

Listening to Absence– sonic practices and space/territory

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Trigger questions

How do we narrate extreme violence without succumbing to its necropolitical impact?

How to make the invisible visible, how to make the unheard audible?

What aesthetic and investigative strategies have creators from Latin America and other post-colonial environments developed to talk about experiences of violence?

What ethical and artistic challenges do we face?

How do these practices intervene in the social imagination, for example, of justice?

What kind of counter-knowledge do we produce in the process?

INTRO

To discuss a series of transmedia, sound, installation and graphic practices that explore and address – in very different ways – extreme and normalized violence in regions such as Mexico. It is a transdisciplinary proposal that opens the door for a critical dialogue on the contribution of the arts to the exploration of violence: for example, sound and sensory practices, artistic interventions in the public sphere, the new audiovisual languages that they seek to transcend linearity and have an impact, both politically and affectively.

Listening to absence – sonic practices and space / territory

What imaginary spaces are opened through sound? From the projects *2487* and *Vis.[un]necessary force*, we can approach the power of the sensory and the challenge of raising awareness.

VIS.[UN]NECESSARY FORCE 1-4

2014 – 2023 | work in progress

Nature: Long term artistic research (AR) project initiated as independent artist (2014) and developed as art-research project (2015-2022) at Universidad Autónoma Metropolitana (UAM), Mexico.

Methodology: practice as research (PAR) or artistic research (AR).
Art research results: artworks, publications, seminars, curatorial projects.

Focus area: Transdisciplinary practices.

Sound as horizontal axis.

Extreme and normalised violence in Mexico as territory.

Art research question:

How the civilian population survive in situations of extreme violence in a context of a failed State?

Vis.[un]necessary force is a long-term multidisciplinary art-research project that explores how the civil population survives amongst extreme violence performed by legit and non-legit groups of power in specific areas of Mexico.

Through *Vis.[un]necessary force* I am trying to understand first-hand the accompanying needs of individuals, to offer visibility through this creative proposal, and to find mechanisms that promote the empathy of the general population towards this extreme violence that takes place in Mexico.

Artworks from this project won prizes, grants, recognitions and are part of contemporary art collections, among them:

Prix Ars Electronica | 2021 | Honorary Mention | Digital Musics and Sound Art Category | Linz, Austria | *Vis.[un]necessary force_4*.

Prix Ars Electronica | 2020 | Honorary Mention | Digital Communities Category | Linz, Austria | *Vis.[un]necessary force_3*.

Biennial of the Frontiers | 2014 | 1st Artist Prize | Matamoros, Mexico | *Vis. [un]necessary force_1*.

ZKM | Center for Art and Media | 2017 | Keynote Speaker and exhibition | Karlsruhe, Germany | *Vis.[un]necessary force_1.01*.

Tamaulipas Cultural Institute Collection | 2015 | Matamoros, Mexico | *Vis.[un]necessary force_1*.

Museum of Contemporary Art MAC Collection | 2015 | Bogota, Colombia | *Vis. un]necessary force_1*.

Culture Ministry Mexico | 3-year art research and production grant | 2015-2018 | Mexico City, Mexico | *Vis.[un]necessary force*.

2487

Immigration as the result of a failed State.

Border Mexico / United States

ARTWORK URL: <https://www.diaspora2487.org/>

2487

This sound piece records the names of 2,487 of the estimated eight thousand people who have died while trying to cross the US/Mexico border since 1993 -cut: 2006.

Database sources: Coalición de Derechos Humanos / Alianza Indígena Sin Fronteras; Stop Border Deaths Now! A project of the Border Working Group, Religious Task Force on Central America and Mexico (WTF CAM); How Many More? Stop Gatekeeper! The California Rural Legal Assistance Foundation's Border Project; Centro de Documentación del Centro de Estudios Fronterizos y de Promoción de los Derechos Humanos A. C. (CEFPROD HAC); Mexican and US newspapers.

2487 was originally commissioned by Artpace San Antonio as part of the International Artist-in-Residence program New Works: 06.2 curated by Yuko Hasegawa, Chief Curator at the Museum of Contemporary Art, Tokyo, Japan.

