can most samplers, and therefore bridges the sense of the terms "sampler" and "digital recorder." At the other end, digital delay units are in effect short-term samplers.

4 The following quotes are excerpts from a forum which took place during January 1986 on PAN, a musicians' computer bulletin board.
[Hensley:] "The opinion of the legal profesionals [*sic*] was that, because the hardware served to limit the number of possible sounds, and because it was not only possible but probable that two individuals could independently program identical sounds... because of all that, patches for synthesizers did not fall into the realm of material for which a copyright could be effectively protected."
[R. Hodge:] "If everyone 'has' and is using a particular sound, then what good is it? (Well that wouldn't make it bad, but it would lose its impact.)"
[SPBSP:] "What good is a great sound if it is available to the 'masses'? Well... what good is a Hammond B-3, a Stratocaster, a Fender Rhodes, or a Stradivarius? Great players and programmers give sounds freely, confident perhaps that it's not the size, it's the motion." [Dave at Keyboard:] "I don't think a sound should be thought of in the same terms as a book, or a musical composition. Really fine work in any field would be greatly diminished by changing a word, removing a note, or resculpturing an appendage. A sound is more subjective, more like a recipe."
[Bill Monk:] "My outlook has been that, while a patch is copyrightable (melodies are, though they are produced with far fewer parameters), it doesn't really matter. Those interested in 'stealing' patches are probably unlikely to be able to make their own or to alter the stolen one in any significant way. But I can make plenty more with a little time and effort. It's the continuing ability that counts, not just having a few great patches."
[M. Fischer:] "At this point it is not entirely clear that 'sounds' are copyrightable, but a strong case can be made for their protection under copyright. The closest reported legal decision was one involving the Chexx hockey game (booing and cheering noises). That case held the sounds to be protectable sound recordings."
[Southworth:] "Various DX-7 programmers have told me that they 'bury' useless data in their sounds so that they can prove ownership later. Sometimes the data is obvious, like weird keyboard scalings or inaudible operators, and sometimes it's not, like the nonsense characters (I seem to recall someone once thought they were Kanji) in a program name. Of course, any pirate worth his salt would find all these things and change them... Synth programmers are skilled craftspeople just like violin makers, so if they go to the trouble of making new and wonderful sounds that other people can use, they should be compensated for their efforts. Unfortunately, it's not as easy as just selling the damn violin."
I also found the following quote on Sweetwater, a swapping network for the Kurzweil sampler (heavily promoted as a great piano mimic): "We cross-sampled most of the Emulator II's library (nothing is sacred)..."
And then there's this quote from Digidesign's promo literature for the Sound Designer (software support for the Emulator): "Sound Designer's 'pencil' lets you draw waveforms from scratch or repair sampled sounds. Have a click in a sound sampled from a record? Just draw out the waveform..."
Whose record? Samples are recordings and theoretically are copy-protected as such. But as PAN correspondent Bill Monk says, being able to prove ownership and actually going to court over a voice are two different things.

5 *A Charter of Rights For Creators: Report of the Subcommittee on Revision of Copyright*. This is the latest of sixteen studies published by the Canadian government in anticipation of a revised Canada Copyright Act. It follows *From Gutenberg to Telidon*, the final statement

from the preceding party in power. The following quotes are from *A Charter of Rights for Creators*:

"There is more at stake in the exploitation of a work than economic reward. Creative works are very much the expression of the personality of their authors. There is an identification between authors and their works. The Subcommittee agrees with the many witnesses who stated that creators cannot be fully protected unless their moral rights are recognized and enhanced."

Another consequence of the language used in the present Act is that moral rights appear to be protected only during the life of the author, rather than the usual term of life of the author plus fifty years. If moral rights are to be recognized as being as important as economic rights, the term of protection should be the same (6). Witnesses before the Subcommittee also supported the recommendation in *From Guttenberg to Telidon* that: "unauthorized modification of the original of an artistic work should be an infringement of the moral right of integrity, even in the absence of evidence of prejudice to the artist's honor of reputation. The Subcommittee agrees that this recommendation should be adopted together with its limitations relating to physical relocation, alteration of the structure containing the work, and legitimate restoration and preservation activities. "The Subcommittee wishes to make clear, however, that respect for works of the mind and their creators should not take the form of paternalism. Creation is after all one of the most self-assertive pursuits that can be imagined, precisely because it is a process fraught with considerable risk. Artists and other creators will always have to go through a struggle in which many fail and where there cannot be any guarantee of success." (7)

