



PERFORMANCE
PHILOSOPHY

VOCAL PERFORMANCE THROUGH ELECTRICAL FLOWS: MAKING CURRENT KIN

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Overture: Vocoder Resistance

Video link: Yellow Magic Orchestra

 <https://www.youtube.com/watch?v=0HubIA-BGGI&t=1m1s>

Is it me, is it you
Behind this mask? I ask
—Yellow Magic Orchestra, “Behind the Mask” (1979)

Starting in the late 1970s, groundbreaking Japanese electropop group Yellow Magic Orchestra—Haruomi Hosono, Yukihiro Takahashi, and Ryuichi Sakamoto (with collaborators Hideki Matsutake and Akiko Yano)—used the vocoder, a voice encoding hardware, to create robotic vocal effects. Inspired by West German electropop quartet Kraftwerk, YMO deployed these effects to achieve an appealing yet subversive sonic style, inspiring early hip-hop artists like Afrika Bambaataa (perhaps consonant with Afrofuturist themes exemplified by jazz visionary Sun Ra).

How did this distorted singing—often described as cold and metallic—resound so successfully with international audiences? East Asian Studies scholar Michael Bourdaughs (2012) hears in YMO’s vocals a radical resistance to Orientalist stereotypes of Japanese identity. Bourdaughs asserts that

the group consciously “appropriated Western stereotypical fantasies of orientalism and performed them back as an empty, parodic identity” (188) as part of their larger “attempt to decouple the sounds being produced from preexisting notions of music as authentic expression of the interiority of the singer” (189). Simulation becomes liberation, as Yellow Magic Orchestra

undermine the very opposition between inauthenticity and authenticity. Their music, performance styles, and recording techniques [...suggest] that under the conditions of contemporary capitalism and media culture, the fake might be more real than the real itself. (188)

In other words, in their performance of a self-consciously “Japanese” identity, YMO both created a unique sound and called into question the very idea that their (Japanese) sound could be “new” rather than either “traditional” or “imitative” (of Western forms). The band’s troubling of the boundary between imitation and authenticity was a high-stakes move within a culture emerging out from under decades of post-war American political and cultural dominance.

The robotic quality of Ryuichi Sakamoto’s voice-through-vocoder—an early example of what I term *plasmatic voice*—sonically performs through the posthuman symbiosis of (marked-Japanese) person and machine. Sakamoto’s voice emerges cyborg-style through electronic circuitry, through (apparently) apolitical electropop, and challenges racial/national hierarchies through parodically dehumanized vocal timbres. Further, the chorusing effect of the vocoder multiplies the single voice into harmony with itself, even as the clarity of the lyrics is obscured by the early technology’s rudimentary processing capabilities. Whether or not we strain to listen across cultural and linguistic borders in order to understand the message, this plasmatic voice affects in unexpected ways, along myriad vectors such as race (in its crosscurrents with Afrofuturist hip-hop) and gender (as in the early work of Laurie Anderson as well as in music by Planningtonrock, which will be taken up later in this paper). The queer resonances of plasmatic voice echo out into the nonhuman spaces of the Anthropocene.

Electric Voices: Delineating Fleshly and Plasmatic Vocality

In any discussion of voice (in its most literal sense—as a cry or utterance), there is a human body, which sounds from birth. Even in the absence of encabled electrical current, this fleshly voice (a term inspired by the Japanese term *nikusei*, lit. “meat-voice,” which indicates vocalization without electronic intervention) is by necessity always moving, never static. From its inception in the nervous system of a sing/speak/er (when impulses spark across synapses to move lungs-larynx-lips), the resultant sound transduces, emerges, proliferates, and dies down. Vibrating the body and thereby its vicinity, voice is both oscillation (patterned vibration in place) and transmission (of sound waves outward), as air molecules are pushed and pulled concentrically from the sounding body. Moving further out, these expansive movements may multiply through reverberation, as the airy energies bounce off or are absorbed by surfaces (changes in particles’ vibrational frequencies). Other materials may resonate upon contact with these sounding molecular waves, creating sympathetic resonances that amplify the voice and let it linger.

With their moving body, a person sounds a space, moving other objects/bodies within the space. The radius of sounding is limited by material constraints: muscular power and resonating technique of the vocalist, surface textures and resonant qualities of other entities in the space (walls, trees, human bodies). Other sounds may arise nearby, perhaps interfering with or adding to the oscillating patterns offered by this fleshly (human) source. Yet soon—not much longer than an exhaled breath—the sound dies down.