SOUNDS

1_ 2487_2006_ LuzMaríaSanchez_2487_RUN_ 3:00 min

2_ *Untitled [Rio Grande_Rio Bravo]*_1998_Stereo 8:02 min

3_ *V.[u]nf_1 and V.[u]nf_1.01* stereo version AUDIO MIX 3:07 min

4_ *V.[u]nf_1* AUDIO NOCHE DE IGUALA TR 29 0:51 min

5_ *V.[u]nf_4_2019_Stereo_LAYER 3* 3:00 min

XTA MATERIAL IMAGINARIES SOUND: Vuelos de la Muerte, Veracruz México. Post-dystopia Mexico City recordings

6_ *Untitled [Planes]*_Stereo_Luz_María_Sanchez 9:00 min

V.[u]nf_1 AUDIO NOCHE DE IGUALA TR 29

Track #29

Original title: balacera en iguala guerrero. [Shooting in iguala guerrero.]

Duration: 0:51 seconds.

Views: 15,748.

YouTube User: MonVel.

URL: <http://www.youtube.com/watch?v=nrWdLH8-Fk>

Extra information: Published September 27, 2014. Shooting this Saturday morning, there is little information on the facts!

Last reviewed: January 13, 2015. [Active link as for July 20, 2020.]

Recording #29, 51 seconds, we can hear gunshots, an older woman, a man, probably a younger man all within an enclosed space, and accordion music.

[Gunshots]

[Cellphone rings (music ringtone)]

[Close to phone] Young male: "haste para allá" [move away]

Older woman: [Answers the phone] "Bueno, ey, ¿otra vez?" [Hallo, yes. Again?]

[Gunshots]

Young male: "¿Qué cosa?" [What?]

[Gunshots]

Older woman: "¿Por todos lados? Ay Dios mío. ¿Ustedes no pueden salir, verdad? No, estéense pues boca abajo, hijo. Sí sí sí, hijo, sí sí sí, ya oí."

[Everywhere? Oh my God. You can't go out, right? No, lie on your stomach, son. Yes yes yes, son, yes yes yes, I already heard.]

Older woman and man almost at unison: "Manténganse boca abajo, por favor." [Stay facing down, please.]

[Gunshots]

Older woman: "Sí hijo, córrele pues, y voy." [Yes son, run, and I will go.]

[Gunshots]

Older man: "Putra madre." [Fuck.]

Older woman: "Quiero ponerme a chillar, con la balacera" [I want to cry, with this soothing.]

Older man: "¡Cálmate, ya!" [Calm yourself, now!]

[Background accordion music]

FORENSIC LISTENING-a practice.

By approaching these real events through their sound components and coming to terms with their highly political power, we understand better the world in which they participate (Abu Hamdan/B 11mm00ss- 11mm14ss). Each of the recordings of V.[u]nf_1 and V.[u]nf_1.01 were meant to be seen/heard since, as I mentioned above, they were videos made with a cellphone and uploaded to YouTube. These recordings could be used, through the forensic approach, as part of a process of justice. Even if the political process that is taking place in Mexico does not assure access to justice at the present, it is important to start building awareness and empathy as a starting point, to eventually move to a forensic-justice like approach.

However, my primary interest rests in exploring the affective politics of fear found in these recordings, and to translate these fearful ambiances into the exhibition space, which brings the audience's attention to the everyday experience of violence. Since these ambiances of fear are translated into the safe arena of the exhibition space I have decided to provide detailed information about each recording, to make clear to the installation's visitors the following points:

- These are real recordings of shootings that took place in a city in Mexico.
- These are recordings made by citizens, who are no different to the exhibition visitors
- These situations can occur at any time, in any place, and in any social context.

I am aware of the importance of maintaining a controlled approach to the sonic elements of the artwork in order to avoid dismantling the emotional power of the field recordings, embedded in the participatory affective sonic constructs. These carefully orchestrated steps contribute to the installation's affective politics, which seeks to translate the feelings of terror across large regions under a state of siege, to a global audience.

SOURCE: LUZ MARÍA SÁNCHEZ CARDONA 2020. "Intermittent Space: Sound, Violence, Ambiance and Affective Politics of Fear in Contemporary Mexico." UNLIKELY. URL: <https://unlikely.net.au/issue-06/intermittent-space> Reviewed 28 July 2022.

THE EXPERIENCE OF THE OTHER:

TEXT LA TIMES 15 July 2022:

Vince Price Art Museum, Los Angeles.

“Vis. [un]necessary force_1.01,” from 2014-2015. It consisted of a large white cabinet bearing almost two dozen 3-D printed objects resembling toy guns. But, really, they’re speakers. Visitors to the museum are invited to pick them up, place them to their ear and play the individual recordings embedded in each: sounds of gunfire from shootouts between narcotraffickers that the artist harvests from YouTube. In other words, to listen to this work, you literally have to put a gun to your head.