6 Of the numerous works covered by the Copyright Act, only one—a musical work—is specifically defined. All the others are described by way of examples—a method of legal drafting which gives scope for flexibility if circumstances change. Because musical works are presently defined as "combinations of melody and harmony, or either of them, which have been printed, reduced to writing, or otherwise graphically produced or reproduced," much contemporary music may not be protected by copyright because it is never written down: It is time for the law to apply the orientation of criteria of fixation as flexibly to musical works as it does to other works. It is irrelevant that a musical work is fixed by recording as opposed to written notation. A law revised in this manner would be consistent in treating, insofar as possible, all subject matter in the same manner (30–31). The present law assimilates sound recordings to musical, literary, or dramatic works, This categorization is outdated. It is time to protect sound recordings as a separate category of subject matter. In addition, the law should specify that the protection of a sound recording is totally independent of what is recorded. It is irrelevant whether what is recorded is a work which is protected by copyright or is in the public domain. For example, bird sounds do not constitute subject matter protected by copyright because such sounds are not works. But a sound recording of the same bird sounds would be protected as falling within the new category of copyright subject matter suggested in this recommendation (49). (References to the U.S. Copyright Act are taken from *This Business of Music*, by Shemel and Krasilovsky [New York: Billboard Publications, 1979] and Tom Schultheiss, "Everything You Always Wanted to Know About Bootlegs, But Were Too Busy Collecting Them to Ask: A Treatise on the Wages of Sinning for Sound," in *You Can't Do That!: Beatles Bootlegs and Novelty Records, 1963–80*, ed. Charles Reinhart [Ann Arbor, MI: Pierian, 1981], 395–411.)

7 This is Christopher Cutler's poignant phrase, from *File Under Popular: Theoretical and Critical Writings on Music* (London: November Books, 1985), 133–34, which also includes a good analysis

of attempted definitions of popular music, and a definition of folk music integral to the use of that term in Plunderphonics:
"First, the medium of its musical generation and perpetuation is tradition and is based in human, which is to say biological, memory. This mode centers around the ear, and can exist only in two forms: as sound and as memory of sound.
"Second, the practice of music is in all cases an expressive attribute of a whole community which adapts and changes as the concerns and realities it expresses—or as the vocabulary of the collective aesthetic—adapt and change. There is no other external pressure upon it.
"Third, there can be no such thing as a finished or definitive piece of music. At most there could be said to be 'matrixes' or 'fields.' Consequently, there is also no element of personal property, though there is of course individual contribution."

8 Ninth U.S. Circuit Court of Appeals Betamax decision on a suit by Walt Disney and Universal Studios against Sony. The courts decided that home taping off air television was breaking the law. Curiously, the record industry never filed a similar suit against audio recorder manufacturers. "Parasitic and predatory," says Stanley Gortikov, President of RIAA (Recording Industry Association of America), regarding the blank tape industry. "Home taping has exploded. The shrapnel of that explosion drains the lifeblood of the musical community... it renders weak the recording companies whose works have become a worldwide means of communication." Our subhead "Blank Tape Is Derivative, Nothing of Itself" is by David Horowitz, of Warner Communications (from "The War Against Home Taping," *Rolling Stone*, September 16, 1982, 62).

9 George Harrison was found guilty of subconsciously plagiarizing the 1962 tune "He's So Fine" by the Chiffons in his song "My Sweet Lord" (1970).
In his speculative story *Melancholy Elephants* (Penguin Books, 1984), Spider Robinson writes about the pros and cons of rigorous copyright. The setting is half a century from now. Population has increased dramatically, with many people living past 120. There are many composers. The story centers on one person's opposition to a bill which would extend copyrights to perpetuity. In Robinson's future, composition is already difficult, as most works are being deemed derivative by the copyright office. The Harrison case is cited as an important precedent. Then, in the late 1980s, the great Plagiarism Plague really gets started in the courts, and from then on it's open season on popular composers. But it really hits the fan at the turn of the century, when Brindle's *Ringsong* is shown to be "substantially similar" to one of Corelli's concertos.
Robinson points out that the currently prevalent system of composition has a limited number of specifiable notes which can be combined in a large but finite number of ways:
"Artists have been deluding themselves for centuries with the notion that they create. In fact they do nothing of the sort. They discover. Inherent in the nature of reality are a number of combinations of musical tones that will be perceived as pleasing by a human central nervous system. For millennia we have been discovering them, implicit in the universe—and telling ourselves that we 'created' them. To create implies infinite possibility. As a species, I think we will react poorly to having our noses rubbed in the fact that we are discoverers and not creators." (16)

10 The ten-millisecond figure is not based on any psychophysical research I've seen, but rather is a duration near the faster threshold of musical sense, which is approached by the examples given in hit parade recognition contests.

11 Unlike the more traditional vehicles of creative expression such as writing, drama, or art, the new media of the twentieth century—records,

films, broadcasts, computers—often require more equipment and a large and diversified creative team. Creation is no longer a craft but also an industry. This change not only involves new forms of economic organization, but reaches into the creative process itself. For example, in a sound recording the creative aspects include the choice of works, the contribution of musicians and performers, the work of sound mixers, and so on. Here the contribution of each team member is distinct but not separable from the final product; the outcome is greater than the sum of its parts (*A Charter of Rights for Creators*, 13).

12 The Beatles, especially Harrison, are an interesting case of reciprocity between fair use and the amassing of possession and wealth. "We were the biggest nickers in town; plagiarists extraordinaire," says Paul McCartney (*Musician*, February 1985, 62). He owns one of the world's most expensive song catalogues, including a couple of state anthems. John Lennon incorporated collage techniques onto pieces like "Revolution 9," which contains dozens of looped, unauthorized fragments taped from radio and television broadcasts. George obviously wasn't "subconsciously" plagiarizing in the case of his LP *Electronic Sound*. This release consisted of nothing more than a tape of a demonstration electronic musician Bernie Krause had given Harrison on the then-new Moog synthesizer. Krause: "I asked him if he thought it was fair that I wasn't asked to share in the disc's credits and royalties. His answer was to trust him, that I shouldn't come on like Marlon Brando, that his name alone on the album would do my career good, and that if the album sold, he would give me 'a couple of quid.'" The record was released with George's name in big letters, while Krause's was obscured.