The situation changes once the electricity is turned on. Electrical current, created and controlled by human endeavor, flows through cables, offering to transform the power and scope of a voice, in both space and time. Once electrified, the voice moves beyond mere bodily might, potentially amplified above human volume range. In the analog and into the digital age, the voice's oscillations are etched into surfaces and traced through silicon; from these materializations, voices, having left their living bodies further behind than ever before, can be played back indefinitely, in apparent reanimations or imitations of the original bodily movement. When sound waves are converted to representations (either analog or digital) that can be stored as electrical signals, these signals are open to processing and eventually decoded (over and over again) using hardware that converts them into audible sound waves. The subtle vibrations of these electrified materials and processes murmur-creak-shout within the new "voices" as they are rematerialized/reconstituted via the refined electrical flows of our complex (post)industrial global system.

Electricity, existing as energy resulting from the emergence of charged subatomic particles, is widely generated, accumulated, channeled as flow, and consumed by humans via physical networks that now extend over most of the earth's surface. Thus, although in its most elemental form—lightning—electricity moves unpredictably and ephemerally, electrical flows entwine with more solid matter, as its potential rests in human-built infrastructure such as power plants and electrical grids. Early European experiments with electricity powered notions of societal control, as "the taming of electricity suggested a revolution in human beings' relationship to their natural environment, and [...] this same concept was directly translatable into their sociopolitical environment as well" (Hollinghaus 2013, 61). For Americans in the early 20th century, technological innovations that brought electricity into daily use were accompanied by a discourse of electricity as a metaphor for "social progress and better, more exciting living" (62).

Plasmatic voice pushes back against common understanding of technologically-mediated voice (broadly construed as any electrical intervention into or processing of the fleshly sounds emerging from a human vocal system) as additive and prosthetic.

Like the fleshly voice that pre-existed the harnessing of electrical power, plasmatic voice is transitive and relational, facilitating flows of affect and information in the spaces between people. Plasmatic voice is complexly (and not entirely humanly) embodied, its materiality multiplied in its travels and transductions. It remains sensorial and emplaced yet tends to disperse in once unimaginable ways (now made mundane).

In its performance, plasmatic voice happens between and within specific bodies in specific contexts, as it vibrates through keenly embodied senses (never limited to a disconnected ear). Like

its fleshly counterpart, plasmatic voice may evoke in those it touches shared meanings and shareable imaginings. Yet plasmatic voice also works at scales of speed and size that are accessible to human perception only via multiple modes of mediation (often in networks of nebulous control by corporate, governmental, and other entities). In short, plasmatic voice is amorphous and rapid, personal and vast.

Friction Produces Charge

In theorizing plasmatic voice as a vibrant assemblage comprising human and electronic elements, I tap into global flows that transpire unpredictably in local encounters and interactions. In our transcorporeality, we are “intermeshed with the more-than-human world” (Alaimo 2010, 2). We humans are not alone in the world; we humans alone are not the world. The bodies of others inhabit and surround us. The listening/singing self is complicated (and never completed) as it vibrates with proximate and distant others—an intermaterial vibrational practice of deeply embodied and co-constitutive listening and sounding (see Eidsheim 2016). Plasmatic voice accounts for these relations/transductions, working as a listening technique, a concept for critical analysis as well as an electrified singing practice.

As illustrated by my listening to Yellow Magic Orchestra’s “Behind the Mask,” plasmatic voice faces the structural imbalances of power that make up life in capitalist, (post)colonial, and (hetero)sexist hegemony, while pushing back against Enlightenment humanist understandings of the self. Foregrounding the tactility of friction for interpersonal encounters in such fraught contexts suggests that we admit that we inhabit “zones of awkward engagement, where words mean something different across a divide even as people agree to speak. These zones of cultural friction are transient; they arise out of encounters and interactions” (Tsing 2005, xi).

Unlike approaches to audio technology and performance that feed into and from the values of control and mastery, plasmatic voice (as both intellectual and aesthetic praxis) is rooted in these “awkward, unequal, unstable, and creative qualities of interconnection across difference” (4). Fiction reminds us of the ameliorative potential of plasmatic voice assemblages, that “heterogeneous and unequal encounters can lead to new arrangements of culture and power” (5), as illustrated in plasmatic encounters that dis/reorient the individual person in/through new contexts and relations.

Furthermore, through contact, friction produces charge—making triboelectricity the epitome of the queer relationship between bodies and current in plasmatic voice. The word “electrum” comes from the Greek word for “amber”: that which attracts when rubbed (Fahnestock 1999, 178–179). This etymology underlines the materiality of plasmatic voice, which, while impossible to hold down, is nonetheless emplaced and embodied in its instantiations and performances.