The audio is absolutely chilling. One track begins as the celebration of a child’s birthday that devolves into what feels like an eternal shootout involving assault rifles.

The work is about narco-violence — but also the often-sensational ways in which it gets presented in the popular culture. A large wall text features the captions that appeared on the original YouTube videos, captions like: “Live shooting at a children’s birthday party in Mexico INCREDIBLE.”

This particular work is about Mexico. But in the context of our mass shooting epidemic here in the U.S., it could very well be about us. And it left me queasy.

It really articulated the cult of the gun. And it couldn’t have made a better case for why sound can be so visceral as a medium. You can read endless stories about violence, but to hear the sound of a person’s voice as it is happening? That is something you will never forget.”

Carolina A. Miranda and Paula Mejía (2022) “A mariachi space opera meets gender-bending Chicano punk in an ambitious sound art show”. Los Angeles Times. 15 July 2022. URL: <https://www.latimes.com/entertainment-arts/story/2022-07-15/sonic-terrains-in-latinx-art-at-the-vincent-price> Reviewed 28 July 2022.

SOUND + SILENCE

SOME CONTEXTUAL IDEAS TO SHARE

Compilation Luz María Sánchez for Interferenze/Liminaria

SOUND

Michel Chion: problematics for sound

“We find ourselves dealing with a perceptual phenomenon—as we do with “sound”—to which the same noun is given to the physical cause that gives rise to the former (in French, the word for “sound” in effect designates both the physical vibration and the heard object), an extraordinary synonymy that becomes the source of predictable confusions. (Chion, 2016: 143).

1. “Because, if we trust to language, sound is divided between the obverse of a “cause” and the reverse of an “effect.”

Stevens and Warshofsky physical definition of sound:

- A) a physical vibration of some material thing
- B) a physiological sensation in an animal brain

“Sound is an organized movement of molecules caused by a vibrating body in some medium (water, air, rock or whatever)” —and the so-called philosophical definition—“ Sound is a sensation . . . a sensory experience”—they come to their own conclusion by putting these two assertions back to back: “This question still puzzles people to this day—and puzzles them to no purpose. It confuses a cause (a physical vibration of some material thing) with an effect (a physiological sensation in an animal brain). And which of the two is sound? Both.”¹¹ The authors, who have just proven that there are two different things, could have gone on to say that the entire problem comes from applying the same term to both.” (Chion, 2016: 195).

Note 11: S. S. Stevens and Fred Warshofsky, *Sound and Hearing* (New York: Time-Life Books, 1969), 9.

2. “Because sound is torn (...), between disparate disciplines.” (Chion, 2016: 195).

“The word “sound” itself, unsatisfactory for signifying so many different things on so many distinct levels of reality, is put forward as one only to be immediately sundered into several disciplines—acoustics, psychoacoustics, phonetics, sound ecology—that are believed complementary, whereas they remain mutually ignorant, and believed standardized, whereas their scientific validity is, for the majority among them, poorly established because lacking a clearly delimited field (I am thinking, for example, of psychoacoustics).” (Chion, 2016: 195-196).

3. “Because sound sits on the edge between order and chaos.

The sound field appears divided, cleft, indeed sharply hierarchized by an important difference: the difference between sounds with precise pitch, with tonic mass to take up Schaeffer’s term again—sounds that are often called “musical”—and sounds without a precisely localizable pitch, with complex mass as Schaeffer puts it—often called “noises.” The former tend to stand out as more privileged than the latter.” (Chion, 2016: 197).

4. “Because of the propensity that certain sonic characteristics have for monopolizing perception to the detriment of others.

This propensity for one sonic feature to dominate the rest distracts attentive observation from the various features that make up a sound.”(Chion, 2016: 198).

5. “Because sound for the most part consists of events.

...sound not only is the result of movement but also very often itself is in a state of change. Rare are those sounds both permanent (without interruption or decay) and stable (without variation, even periodic variation). When we have dealings with a sound that addresses us with these two characteristics, it seems as though we grant it a special place. The regularity, while statistical, of the sound of the ocean (the variation of which is inscribed within a limited field of possibilities) makes it a sound both archetypal and exceptional. But sounds that are simultaneously continuous and stable with regard to their characteristics—like the rumble of a torrent—are rarer still, although we have long since been able to produce them at will by electronic means.” (Chion, 2016: 199).