13 The PAUSE button on home cassette recorders is used for editing and collaging on the fly, i.e., selective editing in real time. This has led to a connoisseurism of the personality of the PAUSE on various decks. Each makes a different-sounding edit. Some can be operated more quickly and precisely than others. Several composers prefer the long-discontinued Sony TC 153-158 line to all others. The Sony saga of consumer-targeted digital recorders is an interesting case of maintaining the pro/amateur gap. The relatively inexpensive PCM-F1 portable digital/analog converter was probably bought by more professionals than home recordists. It was essentially compatible with, and could substitute for, much more expensive professional equipment. Sony discontinued the F1, replacing it with the 701 E, which was not portable and did not have mic inputs. But it could still be adapted as a professional studio convertor. So Sony emasculated it, introducing the 501 E, similar but for most purposes studio-incompatible.

14 Quoted from Jon Hassell's essay "Magic Realism" [liner notes to *Aka-Darbari-Java / Magic Realism*, 1991].The passage refers in an evocative way to some appropriations and transformations in Hassell's recordings. In some cases this type of use obscures the identity of the original, and at other times the sources are recognizable.

15 Referring to DJ Francis Grosso at the Salvation club in New York in the mid-seventies Albert Goldman said, "He invented the technique of 'slip-cueing': holding the disc with his thumb whilst the turntable whirled beneath, insulated by a felt pad. He'd locate with an earphone the best spot to make the splice, then release the next side precisely on the beat.... His tour de force was playing two records simultaneously for as long as two minutes at a stretch. He would super the drum break of 'I'm a Man' over the orgasmic moans of Led Zeppelin's 'Whole Lotta Love' to make a powerfully erotic mix that anticipated the formula of bass drum beats and love cries that is now one of the clichés of the disco mix." Albert Goldman, *Disco* (New York: Hawthorn Books, 1978), 115. Also referred to in "Behind the Groove: New York

City's Disco Underground," by Steven Harvey, *Collusion*, no. 5 (September 1983), 26–33.

16 I have been unable to relocate the reference to this device which had, for example, a "96 Tears" stop. According to one source, it may have been only a one-off mockup in ads for the Roland Juno-60 synthesizer.

17 "A musical note like the buzzing of a titanic bumblebee which sped through space," was one account of the sounds that radio amateurs were receiving along the east American seaboard in 1914, a year after the *Rite of Spring* riot. No one knew what these sounds were until one experimenter recorded them on a hand-cranked Edison cylinder phonograph. When he accidentally played the recording back with the machine undercranked, he heard the slowing turning cylinder resolve the high-pitched whistles into the dots and dashes of Morse code. Further investigation revealed that an American radio station was broadcasting these signals to German U-boats off the coast. A war happened to be going on at the time. The U.S. Navy seized the station, and a lid of secrecy was clamped on the recordings until recent times, when the Freedom of Information Act allowed the National Archives to make them available. The Freedom of Information Act has made the titanic bumblebee available, but Alvin the Chipmunk, a character created by means of a specific tape recorder technique—double speed playback of the human voice—continues to retain exclusive rights.

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specifically created
for the exhibition, all
dated 2019

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BFY90, 2020, 5:46

Giancarlo Toniutti
Italy
N'ungun'ngesel (all six), 2014, 3:33

Gil Kuno
US
Slinky Piece, 2007, 2:43

Gil Sansón
Venezuela
El gris en nuestras vidas 2 [fragment], 2020, 5:41

Gilberto Esparza
Mexico
di di di (dispositivo de distorsión digital), 2008, 2:24

Gilles Aubry
Switzerland
Echoes Of Light & Darkness [fragment], 2013, 5:02

Gintas K
Lithuania
Pointless, 2018, 4:30

Giorgio Magnanensi
Italy/Canada
veryglitchypatch, 2019, 2:27

Godafoss (Carlos Suero)
Spain
Drone Noise Statement One [fragment], 2015, 4:31

Goh Lee Kwang
Malaysia
Shadow From Inside, 2019, 05:09

Government Alpha
Japan
Soft Ditch, 2016, 3:52

Gravespit (Brian Manley, Nicole Heather Rozsa, Margaret Ella Claycomb, Chris Leidner)
US
Blue Roses, 2019, 5:37

Gregory Kramer
US
That Train Has Already/ Will Never Arrive, 2018, 5:00

Grisha Shakhnes
Israel
A Man Asleep [fragment], 2013, 6:37

Günter Rezniček
Germany
Kehrwieder, 1996, 4:11

Gultskra Artikler (Alexey Devyanin)
Russia
Thunderfall, 2016, 2:49

Guttersnipe (Urocerus Gigas and Tipula Confusa)
UK
Sandworm Percolator, 2015, 3:41

GX Jupitter-Larsen
US
Friends About The Polywave, 2020, 4:29

Hadron (Michael Wertmüller & Marino Pliakas)
Switzerland
krakaALTshort, 2020, 6:00