Electrical charge is not itself immaterial. Electricity matters, whether in technological or organic flows. As feminist physicist Karen Barad explains:

Imaginations, at least in the scientific imagination, are clearly material. Like lightning, they entail a process involving electrical potential buildup and flows of charged particles: neurons transmitting electrochemical signals across synaptic gaps and through ion channels that spark awareness in our brains. (2015, 387–388)

Plasmatic voice, in its electrical entanglements with the processes of being, appears alive—a nonhuman animacy acknowledged in the Japanese word for electricity, *denki*, (lit. “lightning–mind/spirit”). As described by philosopher Brian Massumi, a flash of lightning is an event that also appears as “an extra-effect: a dynamic unity that comes in self-exhibiting excess over its differential conditions. In the immediacy of its own event, the event of lightning is absolutely, self-enjoyingly absorbed in the singularity of its own occurrence, and that’s what shows” (2011, 20).

Plasmatic voice as an analytic tool challenges the discourse of technological control. As a practice (of embodied/emplaced listening/singing/thinking) it opens space for feeling failure as its frictions and flashes call into question the teleological progress narrative of the Enlightenment, pushing back against the place of electrical devices (and electricity itself) as “symbols of modernization and progress” (Hollingshaus 2013, 56).

Attending to nonlinear plasmatic flows encourages intermaterial vibrational practice of both listening and sounding, which makes sensible the non-human Other in the voices that emerge from speaker cones and headphones (and elsewhere). As suggested by the complementary notions of queer listening (Bonenfant 2010) and the vocalic body (Connor 2000), plasmatic voice entails the co-creation of a listener’s sense of another’s body-in-motion, through mediated transductive networks animated by controlled electrical currents.

Furthermore, as Anthropocene changes make clear the inescapable failure of the notion of human-led progress as a sustainable enterprise, plasmatic voice sounds out affective spaces in which to re-sense the impending reality of sweeping devastations, allowing for the possibility of decentering the human in favor of more expansive and flexibly relational ways. Rather than pure virtuosity powerfully amplified above the noise floor of the 21st century, plasmatic voice sounds trashy. It sonifies queer aesthetics that may comfort and connect us, below the dully-repeated trumpet peals of apocalypse.

Unlike vocal power extending through broadcast transmission and amplification technologies that facilitate dominance of a single voice over many, plasmatic voice performs multivocality as many voices sound together—as clearly audible in Yellow Magic Orchestra vocoder chords, in which Sakamoto’s single fleshly voice becomes a chord. In later sections, I offer an invitation to listen to further instances of plasmatic voice in popular music through my own perceptual apparatus and affective set, as I shape the idea of plasmatic voice in conversation with myriad other voices.

Plasmatic voice foregrounds the bodily origins of voice while resisting normalization of the individually-sounding human body as central to all analysis, bringing into hearing range the nonhuman in the shifting assemblage of vibrating human and other bodies. This assemblage

resists the more common conception of prosthetic extension, offering a relation of field and flesh that is not additive but something more complex.

The Problem of Prosthesis: Voice + Electronics

The microphone is the main entry point of sound waves (such as a voice originating from a mouth) into the indeterminate chain of multiple interventions (such as transduction, amplification, signal processing) that enables the output of various novel yet human-seeming vocal-like sounds. Yet the microphone, as synecdoche for this dispersed audio network, stands for understandings of technology as prosthetic extension. In models of prosthetic extension, “voice + electronics” promotes an asymmetrical relation of control and power; human-controlled machines extend human dominion. Throughout the development of communications technology, audio devices have been conceptualized as tools that extend human capacity while preserving the normative “humanness” of the unmarked (white, cis-male, able) body (Mills 2012).

Prosthetic logic asserts that the (vibrating) body is a fixed and bounded entity, the function of which can be augmented by the addition of modular technological devices, without qualitative change to either the body or the technology. Dianne Currier (2002) enlists Deleuze and Guattari to take aim at the view of technology as prosthesis, asserting that, “whatever permutations arise from a prosthetic encounter between bodies and technologies, they remain bound within the logic of identity or sameness that structures all binary oppositions” (529). Such a view limits analysis of technology’s roles and effects, since the prosthetic equation relies upon “a self-identical and unified self” (530) as its assumed starting point, to which is added a non-self or “‘non-body’ force or entity” (Ibid.). Thus, prosthetic logic stymies understanding of anything beyond detachable (technological) objects added to a stable (human) self. The diffuse, mutable character of audio networks such as P.A. systems, for example, cannot be accounted for in prosthetic logic. Furthermore, the ways that human vocalists adjust their own voices in response to the lively interventions of a P.A. system in particular acoustic contexts (i.e., moving the mike’s position to avoid the squeal of feedback) go largely ignored.

