

The Politics of Sound

Flows, Codes, and Capture

ABSTRACT This essay considers the politics of sound on the model of migration and borders, that is, as concerning flows and codes, inclusions and exclusions. A rigorously materialist analysis of sound would consider it as one of the many flows that constitute nature and culture. On this model, the fundamental function of society is to code flows, that is, to intercept them, organize them, regulate them, channel them in particular directions, impose meanings and limits on them, and the like. A politics of sound, then, would consider the local and global circulation of sound, its flow, capture, and blockage, the forces (technological, legal, economic, cultural, social, moral, linguistic, racial, gendered, etc.) that accelerate, decelerate, and otherwise inflect it. It would ask: What are the forces that generate sonic flows and propel their movement and circulation? What are the forces that constrain this sonic flux sufficiently to enable it to congeal into languages, musical styles, or scenes? And what are the forces that block, annul, or cancel these sonic flows? **KEYWORDS** sound, politics, flow, code, territorialization, deterritorialization, borders, migration

"EVERYTHING IS POLITICAL"

We are children of our age,
it's a political age.

All day long, all through the night,
all affairs—yours, ours, theirs—
are political affairs.

Whether you like it or not,
your genes have a political past,
your skin, a political cast,
your eyes, a political slant.

Whatever you say reverberates,
whatever you don't say speaks for itself.
So either way you're talking politics.

Even when you take to the woods,
you're taking political steps
on political grounds.

Apolitical poems are also political,
and above us shines a moon
no longer purely lunar.

To be or not to be, that is the question.

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And though it troubles the digestion
it's a question, as always, of politics.

To acquire a political meaning
you don't even have to be human.
Raw material will do,
or protein feed, or crude oil,

or a conference table whose shape
was quarreled over for months:
Should we arbitrate life and death
at a round table or a square one?

Meanwhile, people perished,
animals died,
houses burned,
and the fields ran wild
just as in times immemorial
and less political.¹

Wisława Szymborska's "Children of Our Age" is compelling for the range of attitudes it condenses. In the first place, the poem conveys with a degree of sincerity a view that's common in intellectual discourse today: that politics is everywhere and inescapable, evident in every human act, claim, and perspective, and even in the natural world, viewed as a set of resources marked by human needs, desires, and projects. At the same time, the monotonous assertion of this claim and Szymborska's repetition of the words "politics" and "political" (13 times in 35 lines) suggests that the phrase "everything is political" has become a platitude. (In this respect, "Children of Our Age" reads like the list of "Truisms" artist Jenny Holzer began compiling in 1977, two years before the poem's publication.) The tone of irony and tedium at the claim "everything is political" suggests that, in discourse today, the term "politics" often misses the reality it's supposed to bring to the fore, concerns suggested in the final stanza: matters of life and death, social order and destruction, and so on. The last few stanzas also suggest that, though we may see and hear it everywhere, "politics" is merely human, all too human.

I begin with this poem both because I more or less accept the claim that "everything is political" *and* because I want to ask whether we really know what we mean by the terms "politics" and "the political," and whether what we call "political" really is so. Today, we tend to demand that works of art be "political." In the age of Black Lives Matter, Me Too, resurgent right-wing nationalism, and catastrophic climate change, we tend to want art to engage with and reflect our social and political condition; and, conversely, we tend to judge "apolitical" works to be irrelevant or reactionary. Of course, to be deemed "political," a work of art need not demonstrate its political value or effectivity but often only its political stance. And yet, as Jacques Rancière has pointed out, insofar as there is a consensus about what "political" or "subversive" art is, such art is on the side of power and the police rather than of democratic politics.²

AESTHETICS AND POLITICS: THREE PROPOSALS

How, then, should we think about the politics of art? Focusing on sound and music, I want briefly to consider three different proposals concerning aesthetics and politics and then to offer another proposal. According to the most common idea, music or sound is political insofar as it has political content or represents political issues. Think of Public Enemy's "Fight the Power," Bob Marley's "Get Up, Stand Up," Billie Holiday's "Strange Fruit," MIA's "Borders," or Kendrick Lamar's "Alright." However much we may love this music and be inspired by it, the notion that music is political by virtue of its lyrical content has been subject to withering criticism. In the early 1930s, Walter Benjamin pointed out that "the bourgeois apparatus of production and publication can assimilate astonishing quantities of revolutionary themes—indeed, can propagate them without calling its own existence, and the existence of the class that owns it, into question."³ Anyone who wonders whether this is still the case today need only consider that each of the songs I mentioned was released and marketed by one of the three multinational corporations that control 70% of the world's recorded music (Universal Music Group, SONY Music Entertainment, Warner Music Group), corporations for which these songs are sources of enormous profit rather than any sort of threat. Expanding Benjamin's argument, Theodor Adorno remarks that popular music is so bound up with "consumption" and "amusement" "that attempts to outfit it with a new function remain entirely superficial" and that, "by taking the horrendous and making it somehow consumable" the protest song "ends up wringing something like consumption qualities out of it."⁴ Ranci re goes further, arguing that so-called political art is often reactionary insofar as its mode of address is antidemocratic: it establishes a hierarchy of knowledge that treats the viewer or listener as an ignorant party that needs to be edified and shaken from its stupor.⁵

These criticisms prompt an alternative position. Artist and theorist Hito Steyerl marks the contrast. "A standard way of relating politics to art assumes that art represents political issues in one way or another," writes Steyerl. "But there is a much more interesting perspective: the politics of the field of art as a place of work. Simply look at what it *does*—not what it *shows*."⁶ This gives us the following proposal: Music or sound is political insofar as it resists exploitation in its production, performance, distribution, and reception. Many have argued, for example, that musical free improvisation is deeply "political" in this sense. As critic Ben Watson writes:

Free Improvisation is almost by definition outsider music, opposed to capitalist business-as-usual. Improvisers want to explore the possibilities of the instant—in this space, using these instruments, with this audience (or lack of it) . . . Free Improvisation doesn't guarantee any particular sound or mood, it produces a question mark rather than a commodity.⁷

Of course, if it is true that, as improviser Eddie Pr vost writes, free improvisation "is a form of music which . . . counters the ethos which characterizes capitalism," it does so only in the most local of circumstances, for the relatively small group of players and audience members who attend to its fleeting sounds.⁸

Beyond this particular example, though, we might think of musicians or sound artists as “political” insofar as they attend to the conditions of their labor, to how their work is appropriated by institutions and circulates within contemporary systems of power. As Jean-Luc Godard once put it *a propos* cinema: “The problem is not to make *political* films, but to make films *politically*.”⁹ Think, for example, of the decision by several artists to withdraw their work from the 2019 Whitney Biennial in protest of the museum’s refusal to address the fact that one of its board members, Warren Kanders, is the CEO of a company that manufactures tear gas used against migrants in Tijuana and protestors in Cairo, Gaza, and elsewhere.