Hanan Benammar
Algeria
One way to a desert [fragment], 2015, 4:21

Hands To (Jeph Jerman)
US
Turn My Hands To [fragment], 1991, 3:26

hans w. koch
Germany
clock of fifths [totentsonntag] [fragment], 2017, 5:32

Hardworking Families (Tom Bench)
UK
Cutting Through Air With An Electric Knife [fragment], 2018, 5:15

Hasan Hujairi
Bahrein
Pause, 2017, 02:00

Hecker (Florian Hecker)
Germany
Vi Retrospect, 2003, 3:27

Heibeg
Mexico
TSFA190929 [fragment], 2019, 5:58

Heidseck (Fabrizio Matrone)
Italy
Activity II (Beta) [fragment], 2018, 6:56

Helena Hamilton
UK
Salt, 2016, 3:26

Hélène Prévost
Canada
RITZ [fragment], 2018, 4:43

Helmut Schäfer
Austria
Isolated Irritation [fragment], 2002, 6:07

Henrique Iwao
Brazil
Baby, 2017, 6:34

Henry Vega
US/Netherlands
My Thought Walks Away With a Killing Smile, 2018, 2:05

Herbert Baioco
Brazil
Atmosfera de luz e sombra [fragment], 2018, 3:46

Heribert Friedl
Austria
Expand [fragment], 2005, 5:13

Hervé Perez
France
Répétez après moi, 2019, 6:34

Hideki Umezawa
Japan
Inutile [fragment], 2016, 3:47

Hilary Mullaney
Ireland
Blanket, 2005, 2:33

Hildegard Westerkamp
Canada
Breaking News, 2002, 3:18

Hojo+Kraft (Tomoko Hojo and Rahel Kraft)
Japan/Switzerland
Revealing Unknown Beings, 2019, 2:36

Howard Stelzer
US
Sun Trust, 2017, 6:13

Hubert Heathertoes Napiórski
New Zealand
Next Birthday [fragment], 2013, 5:10

Hunting Lodge
US
We Are They [fragment], 1983, 5:44

Hydra Head Nine (Henrik N. Björkk)
Sweden
Gia Regency, 2002, 4:17

Iddo Aharony
Israel/US
...and later, without a sound [fragment], 2015, 5:27

If, Bwana (Al Margolis)
US
Loop De Loop [fragment], 1987, 5:04

Ikue Mori
Japan/US
The Pit and the Pendulum [fragment], 1996, 6:13

ILIOS
Greece
There's Nothing Else To Compare, 2007, 4:39

Illusion of Safety (Dan Burke)
US
Ecstatic Crisis [fragment], 1986, 4:01

Ilona Scerbak & Minuit De Lacroix
Lithuania/Mexico
Polideportivo Municipal La Concepción (Remix), 2020, 5:00

INCAPACITANTS
Japan
Letter Hero, 2009, 5:01

Industria Masoquista (Javier Riera)
Ecuador
Sunday 04:30 AM, 2004, 4:12

Ingrid Schmoliner
Austria
Stampa, 2014, 4:26

Io Casino
Andorra
Summum Bonum, 2020, 5:52

Ipek Gorgun
Turkey
Afterburner, 2018, 4:17

Irene Moon (Katja Chantre Seltmann)
US
bat auk, 2006, 4:11

Irina Escalante Chernova
Cuba
Impresiones, 2015, 1:50

Island Songs (Nicolas Perret & Silvia Ploner)
France/Italy
I Got My Horse Right Outside, 2016, 6:20

Israel Martínez
Mexico
Mi Vida, 2006, 7:00

Iury Lech
Ukraine/Spain
Var Var, 2014, 4:00

Ivo Bol
Netherlands
Cartoon, 2012, 1:18

Jacaszek
Poland
Pentral IX, 2013, 3:47

Jaime D. Rojas Vargas
Colombia
Sensaciones del río, 2019, 6:21

James Brewster
UK/Sweden
Electro-Acoustic Café, 2011, 2:59

James P. Keeler
US
untitled (5 Shades For A Grey Room), 2002, 2:07

James Webb
South Africa
Tangier Plant Radio, 2010, 2:00

Jan-Peter E.R. Sonntag
Germany
EMP, 2020, 6:00

Jana Winderen
Norway
Heated [fragment], 2008, 6:03

Janneke van der Putten
Netherlands
Glottis Attack for one singer (live recording) [fragment], 2020, 3:37

Jared Sagar
UK
Saturc, 2016, 4:52

Jason Lescalleet
US
Rejection [fragment], 2008, 4:12

Jason Talbot
US
LSB3 [fragment], 2005, 3:25

Javier Ariza Pomareta
Spain
Paleophonic, 2020, 5:21

Javier Pérez Aranda
Spain
Pieza #01, 2014, 3:50

Javier Piñango
Spain
Live i.r.real 8 [fragment], 2017, 4:05

Jazznoize
Spain
Obra sintética [fragment], 2017, 5:57

Jean-Léon Pallandre
France
Souffles, 1998, 4:18

Jean-Louis Huhta
Sweden
Expulsion, 2008, 4:05

Jean-Luc Guionnet
France
Bending Contumax Extract 4, 2016, 3:44

Jean Routhier
Canada
Temps-Morts~NelsonR.Y_B [fragment], 2014, 5:30

Jérémie Mathes
France
Ciclos [fragment], 2013, 5:12

Jeremy D. Slater
UK/US
Live on the Ship in Bushwick, Brooklyn 3.16.19 [fragment], 2019, 6:34