Moreover, the trope of prosthesis reifies normative understandings of human embodiment: “If the prosthesis presumes an enhancement to the ‘natural’ body [...], then bodies and prostheses are already naturalized rather than being understood as socially constructed” (Jain 1999, 39). Eschewing the prosthetic lens that favors essentialized categories of identity, assemblage theory—when infused with more complex and nuanced understandings of structural identity—can further analysis of plasmatic voice in performance. As we hear in the layers of Sakamoto’s vocoder warble, a voice is never simply a human voice.

Deleuze and Guattari’s influential term *assemblage*, translated from the French *agencement*, literally means design, layout, organization, arrangement, and relations. As queer theorist Puar points out, the notion of assemblage as a theoretical term should thus be understood as refocusing analysis from fixed content to tendencies: “relations of force, connection, resonance, and patterning [that] give rise to concepts” (Puar 2012, 57). The human body is thereby not only “de-

privilege[d...] as a discrete organic thing” (Ibid.) but also emplaced within relational networks of human and nonhuman agents and forces. Utilizing assemblage theory in performance analysis entails a shift from valuing “what things are” to “what things do” (Currier 2002, 534). Furthermore, since spatial and temporal conditions of varying scales are also part of an assemblage, such analysis facilitates context-specific modes of thinking. “Becoming,” as opposed to “being,” challenges the notion of a fixed or essential self, promoting process-based understandings (Currier 2003, 333–334).

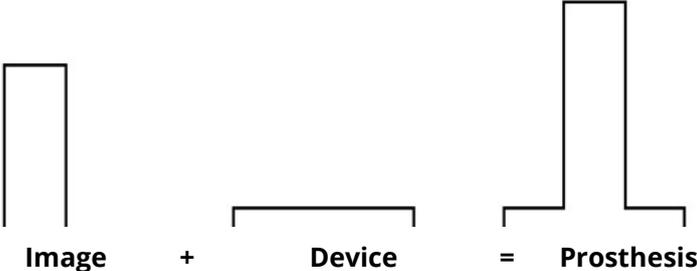


Figure 1.

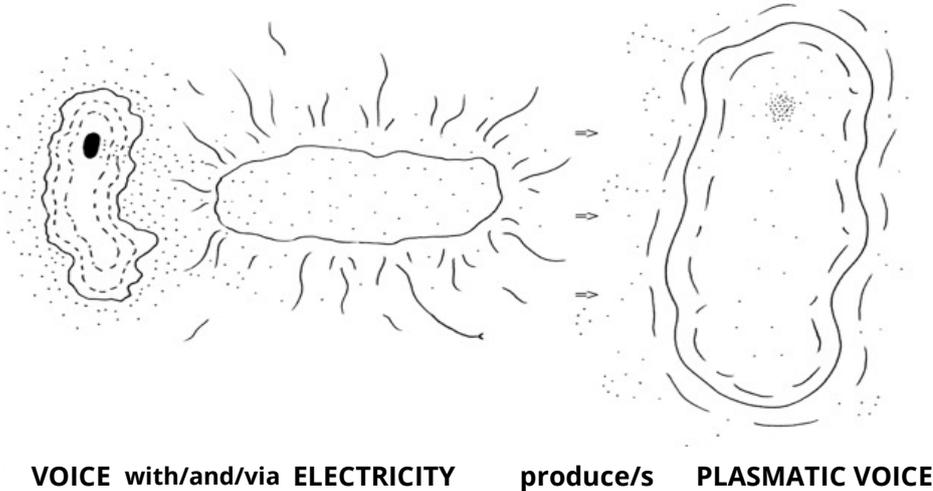


Figure 2.

(Dis)Charge and Plasma

In situations of plasmatic voicing, “what is at issue [...] is the nature of matter and its agential capacities for imaginative, desiring, and affectively charged forms of bodily engagements” (Barad 2015, 388). In its heterogeneous transcorporeality, plasmatic voice can vibrate wildly, shaking off firm boundaries of structural identity and circulating through wide networks, set off by the early impulses of performers like YMO. Just as it charges the fleshly voice to problematize sociopolitical categories, it also challenges understandings of how human technology relates to the nonhuman world.

The electrostatic discharge of a lightning flash occurs as differential electrical charges at a distance resolve to neutrality, but the flow does not move efficiently to resolve difference. Rather, as Barad describes:

flirtations alight here and there and now and again as stepped leaders and positive streamers gesture toward possible forms of connection to come. The path that lightning takes not only is not predictable but does not make its way according to some continuous unidirectional path between sky and ground. (398)

Indeed, in this electrical interaction, the ground charge flickers upwards toward the sky.