Attention to the conditions of artistic labor is surely important, but the question is, What political work can be done by the work of art, the musical piece, the sound installation itself? What is it that can make the *work of art* political? This leads us to a third proposal, associated with the work of Rancière. Music or sound is political insofar as it alters the dominant modes of perception, that is, of *what* or *who* is *heard* and *by whom*. Every society, every configuration of power, and thus every politics, “partitions the sensible,” as Rancière puts it. That is, explicitly or implicitly, it organizes the perceptible world and the sensorium, determining what can be seen and heard by whom in what contexts, spaces, and times: what languages are officially spoken and understood; what words can be said in what contexts; what music can be played when, where, and by whom; what sounds and images are proper or improper, offensive or inoffensive, intelligible or unintelligible, music or noise.¹⁰ In this sense, music or sound is “political” insofar as it creates “dissensus,” contributing to a rift in the established order of the sensible.

Though framed in somewhat different terms, this is precisely what Jacques Attali was after in his 1977 book *Noise: The Political Economy of Music*. For Attali, politics is the struggle between order, on the one hand, and disorder and violence, on the other. And this distinction between order and disorder is sonically prefigured in the distinction between music and noise. Attali writes: “More than colors and forms, it is sounds and their arrangements that fashion societies. With noise is born disorder and its opposite: the world. With music is born power and its opposite: subversion. In noise can be read the codes of life, the relations among [human beings].”¹¹ For music or sound to be “political,” then, is for it to challenge the established distribution of the audible, the division between what is considered music (or intelligible sound) and noise.

THE POLITICS OF FLOWS

In this essay I will push this idea further, considering sound in its local and global circulation today. To deepen our sense of politics and the political, and to set the stage for a discussion of the politics of sound, I want to take a brief detour, considering the so-called migrant crisis of the late 2010s. Prior to the onset of COVID-19, hundreds of thousands of migrants, refugees, and asylum seekers streamed toward the U.S.–Mexico border, leaving their lives in Mexico, El Salvador, Honduras, Guatemala, and elsewhere to escape poverty and violence and seek economic, political, and personal security in the United States. Years of drought intensified by climate change, economic insecurity

exacerbated by free trade agreements, gang extortion enabled by family separation, and entrenched cultures of corruption fueled by a combination of intervention and inaction by the very country toward which these migrants fled—all this and more provoked individuals and families to make the perilous trip north.

Anyone with a U.S. passport, a seasonal worker visa, a Border Crossing Card, or enough money to buy a tourist visa could pass through one of the 48 official ports of entry on the U.S.–Mexico border or fly into an American airport, experiencing only the minor inconvenience of long lines and bureaucratic scrutiny. Those who arrived at the border without the requisite papers, however, confronted the decision to apply for asylum at a border checkpoint or attempt illegal passage across the treacherous Rio Grande or rugged mountain and desert territory monitored by border patrol agents and vigilantes. Some migrants were refused entry and returned to Mexico to await a hearing in American immigration courts; others were placed in detention in the United States. Many were sent back to their countries of origin.

The current U.S. immigration policy is driven by right-wing nationalists who recoil at the demographic prediction that the country will be majority nonwhite by the year 2045 and who fear an influx of poor brown people in need of protection and government assistance. COVID-19 has given further justification to this position, increasing pressure to control not only the flow of foreign bodies but also the global circulation of a virus for which these bodies are its vector of transmission. The COVID crisis has temporarily restrained a minority view held by globalists in the Trump administration who favor a more porous border and the easing of tariffs, arguing that greater flows of labor, goods, and capital will benefit the market economy, for which nation-states and their territorial outlines are either irrelevant or impediments. This rejection of borders is shared by the No One Is Illegal movement, which, however, objects to immigration controls on human rights grounds rather than free trade.¹²

All of this concerns *politics* in its original and deepest sense. After all, “politics” refers to the determination and regulation of the *polis* (the city or state) and to the decision regarding who is a citizen (*politēs*) and who is not. The term *polis* itself derives from the Indo-European root *pela-*, which means “citadel” or “fortified high place.”¹³ And, of course, “politics” shares the same etymology as the term “police.” In short, “politics” deals fundamentally with borders and walls, the protection of those on the inside and the exclusion or expulsion of others. Moreover, all of this has a connection to sound. In ancient Greek, the antonym of *politēs* (citizen) is *barbaros* (barbarian), an onomatopoeic word equivalent to the English terms “gibberish” or “babble,” referring to a foreigner whose speech is considered to be nonsense or noise, and who is thus deemed to be culturally inferior, uncivilized, or bestial—certainly not one of “us.” This returns us to the Rancièrian and Attalian proposals for a politics of sound. Such a politics concerns which sounds count and which do not, which are intelligible and which are gibberish, which are music and which are noise.