Jeremy Young
Canada
The Poetics of Time-Space [fragment] 2016, 4:47

Jeroen Diepenmaat
Netherlands
Hogweed plays Bos en Beemd at 33rpm, 2016, 3:59

Jérôme Joy
France
Ecco [fragment], 2020, 6:00

Jérôme Noetinger
France
Un Temps, 2007, 5:00

Jesse Paul Miller
US
The Bear Was A Dog [fragment], 2015, 7:15

JesterN (Alberto Novello)
Italy
The Eye [fragment], 2016, 5:05

Jez riley French
UK
turbine hall infrasound (geophones) [fragment], 2019, 5:59

Ji Youn Kang
Korea
Time Folding V.3 [fragment], 2014, 7:26

Joachim Montessuis
France
Satyriasis, 1991, 6:36

João Orecchia
South Africa
Storage 1896–2015, 2015, 4:05

Joaquín Gutiérrez Hadid
Argentina
el dorado, 2018, 5:38

Joda Clément
Canada
The Invisibles [fragment], 2005, 5:25

Jodi Rose
Australia
Sonic Infinity Cruise (3) [fragment], 2018, 5:09

Joel Chadabe
US
Many Times Benjamin, 2001, 5:30

John B. McLemore
US
His Darker Paintings [fragment], 2003, 6:56

John Bence
UK
Kill/Aftermath, 2018, 5:54

John Butcher
UK
Atelier, 1999, 4:48

John Grzinich
US/Estonia
Return To Jägala [fragment], 2015, 5:27

John Kannenberg
UK
24-24: Hour 5
[fragment], 2018, 4:59

John Oswald
Canada
Sampler Mystery Tapes
[fragment], 1991, 4:06

John Wynne
UK/Canada
Fallender ton für 207 lautsprecher boxen
[fragment], 2004, 5:29

Jorge Bejarano Barco
Colombia
Máquinas Mestizas
[fragment], 2017, 6:00

Jorge Castro aka Fisternni
Argentina
Metaphysical ambient 4, 2019, 5:58

Jorge Haro
Argentina/Spain
modul+ m [fragment], 2018, 6:00

Jorge Vicario
Spain
second movement for elastic tape, 2014, 2:46

Jørgen Larsson
Norway
Crashing Happy, 2001, 4:05

Jørgen Teller
Denmark
Tide [fragment], 2018, 3:54

José Iges
Spain
Dylan In Between, 2001, 4:36

José Tomé
Spain
Rhythmrain [fragment], 2013, 4:29

Josep Maria Balanyà
Spain
Archaic Rubbers, 2014, 5:58

Joseph Nechvatal
US/France
Sleep [fragment], 1983, 4:12

Josten Myburgh
Australia
Footybox (Ballardong Noongar boodja), 2018, 4:51

Juan Antonio Nieto
Spain
Wetlands, 2010, 5:52

Juan Cantizzani
Spain
Físicoarmónico [fragment], 2007, 5:51

Juan Crek
Spain
Yo soy yo, 2011, 4:33

Juanjo Palacios
Spain
Edificio Resonante [fragment], 2015, 5:20

Juanma Prieto Akasha
Spain
Las costureras 1911 [fragment], 2020, 5:00

Judy Dunaway
US
Blown Uncut, 1998, 5:00

Julián Gómez
Argentina
Hacia un lado, 2017, 5:16

Julian Knowles
Australia
The Billion, 2020, 5:52

Julien Ottavi
France
Micro Puces v1 (Circuit Bending) [fragment], 2001, 3:07

Jun Mizumachi
US/Japan
ARROKOTH [fragment], 2020, 5:58

Justin Bennett
UK/Netherlands
01 Maasvlakte, Netherlands, 2018, 3:57

Justo Bagüeste & Suso Saiz
Spain
I.P.D. 1 [fragment], 1995, 6:00

Kaffe Matthews
UK
One Plastic Bottle, 450 Years, An Extract [fragment], 2017, 4:17

Kasia Glowicka (voice Raehann Bryce-Davis)
Poland/Netherlands
I Thought It Was a Dream But When I Woke I Couldn't Walk, 2018, 4:50

Kasper T. Toeplitz
France/Poland
Almasty [fragment], 2015, 5:54

Kassel Jaeger (François Bonnet)
France
Windshore, 2010, 6:06

Kate Carr
Australia
by cowardice or courage, 2018, 5:09

Kathy Kennedy
Canada
Fields of Ahh 1.0, 2019, 2:11

Keir Neuringer
US
The Organ of a Disembodied Voice, 2011, 5:31

Ken Furudate
Japan
Band Limited Noises, 2019, 4:41

Kenneth Kirschner
US
January 1, 2019 – viii, 2019, 5:44

Kepa Landa
Spain
Atmos Data Kioto [fragment], 2019, 5:00

Komora A (Jakub Mikołajczyk, Karol Kosznic & Dominik Kowalczyk)
Poland
Waking Up, 2016, 6:48

Koray Kantarcıoğlu
Turkey
AC RU 29 Part 1, 2016, 4:47

Kotra (Dmytro Fedorenko)
Ukraine
Spiv Zolota, 2015, 4:09

Kris Limbach
Germany
Aki Void [fragment], 2012, 4:31

La Otra Cara de un Jardín (Francisco Felipe)
Spain
La Otra Cara de un Jardín [fragment], 1980, 4:34