6. “Because sound is hard to isolate in time and in space—in the perceptual continuum.

With sounds, the identification of cohesive units is difficult. Many sonic events link up, mask each other, or overlap in time and space in such a way that carving them out perceptually in order to study them separately, collectively, or in combinations of elements is difficult. (...)

To this difficulty of temporal segmentation is added the difficulty of isolating in space a sound that one would like to study in relation to others that exist at the same time. It is impossible for us to “zoom in” on a sound when others resonate simultaneously with a similar force.” (Chion, 2016: 200).

7. Because it seems difficult to take up a disinterested attitude when faced with sounds.

To maintain in sonic life—or to suggest that others do so—a purely descriptive and disinterested attitude, like a curious onlooker, is not so easy, since sound triggers enormous effects.” (Chion, 2016: 201).

8. “Because sound stubbornly refers us to something other than itself.” (Chion, 2016: 201).

9. **“Because sound is perhaps the most easily influenced of all perceptual objects.**

Some aspects of sound sensation are more easily influenced by visual information than the other way around:

–As far as space is concerned, sound takes up perceptual residence there where we see or even where we mentally locate its cause.

–As far as the identification of causes is concerned, the “figurative vagueness” of sound paradoxically conduces to making a given sound open to a great variety of causal attributions. The result is that every sound, even the most abstract, is potentially figurative and that its “objective” audition is from then on influenced and parasitized by all manner of extrasonic associations and representations.” (Chion, 2016: 201).

10. **“Because maybe sound is not an object.”** (Chion, 2016: 201).

Christian Metz “described the usual attitude to sounds, which treats them as characteristics and not as objects: (...) Ideologically, the sound source is an object and the sound itself a characteristic.” (Chion, 2016: 201-202).

Note 19: Christian Metz, “Le perçu et le nommé,” in *Essais sémiotiques* (Paris: Klincksieck, 1977), 155.

“If sound is an object, it makes its initial appearance in our culture as an object of language, as a shattered object, indeed as an impossible object, hard to reify” (Chion, 2016: 194).

“Si el sonido es un objeto, hace su aparición inicial en nuestra cultura como un objeto del lenguaje, como un objeto hecho añicos, más bien como un objeto imposible, difícil de cosificar” (Chion, 2016: 194).

“Albert Lavignac’s *Encyclop.die de la musique et dictionnaire du conservatoire* (originally published in 1913) we read:

Without a doubt, sound, that is, sonic sensation, does not exist outside of us. There are only mechanical phenomena that, transmitted to the auditory nerve, give rise to the sensation, but these are not the sensation. By an improper extension of the word, however, “sound” gets used to denote the objective phenomenon that gives rise to the sensation. Thus we may speak of the propagation of sound or of its reflection. In reality, these expressions are meaningless, and sound no more propagates nor is reflected than any other sensation might be ...” (Chion, 2016: 194).

SILENCE

Silence: “it was necessary to have sounds and voices so that the interruption of them could probe more deeply into this thing called silence.” (Chion, 1994: 57)

LISTENING

“**Acousmatic**: Pertaining to sound one hears without seeing its source. Radio and telephone are acousmatic media. In a film, an offscreen sound is acousmatic.” (Chion, 1994: 221)

“**Causal listening**: Listening for the purpose of gaining information about the sound's source.” (Chion, 1994: 222)

“**Reduced listening**: Listening for the purpose of focusing on the qualities of the sound itself (pitch, timbre, etc.) independent of its source or meaning.” (Chion, 1994: 223)

“**Semantic listening**: Listening for the purpose of gaining information about what is communicated in the sound (usually language).” (Chion, 1994: 224)

KEY TERMS

“**Acoustics**—the physics of sound.” (Goodman, 2009: 195).

“**Affect**—Spinozist conception of the power of one body to interact with other bodies. The ontological glue of the universe. In its narrower definition, it diverges from psychoanalytical definitions that use it as synonymous with emotion, instead denoting collective dynamics in relation to mood, ambience, and atmosphere as registered across networked nervous systems. Theoretically denotes a plane ontologically prior to cognitive processes and the plane of representation. Concept developed further by Gilles Deleuze and Felix Guattari and by Brian Massumi.” (Goodman, 2009: 195).

“**Affective tonality**—dimensions of mood, ambience, or atmosphere.” (Goodman, 2009: 195).