I want to go beyond these proposals to consider the politics of sound on the model of migration—that is, on the model of flows and codes, inclusions and exclusions. A rigorously materialist analysis of sound would consider it as one of the many *flows* that

constitute nature and culture: flows of matter, energy, and information that, when captured, controlled, bound, or slowed down, become the physical and social forms we know (mountains, organisms, languages, cultures, institutions, etc.).¹⁴ These forms are only temporary coagulations or transitory hardenings of these flows, which constitute the basic reality of the world. On this model, the fundamental function of society is to *code* flows (for example, flows of food, goods, bodies, money, energy, garbage, etc.); that is, to intercept them, organize them, regulate them, channel them in particular directions, impose meanings and limits on them, and the like. A politics of sound, then, would consider the local and global circulation of sound, its flow, capture, and blockage, the forces (technological, legal, economic, cultural, social, moral, linguistic, racial, gendered, etc.) that accelerate, decelerate, and otherwise inflect it. It would ask: What are the forces that generate sonic flows and propel their movement and circulation? What are the forces that constrain this sonic flux sufficiently to enable it to congeal into languages, musical styles, or scenes? And what are the forces that block, annul, or cancel these sonic flows?

SONIC POLITICS AND THE EVOLUTION OF LANGUAGES

To develop this idea further, let's return to the politics of speech and consider the evolution of languages.¹⁵ A flow of air from the lungs vibrates the vocal cords, generating a sound that the larynx, tongue, palate, cheeks, and lips shape into distinct utterances. Some of these are marked as significant through repetition and emerge as phonemes or words. Languages are sets of words and grammatical constructions that slowly accumulate within communities due to the pressures of geographical isolation, social norms, obligations, and hierarchies. Within a community, these sounds and rules replicate like a virus (as William S. Burroughs famously put it), a virus contracted by one generation from the generation that precedes it.¹⁶

Just as genes replicate with variation, so too do languages. No two people speak alike; and subcommunities and regional groups manifest distinct variations in pronunciation, word choice, and grammar. As a result, every language is engaged in a constant struggle between fixity and flow. Without some degree of fixity, there would be no language but only a continuously varied flow of sound. Yet, without the variation characteristic of spoken discourse, languages freeze or die. More broadly, every language is inhabited by idiolects, dialects, patois, slangs, and jargons that exert a centrifugal force, serving as engines of variation and difference that are counteracted by conservative, centripetal social forces that function to slow down this change.¹⁷ Thus, the distinction between a *language* and a *dialect* is always political, a language consisting simply of patterns of utterance propagated and enforced by an elite or dominant group.

Take, for example, the evolution of the Romance languages from Latin. During the Roman Empire, a relatively small minority with tremendous political, economic, military, and cultural power imposed Latin as the official language on a vast territory surrounding the Mediterranean Sea and beyond. Fixed in writing and disseminated in schools to young aristocrats, Latin was the language of the government, the courts, and the military,

and of the most prestigious literature and music. The local variations of so-called vulgar Latin were tolerated in some regions and suppressed in others. Nonetheless, Roman Latin remained the imperial norm and standard. However, with the fall of the Roman Empire in the 5th century and the large-scale migrations and incursions that followed, the linguistic variation characteristic of vulgar Latin accelerated and a range of regional variants began to develop and proliferate, forming a dialect continuum. By the end of the 7th century, classical Latin was no longer intelligible as a spoken language to the people of Romanized Europe. By the early 9th century, priests in France, for example, were ordered by the Church to preach in the vernacular languages.

The development of major European cities at the beginning of the second millennium and the commercial revolution that accompanied it generated the need for written documents (contracts, licenses, inventories, wills, etc.) and thus for a greater supply of scribes than those proficient in classical Latin. So governments in the regional capitals (Paris, Florence, and Madrid, for example) began to codify their dialects in systems of writing that decelerated linguistic variation and established the unique linguistic identities of Gallo-Romance, Italo-Romance, and Hispano-Romance, which eventually became French, Italian, and Spanish. (Other Romance dialects—African-Romance and British-Romance, for example—eventually disappeared, losing the competition with native dialects and those of conquering peoples.) Later, in the 16th century, the dialects of the regional capitals were further fixed by Academies of Language that published official dictionaries, grammars, and pronunciation guidelines disseminated by schools, enforced by commercial and legal necessity, and solidified by the pressure of prestige.

The point of this extended example is to consider how flows of sound are captured and released, decelerated and accelerated by social forces: by the variability and difference characteristic of the spoken word; by migrations that introduce new variations; by conquests that suppress local or minor modes and impose a dominant mode of speaking; by the commercial, legal, military, and ecclesiastical establishment of written forms of language that halt linguistic variation from above; and by the vernacular dialects, jargons, argots, patois, and slangs that continue to bubble up from below. This is sonic politics in a basic and deep sense. Not only is language a site of constant struggle between established forms of power and prestige, on the one hand, and the subversive forces of vulgar speech, on the other. This struggle has everything to do with migratory flows, borders, citizenship, and the police, determining who is inside and who is out, who is recognized as a legitimate member of the polis and who has the status of a barbarian.

CONFLICTED PHONEMES

To concretize these ideas and bring them into the present, I want to consider the work of Jordanian-British artist Lawrence Abu Hamdan. Associated with the London-based research group Forensic Architecture, Abu Hamdan practices what he and his colleagues call “forensic aesthetics,” which aims “to bring new material and aesthetic sensibilities to bear upon the legal and political implications of state violence, armed conflict, and climate change.”¹⁸

All of Abu Hamdan's projects concern the politics of sound and listening. The work I want to focus on is *Conflicted Phonemes*, an installation from 2012 made in collaboration with a group of linguists and immigrant rights advocates, a graphic designer, and nine Somali migrants who sought asylum in the Netherlands.¹⁹ Abu Hamdan's installation graphically charts efforts by Dutch immigration authorities to scrutinize asylum claims on the basis of the asylum seeker's linguistic accent, attempting to determine whether the subject actually originates from a conflict zone and thus has a legitimate claim to asylum. Following a protocol prevalent since the 1980s in a host of European and Oceanic countries, immigration authorities recorded the voices of asylum seekers by telephone and then sent them for analysis to private companies subcontracted by the government.²⁰ These forensic linguists and phoneticians are asked to attend not to *language* but to *sound*. The speaker may *say* one thing, but the expert listens to something else, namely, to "nonverbal effects" that are "byproducts of the event of language": "pitch, accent, glottal stops, intonations, inflections, and impediments."²¹