Laetitia Sonami
US/France
Breathing in Birds and Others [fragment], 2017, 4:25

Lasse-Marc Riek
Germany
Flugzeug/Kegelrobbe (Bulle), 2013, 3:54

Lasse Marhaug
Norway
Angelica [fragment], 2009, 4:49

Laura Mello
Brazil
Schnitzel-Caixinha Sample333up Sample750down Glockleiter with field recordings, 2018, 2:05

Laurent Bigot
France
Très-Cloîtres, 2h du matin, 2017, 1:28

Lawrence English
Australia
A Summer Crush (Takadanoba/Brooklyn) [fragment], 2004, 6:10

Leah Barclay
Australia
Hydrophone Recording from Salt Caves Dam, Pilliga Forest, Late Afternoon [fragment], 2018, 4:52

Lee Patterson
UK
Nine Lucifers (Remastered 2020), 2009, 1:55

Leo Okagawa
Japan
Motion, 2017, 4:54

Leonie Roessler
Germany
Tehrsfahan, 2016, 4:48

Liew Niyomkarn
Belgium/Thailand/US
WHOLE II, 2016, 5:33

Linn Halvorsrød
Norway
This is how I imagine sound therapy, 2020, 6:00

Liquid Sphere (Laurent Guerrier)
France
d.t.w.a. [fragment], 2002, 4:03

Lisa Schonberg
US
Lookout Creek (Eighth Notes), 2019, 5:03

Livebatts! (John White, MJ Coldiron, Andrea Rocca)
US/Italy
Waldesrauschen [fragment], 1999, 4:34

Llorenç Barber
Spain
Nox Noctis, 2020, 5:23

Lou Mallozzi
US
Lingualabial [fragment], 2018, 5:47

Louis Dufort
Canada
Into The Forest I've Seen Under [fragment], 2020, 6:18

Luar Domatrix (Rodolfo Brito)
Portugal
Non Glance [fragment], 2017, 6:14

Luca Forcucci
Switzerland
Bodyscape [fragment], 2019, 4:45

Luca Sigurtà
Italy
Alphabet, 2019, 4:02

Lucy Railton
Uk
To The End, 2018, 4:20

Luigi Turra & Christopher McFall
Italy/US
tactile.surface [fragment], 2010, 7:17

Luis Marte
Argentina
Octo011, 2020, 5:48

Luke Pearson
US
War For Silent Wilderness, 2019, 5:00

Lyke Wake
Italy
At The End Of The Dream, Where Nothing Remains (Intro 1), 2020, 5:58

M2w (Mathias Janssens)
Belgium
first improvisation on boat [fragment], 2011, 6:00

Maar (Joseph Clayton Mills & Michael Vallera)
US
Severe Combined, 2018, 7:21

Maeror Tri (Stefan Knappe, Martin Gitschel, Helge S. Moune)
Germany
A Deeper Hell [fragment], 1994, 4:58

Magali Babin
Canada
Excuse me, can you tell me where is the new year's party?, 2018, 5:42

Magali Daniaux & Cédric Pigot
France
El Mirador, 2019, 5:20

Maggi Payne
US
Moiré [fragment], 1996, 7:16

Maia Francisco
Spain
Washing Machine [fragment], 2016, 5:48

Maia Urstad
Norway
Distant voices still live, 2019, 5:55

Manrico Montero
Mexico
Aster, 2008, 5:39

Manuel Rocha Iturbide
Mexico
Móin Mor [fragment], 1995, 5:46

Manuella Blackburn
UK
Switched On [fragment], 2011, 2:00

Marc Behrens
Germany
Our Tongues in Your Ears [fragment], 2018, 5:41

Marek Choloniewski
Poland
Physical Modeling, 2004, 7:24

Margriet Kicks-Ass
Netherlands
Noise Ocean, 2014, 5:40

María de Alvear
Spain/Germany
Die Badende [fragment], 1987, 5:20

Marie Guilleray
France
Estran [fragment], 2012, 5:28

Marije Baalman
Netherlands
Verlust, 2012, 03:29

Marinos Koutsomichalis
Greece/Cyprus
Weierstrass function, finite state automata, and l-system [fragment], 2015, 4:49

Mark Bain
US/Netherlands
Harping [fragment], 2020, 6:00

Marko Uzunovski
Netherlands/ North Macedonia
Convergence (Edit) [fragment], 2012, 5:58

Marta Sainz & Enrique Zacagnini
Spain
Live at Sarean [fragment], 2017, 5:49

Marta Zapparoli
Italy
Pissed of Wasps in a Plastic Bottle [fragment], 2015, 06:27

Martijn Tellinga (Ensemble: Konzert Minimal)
Netherlands
during, lasting .. exhibition piece [fragment], 2015, 6:17

Mason Jones
US
Yearning Like A Goddess In Pain [fragment], 1993, 4:35

MASONNA
Japan
Hyper Chaotic Chapter 1, 1996, 0:48

Massimo Toniutti
Italy
Gravi, 1987, 3:12

Mathieu Ruhlmann
Canada
tsukubai, part VI, 2009, 4:13

Mats Lindström
Sweden
El Tanque [fragment], 2020, 5:40

Matt Byrd
US
Life [fragment], 2017, 6:50

Matt Shoemaker
US
Tropical Amnesia One [fragment], 2008, 12:06

Matteo Marangoni & Ángel Faraldo
Italy/Spain/Netherlands
Rites for a New Utopia (Installations), 2015, 6:00