Further, lightning entails the creation of plasma, enacting a change of state in the gaseous molecules of air. Atoms break apart and free (negative) electrons flow in a plasma channel. Plasma, one of the four basic states of matter (the others being solid, liquid, and gas), is not otherwise commonly found on the earth’s surface—although solar wind (itself a flow of plasma) in its interactions with the earth’s atmosphere creates the polar wind, a massive plasma fountain in the earth’s magnetosphere. The auroras visible in the circumpolar regions result from such interactions, as charged particles (or ions) precipitate in the upper atmosphere; more mundane are the low-density plasmas of neon and florescent lights, creating the colored glow of charged particles by adding energy to a sealed tube of ionized gas. A plasma cloud holds no charge, as it contains approximately equal numbers of positive and negative particles; yet it is extremely conductive, filled with the possibility of myriad flows. As lightning creates plasma in the air—and plasma, a field of further possible flows—plasmatic voice, in its unpredictable instantiations of listening and vocalizing, indicates the existence of fields that facilitate dispersed sparks of performances that unsettle humanist hierarchies of order.

At the quantum level of the electron, matter engages in infinite indeterminate involutions, as particles emerge, transform, and transition unpredictably (399–400). “Matter is never a settled matter,” asserts Barad, even at the level of elementary particles:

Matter in its iterative materialization is a dynamic play of in/determinacy. [...] It is always already radically open. Closure cannot be secured when the conditions of im/possibilities and lived indeterminacies are integral, not supplementary, to what matter is. (401)

Plasmatic voice, as concept and practice, engages in its own intimate, indeterminate entanglement with potentials and flows of bodies/devices and electrons. Plasmatic voice energizes vibrational practice, engaging analog and digital networks to enter into transformations at scales that elude human sensory capacity. Yet these plasmatic flows eventually recombine, condense, freeze. No phase change is permanent, and the energetic/energized/energizing indeterminacies of matter-in-motion elude human control.

Plasmatic voice as a listening/singing/thinking practice enables me to attend to the human-bodied voices far from me, as it puts me into ineluctable connection with the impoverished people in faraway factories who make my electronics. It heralds massive climatic changes, both impending and already underway. Plasmatic voice sings with the possibility of phase transition, as a change in quantity (of energy) results in a change in quality (state). If free-moving gas molecules are cooled to a specific temperature, they will condense into a liquid. This change of state binds the molecules together, resulting in a set of altogether different behaviors. Conversely, hotter conditions will force a phase transition from gas to plasma, the process of ionization in which the bonds between molecular particles (electrons and nuclei) themselves are loosened, and ready to conduct electrical flow. Plasmatic voice holds within its diffuse fields the fleshly voice of a human body.

Queer Listening to Vocalic Bodies: Expanding Intensity and Affect

Queer listening listens out for, reaches toward, the disoriented or differently oriented other. [...] Listening becomes the act of paying intense somatic attention to the ways that our bodies engage with the sonic stimuli around them, in order to decide which emanators of vocal sound to gesture toward, which of these to want and to seek. [...] These stimuli are not just sound. They are tactile. (Bonenfant 2010, 78)

In intermaterial vibration with plasmatic voice, I attend to and extend toward other point-sources of vocal sound phenomenologically, as an individually-embodied organism. In a practice that “reaches toward” abjected or silenced others—and thus outward to the possibility of someone/thing beyond what is (officially) recognized—I sense another as (queerly) myself. The listening “I” is emplaced in time and place, rooted in particular relations to multiple non-“I” elements of multiple intersecting assemblages, via not only sociocultural but also transcorporeal processes of embodiment and othering. Attending to the crucial experience of perceptual intensity that Massumi (2002) discusses as “*the felt reality of relation*” (16, italics in original)—helps to make sense of gap between the me and not-me vibrating together.

Part of the challenge of analyzing somatic experience is that intensity is ineffable. Whereas sociolinguistic qualification operates on the level of content, intensity resists assimilation through language alone, since intensity is a matter of degree. If language constructs a linear temporal flow in “a world of constituted objects and aims” (26), then intensity—functioning as a complicating “immediacy of self-relation” (14)—fluctuates in nonlinear patterns of resonance, like sound waves echoing back and forth through the air between walls.

Similarly, affect (that is, the potential to affect or be affected) resonates with vibratory motion. Affect can be recognized as emotion only once it is reinserted into narrative time via social convention as “intensity owned and recognized” (28). Affect occurs in temporal flux, as an entity’s fluctuating “powers to affect and be affected” fold and feed back into future and past contemporaneity with the present (15). This folding of time forms memory. Variation in intensity is felt, as “feedback and feedforward, or recursivity [...] folds the dimensions of time into each other” (15).