Here again we have an effort to determine and police citizenship and legitimacy on the basis of sound. Yet, of course, this process is highly problematic, ignoring the complexities of global migration and the way its effects are registered in the voice. It ignores, for example, that phonetic borders are porous, that many migrants are bilingual, that many accumulate new words and patterns of speech in multilingual refugee camps, that refugees have often worked to conceal their origins for fear of persecution, that asylum seekers sometimes alter their dialect to be intelligible to their interpreters, and so on.²²

Conflicted Phonemes attempts to track these effects in visual form. A large blue wall print marks the changes in three families of Somali dialects over 40 years of tumultuous history: from the adoption of a northern dialect (Maxaa Tiri or Nsom) as the official language of Somalia in 1972 through the refugee crisis of 2011. The chart registers the linguistic consequences of forced education and intermarriage, military service, migrations due to war and famine, and experiences in diversely populated refugee camps. This visual presentation reveals the fluidity of language and of populations, demonstrating the futility of pinning either to a proper origin.

This diachronic chart is accompanied by a set of diagrams that, for each of nine asylum seekers, maps the variability of the applicant's vocal accent, the official verdict of the Dutch government, and an analysis and verdict by a contra-expert. On one page, for example, we see that Mohamed adopts a variety of different accents and dialects depending on the person to whom he speaks. He speaks standard Somali to his mother, a mixture of standard Somali and a southern dialect with his father, a combination of Amharic and a southern dialect with a fellow Somali pupil, and all three major dialects with fellow Somali asylum seekers. An accompanying page lists the applicant's self-reported origin (born in Mogadishu but raised 300 miles south in the Lower Juba region), the verdict of the Dutch immigration authority ("definitely not traceable to the speech community in South Somalia") and the more complex verdict of a counter-expert ("He speaks Somali in its Northern variety which is spoken in Lower Juba region. Based on my analysis, it is highly certain that the applicant was socialized in a speech community in South Somalia").

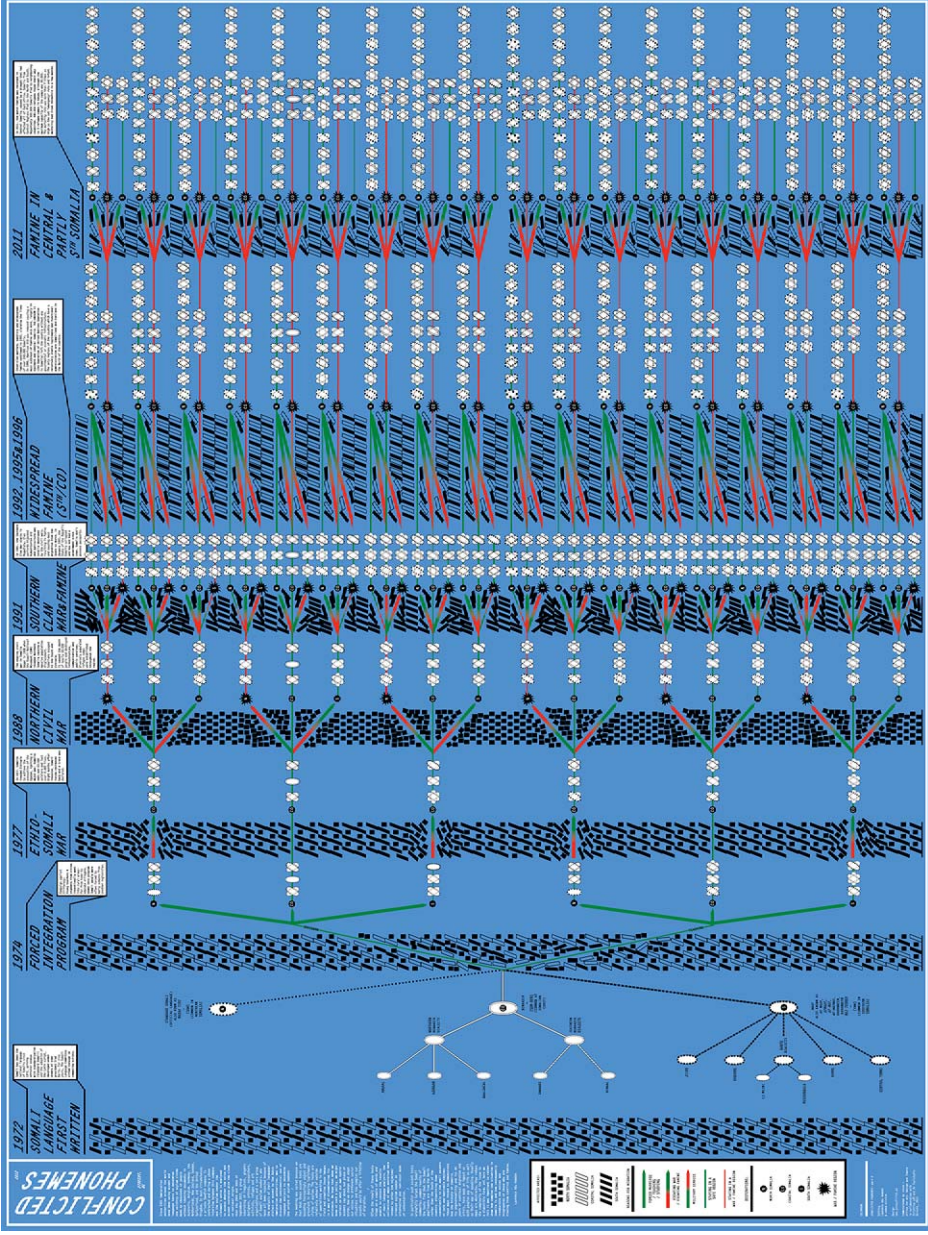
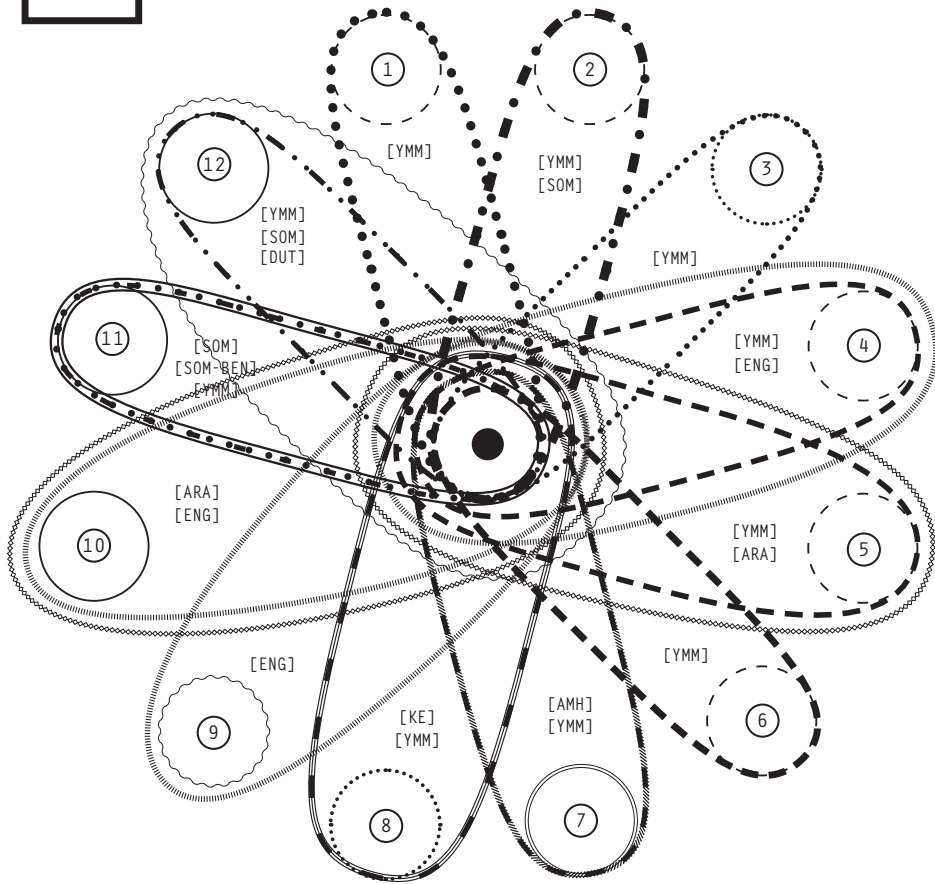