“**Ecology of fear**—phrase coined by urban theorist Mike Davis to depict the affective climate of catastrophic urbanism, the city and its control systems as affected by the threat of natural, technological, sociopolitical, or economic disaster.” (Goodman, 2009: 196).

“**Hypersonic**—inaudible affects of an ultrasonic encounter.” (Goodman, 2009: 197).

“**Infrasound**—leaky, subbass frequencies under the auditory threshold of 20 hertz, often felt in terms of tactility or organ resonance instead of hearing!” (Goodman, 2009: 197).

“**Sonic warfare**—deployment of sound systems in the modulation of affect, from sensations to moods to movement behaviors.” (Goodman, 2009: 198).

“Ultrasound—directional, high- frequency vibrations above the auditory threshold of 20 kilohertz.” (Goodman, 2009: 198).

“Unsound—the not yet audible. Refers to the fuzzy periphery of auditory perception where sound is inaudible but still produces neuroaffects or physiological resonances. Refers also to the untapped potential of audible bandwidths and the immanent futurity of music. Sonic virtuality.” (Goodman, 2009: 198).

“War machine—technical concept of Gilles Deleuze and Felix Guattari referring to a range of collective phenomena engaged in the active decoding and deterritorialization of strata. Can be conceptual, sonic, aesthetic, economic, political, animal, and so forth. When contrasted to military machines, war machines are differentiated by not taking conflict or violence as their primary object.” (Goodman, 2009: 198).

Sonic fear: “While sonic mood modulation becomes another dimension of the ambiances of control, it would be foolish to ignore the complex affects of the ecology of fear for the sake of a too hasty politics of silence.” (Goodman, 2009: 73).

“Sound is often understood as generally having a privileged role in the production and modulation of fear, activating instinctive responses, triggering an evolutionary functional nervousness.” (Goodman, 2009: 65).

“While the ability to interpret sounds and attribute likely causes to them is learned culturally so as to instruct on the particular danger to each species, it is also argued that this is built on top of an evolutionary hard- wired instinct to respond appropriately, for the sake of survival, to any threat indicated by sound. To prolong survival, it is claimed, the body has developed three basic affects in response to fear: the fight, flight, and freeze responses. These three affects travel down three lines: the line of attack, the line of flight, and the line of fright. Conflict, escape, and immobility.” (Goodman, 2009: 66).

Noise affect:

“The story here, the directionality of its chain of events, is a common one that persists into contemporary cognitivist neuroscience: sound—cognitive classification of sound to attribute external source and internal subjective emotion, movement, or activation of the body in response to the emotion. However, this model rests on certain problematic presuppositions regarding the relation between mind and body and their activation, between feeling and emotion. The point of departure for an affective analysis is the disjunction between stimulus and response, cause and effect. If affect operates across the nature- culture continuum, problematizing the difference between what is preprogrammed into the body and what are learned responses, then what is meant by an instinctual response to sound? How are so-called instinctual responses sometimes shortcircuited in the intensification of joy? And what happens when there is a more complex, nonlinear array of sensorienvironmental conditions at work, when effects become autonomous from causes, when sounds evacuate their source, when fear becomes self- producing?” (Goodman, 2009: 67).

Politics of sound and noise

“Together, the aesthetic politics of silence and noise has been a useful way of framing or demarcating the field of sonic power. For example, in the history of musical aesthetics, silence, from John Cage onward, has been conjoined to the virtual in that it constitutes the shadow of audition, the nonconscious background, perceivable only through absence and with only a negative possibility of entering conscious attention. Silence here is sound in potential, unactualized. Similarly, the concept of noise, from futurism onward, came to mean the potential of any sound whatsoever to disrupt and move forward musical jurisdictions as policed by generic criteria, critical border patrols, or harmonic or melodic parameters of organized sound.

Both of these aesthetic tendencies, within the remit of a politics of amplitude, are often placed in allegiance to an anticapitalist politics. In these cases, in noise pollution policy, for example, strategic resonances are recognized in local tactical interventions into the force fields of sonic ecologies. Yet the silence- noise axis has several drawbacks. The politics of silence often assumes a conservative guise and promotes itself as quasi-spiritual and nostalgic for a return to a natural. As such, it is often orientalized and romanticizes tranquility unviolated by the machinations of technology, which have militarized the sonic and polluted the rural soundscape with noise, polluted art with sonification, polluted the city with industry, polluted thought with distraction, polluted attention with marketing, deafens teenagers, and so on¹. Its disposition is almost always reactionary. In a much less strong but more compelling aesthetic version, it sides with those lamenting the loss of dynamic range within the “loudness war” that currently rages concerning the overuse of compression in mastering techniques within sound engineering. Dynamic compression here, or at least its overuse, in maximizing loudness and minimizing dynamic range, is objected to as a weapon for enhancing the audio virological power of sonic capital while deadening affect in the hypercompetitive economy of attention.