Matthew Aidekman
US
I'm Thinking of Leaving, 2020, 5:38

Mattin
Basque Country/Spain
Objeto de género, 2020, 3:07

Maxime Corbeil-Perron
Canada
Suite Fukushima Daiichi, 2011, 5:23

Medusa's Bed (Zahra Mani, Lydia Lunch, Mia Zabelka)
UK/Pakistan/ US/Austria
Medusa on Air (preview instrumental), 2014, 05:23

Meira Asher
Ireland
(MP)_Caterpillar (feat. Mahade Pako), 2004, 5:11

Melissa Cruz García
Colombia
Foot Food and Breathing Jacket on Gravity, 2016, 4:19

Melodinámika Sensor (Javier Hernando)
Spain
Naturstudium, 1983, 4:36

Mesías Maiguashca
Ecuador
Videomemorias (soundtrack) [fragment], 1989, 7:12

Michael Clemow
US
... While Lost in the Bushveld Before Dawn, 2014, 5:16

Michael Duane Ferrell
US
Victim of Self Deceit, 2019, 7:28

Michael Esposito
US
Spectral Code Transmission Live (2016) [fragment], 2016, 3:30

Michael Fahres
Germany/Netherlands
Cetacea [fragment], 2006, 5:16

Michael J. Schumacher
US
Re-enact [fragment], 2015, 5:50

Michael Northam
Nepal/India/US
unenconded [fragment], 2015, 5:19

Michael Prime
UK/Ireland
Ha, ha! Your Mushrooms Have Gone (Beamish Brewery 2), 2010, 4:29

Michael Rüsenberg
Germany
Lisboa Horn Concerto, 2003, 2:54

Michalis Moschoutis
Greece
NLN, 2015, 2:55

Miguel A. García
Spain
Bestiari (for Tzesne) [fragment], 2015, 7:41

Miguel A. Ruiz
Spain
Animales Metafísicos, 1989, 3:21

Miguel Álvarez-Fernández
Spain
Armónicos, 1999, 4:46

Miguel Isaza
Colombia
Upallay [fragment], 2019, 5:29

Mika Motskobili (Vo Ezn)
Georgia
Nul.eo, 2017, 03:06

Mike Cooper
UK
Bendigo To Kyoto [fragment], 1999, 4:30

Mike Honeycutt
US
Monochrome Vision tribute, 2014, 4:33

Mike Vernusky
US
The Holy See / Red Mass [fragment], 2018, 8:30

Mikel R. Nieto
Spain
44, 2017, 1:23

minoru sato -m/s
Japan
threshold and dispersion of magnetic pendulum, 2014, 3:41

Minóy (Stanley Keith Bowsza)
US
The Conditions of Postmodern Male Bonding [fragment], 1986, 5:54

Miquel Jordà
Spain
La cabellera viajera, 2012, 5:08

Mise_En_Scene (Shay Nassi) & Audio Architecture
Israel/Germany
Contures of Leafs (Version II Mind Snare), 2009, 6:34

Miya Masaoka
US
Wind At My Feet, 2020, 5:10

Modelbau (Frans de Waard)
Netherlands
Total Loss, 2019, 4:27

Monty Adkins
UK
Saenredam's Dream, 2019, 5:12

MSBR (Koji Tano)
Japan
Euro Grappling Electro, [fragment], 1998, 4:36

Muqata'a
Palestine
Istihdar, 2018, 1:56

Murmer (Patrick McGinley)
US/Estonia
Specular Reflection (Liquid Solid Redux 2000–2010) [fragment], 2012, 6:41

Mykel Boyd
US
fever dream two [fragment], 2017, 5:23

n_/0 (Luis Rivera)
Mexico
Setab0ut, 2019, 5:12

N1L
Latvia
Alpha Fall, 2018, 5:25

Nacarid López
Venezuela/Spain
En Marte Hay Vida, 2013, 3:29

Nad Spiro
Spain
Spiaire [fragment], 2014, 5:52

Nadia Lena Blue
France
Forme limpide d'un reste, 2019, 03:09

Natalia Domínguez Rangel
Colombia/Netherlands
Untitled - Sound for installation N.1822 [fragment], 2019, 1:42

Natasha Barrett
UK/Norway
Innermost [fragment], 2019, 4:29

Naujawanan Baidar (N.R. Safi)
Afghanistan/US
Chaikhana Transistor, 2018, 3:12

Naxal Protocol (Piero Stanig)
Italy
Choose Your Conspiracy, 2017, 5:33

Neil Lowe
South Africa/New Zealand
Inaudible Ambiences / Suburban Johannesburg, 2019, 3:16

Neo Zelanda
Spain
Francés Básico, 1982, 3:11

Neon & Landa
Latvia/Netherlands
Sapphire Lake [fragment], 2016, 4:50

Nicholas Szczepanik & Juan José Calarco
US/Argentina
through a reminiscent reagent [fragment], 2010, 5:57