FIGURE 1. Lawrence Abu Hamdan, *Conflicted Phonemes*, 2012, wall print, installation detail. Courtesy of the artist.

C

CONFLICTED PHONEMES
VOICE MAPPING

VOICE : MOHAMED



● - MOHAMED

○ - PERSON SPEAKS WITH

- [SOM] STANDARD SOMALI
- ===== [SOM-BEN] BENAADIR (SOMALIA)
- [YMM] MAAY (SOMALIA)
- ===== [ARA] ARABIC
- ||||| [ENG] ENGLISH
- ~~~~~ [DUT] DUTCH
- ===== [AMH] AMHARIC
- ===== [KE] KENYAN

- IN SOMALIA:
- 1 MOTHER
 - 2 FATHER
 - 3 SOMALI TEACHER
 - 4 ENGLISH TEACHER
 - 5 ARABIC TEACHER
 - 6 FELLOW PUPIL FROM STH SOMALIA
 - 7 FELLOW PUPIL FROM NTH SOMALIA
 - 8 FELLOW PUPIL FROM COASTAL SOMALIA

- IN THE NETHERLANDS:
- 9 DUTCH (ARRIVAL IN NL)
- REFUGEES/ASYLUM SEEKERS:
- 10 EGYPTIANS
 - IRAQI
 - LIBYANS
 - SYRIANS
 - TUNISIANS
 - 11 SOMALI
 - 12 MOHAMED'S CHILDREN

Part C (Voice Mapping) of *CONFLICTED PHONEMES*
Lawrence Abu Hamdan & Janna Ultrich
Utrecht, 2012

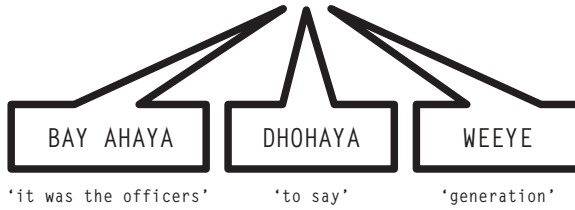
Commissioned by *Casco - Office for Art, Design and Theory*
in collaboration with *Stichting LOS*

FIGURE 2. Lawrence Abu Hamdan, *Conflicted Phonemes*, 2012, voice map, installation detail. Courtesy of the artist.

A

CONFLICTED PHONEMES
LANGUAGE ANALYSIS

APPLICANT : MOHAMED



Origin according to the applicant:
 The applicant was born in Mogadishu, but he grew up in Bilis Ooqaani, a district of Afmadow, Jubada Hoose (Lower Juba region), in South Somalia.

#1

Immigratie- en Naturalisatiedienst
 Ministerie van Binnenlandse Zaken en
 Koninkrijksrelaties

Origin according to the expert:
 The applicant is definitely not traceable to the
 speech community in South Somalia.

Result of language analysis in 2008: NEGATIVE

#2

DE
 taal
 STUDIO

Origin according to the contra-expert:
 The applicant can be traced to the cultural
 community within South Somalia. He speaks Somali in
 its Northern variety which is spoken in Lower Juba
 region. Based on my analysis it is highly certain
 that the applicant was socialized in a speech
 community in South Somalia.

Result of language analysis in 2008: POSITIVE

B

Justitie
 STATUS
 10 / 2012

REJECTED

FIGURE 3. Lawrence Abu Hamdan, *Conflicted Phonemes*, 2012, language analysis, installation detail. Courtesy of the artist.

Abu Hamdan's project graphically presents the results of social scientific research and political advocacy. Yet it's presented as an art installation, was commissioned by an art institute, and has been shown primarily in art museums and galleries. Like other "forensic aesthetics" projects, it operates at the intersection of politics and art, revealing the degree to which politics is always engaged in aesthetics—that is, in judgments about sensation and questions about what or who is visible or audible by whom. An artwork focused on sound, *Conflicted Phonemes* is political in the basic sense, concerned with the sorting of citizens from barbarians on the basis of the sounds or noises they make.

AUDIO RECORDING AND THE FLOWS OF SOUND

The sonic politics I've sketched so far has focused on speech and language, examining how the spoken word enables and restricts the flows of sounds and bodies. Yet, over the past century or so, sound has circulated not only (or primarily) by way of the living, present voice or the live musical event but more broadly by way of audio recording through a series of technological vessels—records, tapes, CDs, MP3s, and streaming audio—that vastly increase the spatial and temporal scope of sonic transmission and provoke new and different efforts to code and constrain it. A politics concerned with the local and global circulation of sound—its flow, capture, and blockage; the forces that accelerate, decelerate, and inflect it—must attend to the flows of recorded sound.

The history of audio recording is inseparable from the history of capitalism. Prior to the advent of audio recording, sound was purely evanescent—"a disappearance of the reality as soon as it is," Hegel fittingly described it.²³ The only means of registering or recording sound were biological. Funneled through the ear, sound was filtered by the brain according to evolutionary and cultural schemata that determined its significance for survival or social membership, and engrained through repetition and habit. Virtual systems (grammatical rules, song structures, etc.) shaped sonic flows into memes that facilitated their replication and transmission to future generations.²⁴ All these processes coded and "territorialized" sound. That is, they captured and organized its flow, enabling it to accumulate as a cultural "stock."²⁵ 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.

Oral languages and traditional songs were collective products, anonymous creations of an entire community over many generations, constituting a sort of cultural commons. The bodies through which they passed served as relays, points of connection and transmission of their sonic flows. The emergence of capitalism in early modern Europe demanded new and different forms of sonic capture, particularly for the capture of musical flows. It sought to fix music as a commodity, a *thing* that could be bought and sold for profit. To achieve this, capitalism initially repurposed a tool that had existed for several centuries as a mnemonic device for musicians and performers: musical notation. Just as the institution of writing decelerated the variation of spoken language, the musical