A third state between active and passive, affect may be said to be the zero point in an oscillation, the critical point of emergence. In the assemblage of plasmatic voice, when electrical components energize, then exceed, human sensory thresholds (via extreme speed, for example), the intensity of bodily affect undergoes sudden transformation. Witness the perceptual shift of what sounds like (or more accurately, is sensible as) a pulsating rumble (of, say, 10 Hertz or cycles per second) into a deep continuous bass when the frequency shifts into the audible range for humans (between 20 and 20,000 Hertz for the average adult).

Video link: Low Frequency Test Tones

 <https://www.youtube.com/watch?v=n5visUla2MY>

Yet affective resonance occurs within the organismal boundaries of a (human) body, leaving nonhuman materialities unaccounted for: “With the body, the ‘walls’ are the sensory surfaces. The intensity is experience. The emptiness or in-betweenness filled by experience is the incorporeal dimension [of indeterminate potential]” (14). Media theorist Mark Hansen (2004) similarly suggests a human organismal bias:

When the body acts to enframe digital information [...] what it frames is in effect itself: its own affectively experienced sensation of coming into contact with the digital. In this way, the act of enframing information can be said to “give body” to digital data—to transform something that is unframed, disembodied, and formless into concrete embodied information intrinsically imbued with (human) meaning. (13)

Yet the process of embodiment in plasmatic contexts is always already beyond human, since we continually redefine ourselves in relation to our shifting transcorporeal conditions:

The energy and impulses of bodies and electronic circuitry combine and find new forms, and they are traversed by flows of light, information, signs, sociality, sexuality, conversation, and contact that give rise to differing meanings, experiences, and configurations of bodies and technologies. (Currier 2002, 535)

After all, a body in motion (in time and space) does not coincide with itself, but rather “with its own transition: its own variation” (Massumi 2002, 4). Thus, a body in motion is not quite itself. Frequency (as of a sound wave) functions as a similar combination of repetition and variation to create the

molecular oscillations of air pressure that make up the sound. A body carries a charge of indeterminacy in “its openness to an elsewhere and otherwise that it is, in any here and now” (5). Or put another way, “the air is charged with possibility” (Puar 2012, 61). The challenge for critics and artists, listeners and vocalists alike, is to develop language that does not dampen the charge of “*the felt reality of relation*” (Massumi 2002, 16), but, rather, that expands the possibilities of the critical apparatus of a mutually sensing assemblage beyond a lonesome human skin. Plasmatic voice as queer listening practice allows for a vibratory sensation of what lies beyond the breakdown of rigid gender categories, a moving venture into the (as-yet) unknown.

Break: Pitch-shift Transduction

Video link: Planningtorock

▶ https://www.youtube.com/watch?v=0fAJ7nID3_Y&t=36s

I know my feelings
Under my deep skin
Crawling out from my feelings
I know my ceiling
Took me into a doorway
–Planningtorock, “Doorway” (2011)

Planningtorock performs this plasmatic becoming, as their voice resounds via the material flows of electronic sound technology, pushing the limits of conventional gender signification, another queering. When hearing a voice (a shifting pattern of sound waves shaped by a moving vocal tract) in everyday contexts, social categories of gender push the listener to locate the sound of every voice within a binary category of gender. And yet as literary scholar Steven Connor (2000) suggests in his theorization of the vocalic body, such an aural confection (“a man’s voice” versus “a woman’s voice” or vice versa) exists within the listener’s perceptual processes at least as much as it is suggested by the singer’s physical presence:

What kind of thing is a vocalic body? What sorts of vocalic bodies are there? Such bodies are not fixed and finite, nor are they summarizable in the form of a typology, precisely because we are always able to imagine and enact new forms of voice-body. (36)

As thoughtless performances and cruel enforcements of binary gender fall away (including “objective” scientific research that claims universality of categories and results based in culturally-specific norms), expressions of gender that do not conform to narrow assumptions and overgeneralized averages bloom and flower through the queering potential of plasmatic voice.

Listening to Planningtorock’s words sung by a voice that is pitch-shifted and formant-adjusted to fall precisely upon the gender faultline between cis-male and cis-female (for a normative English singer), my own queer body resonates sympathetically. I attend to the vibrational world around

me, to the ways that the air shimmers sonically, and from these sounds I perceive/construct the vibrating source that produced some portion of those shimmers. Without knowing that I do so, I identify and prioritize which of those shimmers and their attendant source(s) are most important for my continued organismal existence. The flow is ongoing and there are myriad airy vibrations in every moment of the ongoing co-creation of my vibrational world. Perhaps I sound in response, and/or attend to familiar soundings, the voices coming from similar cousin-shapes—what I perceive as the soundings of kin. I open toward their echoes. My own body vibrates in time with the gender nonbinary vocalic-body that I hear/create.