Nico Dockx (feat. BuildingTranmissions)
Belgium
Ghosttransmissions (pt.2), 2018, 4:03

Nicolas Collins (with Ben Neill, trumpet)
US/Chile
Still Lives, 1993, 5:49

Nicolas Wiese
Germany
Expediency/Atavism, 2018, 3:47

Nik Colk Void
UK
Recollection Pulse #3 [fragment], 2018, 6:31

No Xivic (Henkka Kyllönen)
Finland
I Do Blame You [fragment], 2004, 5:14

novi_sad (Thanassis Kaproulias)
Greece
International Internal Catastrophes [fragment], 2018, 6:04

nulla.cc (Lloyd Dunn)
US/Czech Republic
World of Stone [fragment], 2014, 6:33

O+A (Bruce Odland & Sam Auinger)
US/Germany
rotterdam-BOX30/70 [fragment], 2001, 6:09

O Morto (Mestre André)
Portugal
The Forest and The People [fragment], 2015, 7:47

Of Habit & Dane Law (Gary Myles & Adam Parkinson)
UK/Hong Kong
Disconnect, 2018, 4:08

Olivia Block
US
Foramen Magnum [fragment], 2013, 5:42

Oren Ambarchi
Australia
Simian Angel [fragment], 2019, 6:18

Oriol Rosell & D.Forma
Spain
Weekend Warrior [fragment], 2016, 1:56

Oscar Abril Ascaso + Sedcontra
Spain
Sin titulo, 1993, 2:18

Oscar Martín
Spain
Boids Alpha Centauri [fragment], 2015, 6:10

Otto Castro Solano
Costa Rica
Olinda [fragment], 2016, 6:00

Our Man From Odessa (German Popov)
Ukraine
Particles, 2018, 2:10

Phil Dadson, Paul Winstanley, Tom Nunn
New Zealand/US
Accretion [fragment], 2019, 5:29

Pablo Reche
Argentina
Contelación D1 [fragment], 2004, 5:46

Pablo Sanz
Spain
Strange Strangers [fragment], 2019, 6:07

Pali Meursault
France
Cycle #2 (Offset), 2013, 4:56

Panchasila
Argentina
Canción de la Emperatriz, 2018, 4:28

Pandelis Diamantides
Greece
New Ideas for Increased Mobility, 2018, 3:26

Panzar (Peter Andersson)
Sweden
Disorder-Gepanzert [fragment], 2006, 6:32

Pascal Battus
France
Limb [fragment], 2012, 5:55

Patrick Higgins
US
Dossier [fragment], 2018, 5:10

Paul Baran
UK
The Human Republic of Haiti [fragment], 2014, 5:31

Paul Dickinson
US
Owl v. Microphone [fragment], 2019, 5:32

Paul Panhuysen
Netherlands
Stalin [fragment], 1995, 5:05

Paul Prudence
UK
Obsidian, 2018, 5:18

PBK (Phillip B Klingler), Mark Spybey, John Butcher, Travis Johnson
US/UK
Heat on Earth [fragment], 2018, 6:03

Pedro Chambel
Portugal
The Inglorious Search [fragment], 2019, 4:47

Pedro Bericat
Spain
W. Churchill, 2016, 1:45

Pedro Rebelo
Portugal
Listen to Me #1 [fragment], 2020, 5:21

Pelayo Arrizabalaga & Eli Gras
Spain
Eee/Aaaaaa [fragment], 2013, 4:14

People Like Us (Vicki Bennett)
UK
Nothing, 2004, 3:33

Peter Bosch & Simone Simons
Netherlands/Spain
Acuática, 2020, 5:55

Peter Cusak
UK
Lake Baikal ice flow splits underwater [fragment], 2003, 5:45

Peter Duimelinks
Netherlands
Trivelogue, 1999, 4:56

Pharmakustik (Siegmar Fricke)
Germany
Umzug [fragment], 1985, 4:08

Pheobe riley Law
UK
interference of objects (east yorkshire # 2)
[fragment], 2019, 3:13

Philip Samartzis
Australia
Boleskine [fragment], 2019, 6:00

Philip Sulidae
Australia
Quaint Cloudy And Metal [fragment], 2014, 5:43

Philippe Faujas
France
Antes [fragment], 2005, 5:27

Philippe Petit
France
Sleepwalking, 2020, 5:49

Phill Niblock
US
UnmountedMadrid [fragment], 2019, 5:59

Philippe Lamy
France
Mots Effacés [fragment], 2012, 5:20

Pierce Warnecke
US
The Rift That Sets [fragment], 2012, 3:47

Pierre Bastien
France
Edo Ode, 2015, 4:32

Pierrot Lunaire (John Denizio)
US
Fuck Em', 2016, 4:38

Pietro Riparbelli
Italy
First Day [fragment], 2012, 5:30

Pina Bounce (Thalia Ioannidou)
Greece
Trumpetancy-intro [fragment], 2015, 5:17

Pink Twins
Finland
Blade of gold [fragment], 2020, 5:00

Poly Fannies (David Meunier & Thomas Giry)
Belgium
untitled A (Athom Afternan') [fragment], 2014, 6:04

Positive Centre (Mike Jefford)
UK
Composite Particles, 2018, 4:32

Psychoangelo (Michael Theodore & Glen Whitehead)
US
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