score arrested the flow of sound in the form of graphic symbols on a page. This reification of music enabled it to circulate 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 made it the province of a specialized class that regulated its flow. Notation fixed music in the form of an authorized document to which performers were held accountable, 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 electronic audio recording in the 19th and early 20th centuries 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, but 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 isn't exhausted by any playback in the present. It generates a vast, discontinuous sonic archive in which wildly heterogeneous sounds collide, overlap, and coalesce.²⁶

CAPITALISM: RELEASE AND CAPTURE

Capitalism has an ambivalent relationship to flows and codes. On the one hand, it is a powerful agent of deterritorialization, unleashing flows of all kinds. Capitalism freed labor from serfdom, from attachment to the land, and from distinctions between qualitatively different kinds of work, transforming *labor* into the fluid and exchangeable commodity *labor power*. It tore wealth from landed property and set it into circulation as abstract *capital*. In the *Communist Manifesto*, Marx and Engels marvel at this deterritorializing tendency of capitalism, its “constant revolutioning of production,” its “uninterrupted disturbance of all social relations,” the “everlasting uncertainty and agitation” that distinguishes it from all previous social and economic formations. Under capitalism, they write in a famous passage,

all fixed, fast-frozen relations, with their train of ancient and venerable prejudices and opinions, are swept away, all new-formed ones become antiquated before they can ossify. All that is solid melts into air, all that is holy is profaned. . . . The need of a constantly expanding market for its products chases the bourgeoisie over the whole surface of the globe.²⁷

Yet this tendency toward deterritorialization and the unleashing of flows is restrained by another tendency: capitalism must ensure that these flows are reterritorialized into money, that profit can be extracted from them.

The history of audio recording amply reveals this dual tendency of deterritorialization and reterritorialization, flow and capture. Again, the invention of electronic audio recording did something extraordinary, transforming an evanescent sonic *process* into an *object*, capturing and reifying sound as an exchangeable commodity. At the same time, it enabled this encapsulated sound to travel widely. Every new recording format has accelerated the velocity and range of this flow. The portability and circulation of sound was massively increased in the 1960s with the advent of cassette tape, which enabled listeners to hear their favorite sounds while traveling down the freeway or, after the commercial debut of the Walkman in 1979, anywhere at all. The portability of cassettes fostered the development of international tape-trading networks, global communities of musicians and artists who traded one-off or small-batch recordings and mixes on cassettes via alternative music zines.

An eminently portable read/write format, the cassette lent itself to piracy and samizdat purposes. Recording industry associations in the United States and Great Britain 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 recording 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 \$1 billion annually.²⁸ The introduction of even slimmer and more portable compact discs in the mid-1980s allowed these profits to increase exponentially, reaching \$14.6 billion by 1999.

Within less than a decade, however, the recording 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 a staggering quantity and variety of free music on demand to anyone with an Internet connection. Again, the major labels sought to halt this flow, 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 such as Diedrich Diederichsen and Björn Gottstein, and musicians such as Ekkehard Ehlers, 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.²⁹ Economist Jacques Attali 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.³⁰

Once again, however, capitalism engineered a way to restrict the flow. By 2016, recording industry revenues were once again on the rise, thanks largely to Spotify, a music-streaming service invented by a former audio pirate.³¹ 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 \$100.³² Capitalism seems to have discovered a way to halt the flow of sound, or rather, to route that flow through its mechanism of profit extraction.

Even so, music and sound today travel 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 musics that combine global influences with local or indigenous forms. Digital platforms and networks provide easy access to these musics, which are often homemade and produced with cheap, readily available equipment. More music and sounds are available to more people than ever before, and more people are making more of these sounds as well.

ACCELERATING THE FLOW

Kidal is 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.³³ In 2010, most of these travelers and urban locals were equipped with knockoff cellphones that served a myriad of functions, prominent among which was to store and trade MP3s. These collections were extraordinarily wide-ranging and diverse: American classic rock and European techno-pop shared 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 were traded phone-to-phone via Bluetooth networks that didn't require Internet or phone service, which, in the Sahel, are spotty and expensive if they exist at all. Or they were purchased from cellphone dealers who downloaded songs from cellphones brought in for repair. Two years later, Islamist rebels had taken over the region and imposed sharia law, banning music and destroying cellphone towers to halt this musical exchange. Prominent Malian musicians sought exile in Algeria or moved southwest to the capital, Bamako, where the Islamist presence was weaker.