A voice exists outside/between bodies, yet always implies the sounding of a particular body. We hear context in that voice as well: the acoustic space of origin (as well as distance and position from the listening ear) in the sound of an acoustic voice. In amplified and recorded voices, we hear the qualities of machines added into those vocal timbres—even as we feel certain of our ability to identify in those machinic voices the specific bodies of the singers we love. A voice is always a body in a place—and just as the place may be artificial (e.g., the large hard space conjured by electronic reverb) so now too may the voice.

Plasmatic voice as intermaterial vibration entails the co-creation of a listener's sense of (another's) body-in-motion. The feeling of that body's humanness is a complex and shifting assemblage of social/cultural conventions, biological functions (of the sounding and perceptual systems), and technical designs. In encoded and re-synthesized voices, we hear not the external, visible forms of artificial bodies, but the shifting vibrations of acoustical models animated by digital software and electrical current—and then through the internal sympathetic vibrations of our very own eardrums transduced into our nervous systems.

As “the voice-body is [...] a body-in-invention, an impossible, imaginary body in the course of being found and formed” (Connor 36), they/we resonate non-binary plasmatic voices beyond our own collective making—vocal bodies of people who exceed the limits of ethnic identity and binary gender, to vibrate with future sounds of now-coming-into-being. Such intermaterial vibrational practice as it moves into the interstices of failure is a very queer art.

Sounding the Queer Art of Failure: Digital Trash and the Materiality of Electrons

To live is to fail, to bungle, to disappoint, and ultimately to die; rather than searching for ways around death and disappointment, the queer art of failure involves the acceptance of the finite [...] Rather than resisting endings and limits, let us instead revel in and cleave to all of our own inevitable fantastic failures. (Halberstam 2011, 187)

Plasmatic voice as queer sonic practice may suggest new ways of becoming less human and more humane, as we enter into vibratory relation with the world-in-breakdown. Oblique to the queerness of plasmatic voice is Haraway's appeal to “make kin sym-chthonically, sym-poetically” (2015, 161) as a move toward amelioration of the ecological and ethical problems of Anthropocene.

However, making kin of electrical current, a human-controlled refinement of a phenomenon that is one definition of animate life, requires coming to terms with the unsustainability of audio technology.

Plasmatic performance requires highly refined nonhuman components (i.e., audio hardware) and processes (i.e., steady electrical current) to exist. Such components make plasmatic voice as practice both a product of and contributor to the Anthropocene. As Jonathan Sterne writes:

“New” media technologies as we know them, and all of their components, are defined by their own future decomposition. Obsolescence is a nice word for disposability and waste. Billions of pieces of computers, Internet hardware, cellphones, portable music devices, and countless other consumer electronics have already been trashed or await their turn. The entire edifice of new communications technology is a giant trash heap waiting to happen, a monument to the hubris of computing and the peculiar shape of digital capitalism. (2007, 17)

In other words, the failure of media hardware produces fodder for the burgeoning technosphere, a new part of earth’s system that may be considered an offspring of the biosphere and human systems. The technosphere now co-comprises the realm of contemporary human endeavor:

The technosphere as defined here comprises our complex social structures together with the physical infrastructure and technological artifacts supporting energy, information and material flows that enable the system to work, including entities as diverse as power stations, transmission lines, roads and buildings, farms, plastics, tools, airplanes, ballpoint pens and transistors. (Zalasiewoicz et al. 2017, 2–3)

The processes contributing to the technosphere show no signs of slowing, but rather “[c]ontinuous growth, transformation and re-incorporation takes place among these components, and its scope is now global” (11). Its physical aspect is estimated to have a mass of 30 trillion tons—“five orders of magnitude greater” than the earth’s present human biomass (Ibid.)—which, at its current population of over seven billion individuals, is itself both unprecedented and difficult to imagine:

The enormous scale of the technosphere by comparison to pre-anthropogenic systems becomes even more apparent when one considers that present human biomass is more than double that of all large terrestrial vertebrates that characterized the Earth prior to human civilization and is an order of magnitude greater than present wild terrestrial vertebrate biomass. (Ibid.)

Current taxonomies cannot account for individual elements such as electromagnetic waves that leave only ephemeral physical traces; examination of the technosphere requires “devising classifications of technological morphology and ultimately making connection to dynamical considerations, for instance of energy flows” (3).

Furthermore, the technosphere as a whole has emergent qualities, dependent upon human action (both individual and collective) but ultimately beyond the reach of human control, operating with

“quasi-autonomous dynamics” (Haff 2014, 126). These emergent and unpredictable flows are an ineluctable part of the dire matter of the Anthropocene, as the “success” of capitalism’s systems of planned obsolescence turns into the “failure” of the global climate to support human life.