With all its flows and cuts, relays and blockages, this Saharan cellphone culture exemplifies how sound moves in the early 21st 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, as Marx and Engels noted 170 years ago, the tendency of global capitalism is

toward massive deterritorialization and decoding.³⁴ Capitalism annihilates all *codes* and instead operates by way of 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.

Again, though, 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.” MP3 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 variously been called “control society,” “surveillance capitalism,” and “algorithmic power.”³⁵ Like Facebook and Google, music-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.³⁶ Prominent critics of surveillance capitalism see new legal restrictions and regulations as the solution to its extraction of free labor and invasions of privacy. But there is another solution, not to return to older modes of aesthetic value but to accelerate capitalism’s tendency toward decoding and deterritorialization, to push it farther than it’s willing to go. This was the solution of early hip-hop and of sampling artists from John Oswald to Maria Chavez: 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 and extend these networks, developing new technologies that release sound from the capitalist axiomatic and increase the speed and spread of its flow.

IMMATERIAL BORDERS AND ALGORITHMIC CITIZENS

I began by suggesting that the fundamental site of politics is the border, the site at which determinations are made about which bodies and goods can pass through and which are refused. The border functions as a filtering mechanism that works via coding operations concretized in passports, visas, permits, bills of lading, certificates of origin. Though these determinations, inclusions, and exclusions are as old as the *polis* itself, the mechanisms of border control we experience today are inventions of the 19th and early 20th

centuries, responses to the deterritorialization of labor by capitalism and the invention of new means of conveyance.³⁷

Yet the new policing of borders and the erection of more powerful fortifications are symptoms of the increasing obsolescence of these physical borders. As political theorist Wendy Brown has argued, the proliferation of borders in the world today is a result of waning state sovereignty in the face of globalization, which aspires to the frictionless circulation of goods and capital, if not people.³⁸ Paper passports are rapidly being replaced by data profiles; borders are becoming increasingly immaterial and ubiquitous; and citizenship is becoming more and more algorithmic.³⁹ As journalist Atossa Araxia Abrahamian puts it, borders today have become “overlapping and concentric circles that change size, shape, and texture depending on who—or what—is trying to pass through.”⁴⁰

We’ve seen that sound plays a crucial role in these processes of filtering and coding, separating the citizen or legitimate claimant from the barbarian. The resurgence of right-wing nationalism, the obsession with border walls, and the institution of monolingualism will ensure that the spoken word remains an important site for sonic politics. At the same time, a genuine politics of sound must also attend to the movements of sound and music across the borders, nodes, and inflection points of the datascape, to the ways that flows of music and sound are permitted or halted, captured and mined, employed as data points in the profiles that increasingly determine our place and our capacities for movement within the circuits of economic and political power. ■

NOTES

1. Wisława Szymborska, “Children of Our Age,” in *Poems New and Collected*, trans. Stanisław Barańczak and Clare Cavanagh (New York: Houghton Mifflin Harcourt, 1998), 200–201.
2. See, e.g., “Art of the Possible: Fulvia Carnevale and John Kelsey in Conversation with Jacques Rancière,” *Artforum*, March 2007, 264, 266.
3. Walter Benjamin, “The Author as Producer,” in *Selected Writings, Vol. 2, Part 2, 1931–1934*, ed. Michael Jennings et al. (Cambridge, MA: Belknap Press, 1999), 774.
4. See Ric Brown, “Theodor Adorno on Popular Music and Protest” (2007), <https://archive.org/details/RicBrownTheodorAdornoonPopularMusicandProtest>.
5. This theme runs throughout Rancière’s work, from his 1987 book *The Ignorant Schoolmaster* through the 2007 essay “The Emancipated Spectator” and beyond.
6. Hito Steyerl, “Politics of Art: Contemporary Art and the Transition to Post-Democracy,” *e-flux journal* 21 (December 2010): 1, http://worker01.e-flux.com/pdf/article_8888181.pdf.
7. Ben Watson, “Cyber Improv: Their Progress or Ours?” *Signal to Noise* 21 (Spring 2001): 8–9.
8. Edwin Prévost, “Free Improvisation in Music and Capitalism: Resisting Authority and the Cults of Scientism and Celebrity,” in *Noise and Capitalism*, ed. Mattin and Anthony Iles (Donostia-San Sebastián: Arteleku, 2008), 41, <http://artxibo.arteleku.net/en/islandora/object/arteleku%3A374>.
9. Godard, quoted in Colin MacCabe, *Godard: Images, Sounds, Politics* (London: Macmillan, 1980), 19. See also artist Thomas Hirschhorn’s essay “Doing Art Politically: What Does This Mean?” (2008), <http://www.thomashirschhorn.com/doing-art-politically-what-does-this-mean/>.
10. See, e.g., Jacques Rancière, *The Politics of Aesthetics: The Distribution of the Sensible*, trans. Gabriel Rockhill (London: Continuum, 2004).
11. Jacques Attali, *Noise: The Political Economy of Music*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1985), 6.

12. See “Manifesto of the No One Is Illegal Group,” in Teresa Hayter, *Open Borders: The Case Against Immigration Controls*, 2nd ed. (London: Pluto, 2004), 173–83. No One Is Illegal (*Kein Mensch ist Illegal*) was launched by media artist Florian Schneider in 1997 as a series of workshops, performances, and installations held at the German art fair Documenta X.
13. See Thomas Nail, “Migrant Cosmopolitanism,” *Public Affairs Quarterly* 29, no. 2 (April 2015): 188.
14. Manuel DeLanda develops this idea in *A Thousand Years of Nonlinear History* (New York: Zone Books, 1997). I explore the notion of sound as a material flow in *Sonic Flux: Sound, Art, and Metaphysics* (Chicago: University of Chicago Press, 2018).
15. See DeLanda, *A Thousand Years of Nonlinear History*, 183–213, and *Assemblage Theory* (Edinburgh: Edinburgh University Press, 2016), 51–67.
16. See, e.g., William S. Burroughs, “Playback from Eden to Watergate,” in *The Job: Topical Writings and Interviews* (London: John Calder, 1984), and “Ten Years and a Billion Dollars,” in *The Adding Machine* (New York: Seaver Books, 1985).
17. On this, see Gilles Deleuze and Félix Guattari, *A Thousand Plateaus*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 7.
18. Eyal Weizman, “Introduction: Forensis,” in *Forensis: The Architecture of Public Truth* (Berlin: Sternberg, 2014), 9.
19. The project is documented at <http://lawrenceabuhamdan.com/conflicted-phonemes>.
20. See Abu Hamdan, “The Freedom of Speech Itself,” *Cabinet* 43 (Fall 2011): 84.
21. See Abu Hamdan, “Aural Contract: Forensic Listening and the Reorganization of the Speaking Subject,” in *Forensis*, 68.
22. Abu Hamdan, “The Freedom of Speech Itself,” 85.
23. Hegel, *Philosophy of Mind*, trans. William Wallace and A.V. Miller, ed. Michael Inwood (Oxford: Clarendon Press, 2007), 194.
24. For more on virtuality and its relationship to sonic structures, see Cox, *Sonic Flux*, chap. 2.
25. See Deleuze, Seminar of December 14, 1971, <https://deleuze.cla.purdue.edu/index.php/seminars/anti-oedipus-i/lecture-02>, 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.
26. For more on this feature of audio recording, see Cox, *Sonic Flux*, 55–58.
27. Karl Marx and Friedrich Engels, “Manifesto of the Communist Party,” *The Marx-Engels Reader*, 2nd ed., ed. Robert C. Tucker (New York: W.W. Norton, 1978), 476.
28. Recording Industry Association of America U.S. Sales Database, <https://www.riaa.com/u-s-sales-database/>.
29. 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 the conference catalog for “Audio Poverty” (Berlin: Haus der Kulturen der Welt, 2009, https://ia800705.us.archive.org/4/items/AudioPovertyCatalogue/AudioPoverty_Katalog.pdf). See also Jonathan Sterne, *MP3: The Meaning of a Format* (Durham, NC: Duke University Press, 2012), 211–12.
30. See Jacques Attali, “Ether Talk,” *The Wire* 209 (July 2001): 70–73.
31. “I don’t think I would have been that interested in music, if it weren’t for piracy,” Spotify founder Daniel Ek told an interviewer. “I come from a working-class family. We couldn’t afford all the records that I wanted.” Stephen J. Dubner, “How Spotify Saved the Music Industry (But Not Necessarily Musicians),” *Freakonomics* episode 374 (April 10, 2019), <http://freakonomics.com/podcast/spotify/>. Another former audio pirate, Napster co-founder Sean Parker, invested millions in Spotify and joined its board in 2010.
32. Dubner, “How Spotify Saved the Music Industry.”

33. 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.
34. By “decoding,” I mean the undoing or dissolution (rather than the deciphering) of codes.
35. See Gilles 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 McChesney, “Surveillance Capitalism,” *Monthly Review* (July 1, 2014), <https://monthlyreview.org/2014/07/01/surveillance-capitalism/>; Shoshana Zuboff, *The Age of Surveillance Capitalism* (New York: PublicAffairs, 2019); and Jackie Wang, *Carceral Capitalism* (New York: semiotext[e], 2018).
36. See Diedrich Diederichsen, *On (Surplus) Value in Art* (Berlin: Sternberg Press, 2008), 46–50.
37. See John C. Torpey, *The Invention of the Passport: Surveillance, Citizenship, and the State*, 2nd ed. (Cambridge: Cambridge University Press, 2018). See also Robert Sullivan’s interview with Torpey, “What If There Were No Borders?” *Vogue.com* (November 30, 2018).
38. Wendy Brown, *Walled States, Waning Sovereignty* (New York: Zone, 2010). See also Étienne Balibar: “. . . globalization tends to knock down frontiers with respect to goods and capital while at the same time erecting a whole system of barriers against the influx of a workforce and the ‘right to flight’ that migrants exercise in the face of misery, war, and dictatorial regimes in their countries of origin.” In “Europe, an ‘Unimagined’ Frontier of Democracy,” *diacritics* 33, no. 3–4 (Fall–Winter 2003): 37. See also Sandro Mezzadra and Brett Neilson, who argue that “the globalizing processes of the past twenty years have led not to the diminution of borders but to their proliferation.” In *Border as Method, or The Multiplication of Labor* (Durham, NC: Duke University Press, 2013), 62.
39. See Atossa Araxia Abrahamian, “The Real Wall Isn’t at the Border,” *New York Times*, January 26, 2019, <https://www.nytimes.com/2019/01/26/opinion/sunday/border-wall-immigration-trump.html>; “The New Passport Poor,” *The New York Review of Books Daily*, May 21, 2018, <https://www.nybooks.com/daily/2018/05/21/the-new-passport-poor/>; and “Data Subjects of the World Unite,” *New York Times*, May 28, 2018, <https://www.nytimes.com/2018/05/28/opinion/gdpr-eu-digital-privacy-law-data-subject-europe.html>. Also see John Cheney-Lippold, “A New Algorithmic Identity,” *Theory, Culture, & Society* 28, no. 6 (November 2011) and artist James Bridle’s project “Citizen Ex,” <http://citizen-ex.com/>.
40. Abrahamian, “The Real Wall.”