Plasmatic voice as posthuman vibration must be engaged in ways that take into account the high tech trash that comprises “a catastrophic dimension of that middle space between fantasy and accomplishment” (Sterne 2007, 29). Going further, we must understand the dispersed assemblages of electrical mains systems and audio hardware (in relation to ourselves as listeners/singers) as something beyond mere mechanical tools—engaging plasmatic voice as a “method for imagining, not some fantasy of an elsewhere, but existing alternatives to hegemonic systems” (Halberstam 2011, 89). Attuning to (other) queer bodies reaches further, toward the nonhuman world upon which humans rely.

Donna Haraway, in her writings on the Anthropocene (or the Capitalocene, Plantationocene, or Cthulucene), suggests:

If there is to be multispecies ecojustice, which can also embrace diverse human people, it is high time that feminists exercise leadership in imagination, theory, and action to unravel the ties of both genealogy and kin, and kin and species. (2015, 161)

Kin-making, or “making persons, not necessarily as individuals or as humans” (Ibid.) is one alternative to the human-centric lifeways that build and sustain the failing human/nonhuman systems of the technosphere. Improviser, programmer, and music scholar George E. Lewis (2000) suggests that such personhood may be extended beyond biological entities that Haraway proposes to be made kin, to our very tools and instruments:

The “anti-authoritarian” impulse in improvisation led me to pursue the project of de-instrumentalizing the computer. If the computer is not treated as a musical instrument, but as an independent improviser, difference is partly grounded in the form of program responses that are not necessarily predictable on the basis of outside input. (36)

As human-bodied organisms, we have the propensity to hear voices, even beyond the human, thereby giving voice to flows and motions beyond culturally recognizable beings’ fleshly embodiment. This listening ability exhibits our capability to enlarge our vibrational practice to include not only human(oid) motion but also environments and ecosystems.

Coda: Vocoder Dissolution

Audio link: Black Moth Super Rainbow

 <https://blackmothsuperrainbow.bandcamp.com/track/new-breeze>

New breeze came, the evil won't stay
New breeze came and drove it away
Fallout rain wears down the paint
Doomsday downgrade, swallow nightshade
I got a sunburn fever
I got so high from a creeper
I always dissolve when I'm near you
I hope you're here when I fall through
—Black Moth Super Rainbow, "New Breeze" (2018)

Pennsylvania (U.S.A.) pop experimentalists Black Moth Super Rainbow utilize an eclectic array of electronics (including vocoder) to produce a surprisingly organic sonic atmosphere. Here, the singer's voice-through-vocoder sounds neither robotic nor human. Rather, white noise whispers gently through the low, humming pitches of the melody, almost devoid of the formants that typically characterize a human vocal tract, to evoke something more like a warm wind. Add ample reverb and a warbling synth counterpoint and the lyrics soar, as though sung by distant bees, a grove of trees, or even the air itself. Yet in both timbre and text, the musical aesthetic avoids the nostalgic trope of "pristine nature," as the materiality of audio technology itself intrudes into the music. Glitchy stutters in the vocals at the beginning of each verse—like an old cassette tape with its magnetic layer flecking off, or even as if the headphone jack connection is right this instant shorting out—evoke the more-than-humanness of the scene, in which environmental forces and technology create a posthuman environment into which the myth of human control blurs and fades.

Listening (as a post-lunch body walking in a valley under a raucously cloudy sky, earbuds tightly in-ear cabled to battery-powered mp3 player with a recent internet link), I long to dissolve alongside this plasmatic voice, which is simultaneously recognizable as a singer of English yet next-to-unimaginable as a human-bodied person. Intermaterial vibration along with this sound tickles open hitherto unimagined queer affective spaces inside, which hint at "the dissolution of boundaries that shore up human exceptionalism" (Alaimo 2017, 112). From a mask to a doorway to a breeze, I hear performance-becoming-present though shared sonic vibration, as alternating current makes alterity kin.

Attending to the interface between human and nonhuman, with an openness to affect and its accompanying becoming-with, provides an alternate starting point for responding to the dreadful problems posed by the Anthropocene. Rather than clinging to human-centric affective logics of (post)apocalypse—anger, depression, paralysis—moving, instead, with plasmatic voice makes tangible the possibility of moving toward new lives always emerging.

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Biography

Dr. Gretchen Jude, a scholar-practitioner of sound, completed her Ph.D. in Performance Studies at the University of California, Davis, in June 2018. Gretchen's dissertation engaged with intersections of voice and audio technology in Japanese experimental and popular music.

Gretchen also holds an M.F.A. in Electronic Music and Recording Media from Mills College, as well as koto [Japanese zither] certification from the Sawai Koto Institute in Tokyo. In both academic work and performance research, Gretchen aims to synthesize and harmonize personal, embodied experience with the rapid changes in culture and machinery that both empower and impinge upon us.

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