The politics of noise, on the other hand, may become an excuse for relativism (one person’s noise is another’s music) or, in more militant mode, takes noise as a cultural weapon, as a shock to thought, as a shock to bourgeois complacency, as a shock to tradition, as a shock to the status quo.² The various positions that can be grouped under this heading revolve around an array of definitions of noise, from unwanted sound, to deconstructive remainder, systemic excess, void, or disturbance through to acoustic definitions based on distribution of frequency and tagged by colors—white, pink, black, and so on. Aesthetically, however, in the soundtrack to the politics of noise, its weapons often remain trapped within the claustrophobic confines of the dual (and usually white) history of rock music and avant- classical sound art. Justified by Adornian propaganda, the politics of noise may be enlisted to celebrate everything from the dreary to the monstrous, with sonic dominance narrowly construed as the overpowering taken to the point of meaningless parody—instead of a shock to thought, a provocation to boredom.” (Goodman, 2009: 191-192)

Note 1: We can find this strand of thought passing through the acoustic ecology movement, particularly Shaffer and Barry Truax, who both tend to idealize nature, through to Virilio’s complaints against the “silencing of silence” through the sonification of art, through to Stuart Sim’s frankly unhinged *Manifesto for Silence*, (Edinburgh: Edinburgh University Press, 2007). (Goodman, 2009: 250)

Note 2: The line passes from the Italian futurists' manifesto for noise in the Art of Noises through to Attali and recent texts by for example. It is interesting to note also that Cage stands at the crossroads of both the politics of noise and silence. (Goodman, 2009: 250)

Vibrational ontology

"An ontology of vibrational force objects to a number of theoretical orientations. First, the linguistic imperialism that subordinates the sonic to semiotic registers is rejected for forcing sonic media to merely communicate meaning, losing sight of the more fundamental expressions of their material potential as vibrational surfaces, or oscillators. (...) the phenomenological anthropocentrism of almost all musical and sonic analysis, obsessed with individualized, subjective feeling, denigrates the vibrational nexus at the altar of human audition, thereby neglecting the agency distributed around a vibrational encounter and ignoring the nonhuman participants of the nexus of experience.

Rather, it is a concern for potential vibration and the abstract rhythmic relation of oscillation, which is key. What is prioritized here is the in-between of oscillation, the vibration of vibration, the virtuality of the tremble. Vibrations always exceed the actual entities that emit them. Vibrating entities are always entities out of phase with themselves. A vibratory nexus exceeds and precedes the distinction between subject and object, constituting a mesh of relation in which discreet entities prehend each other's vibrations. Not just amodal, this vibrational anarchitecture, it will be suggested, produces the very division between subjective and objective, time and space. (...)

If this ontology of vibrational force can help construct a conception of a politics of frequency, then it must go beyond the opposition between a celebration of the jouissance of sonic physicality and the semiotic significance of its symbolic composition or content. (...)

... This vibrational ontology begins with some simple premises. If we subtract human perception, everything moves. Anything static is so only at the level of perceptibility. At the molecular or quantum level, everything is in motion, is vibrating. Equally, objecthood, that which gives an entity duration in time, makes it endure, is an event irrelevant of human perception. All that is required is that an entity be felt as an object by another entity. All entities are potential media that can feel or whose vibrations can be felt by other entities. This is a realism, albeit a weird, agitated, and nervous one. An ontology of vibrational force forms the backdrop to the affective agency of sound systems (the sonic nexus), their vibrational ontology (rhythmanalysis), and- their modes of contagious propagation (audio virology)." (Goodman, 2009: 82-83)

Sonic warfare

"The colonization of the inaudible, the investment in unsound research, indicates the expanding front line of twenty-first-century sonic warfare. While hypersonics probes the upper threshold of audibility, which can vary in relation to social segmentations such as age, or researches the neuroscientific effects of combinations of ultrasound with audible frequencies, bass materialist cultures concentrate on the seismological dimension of music, on sonic dominance, in both its physical and incorporeal forces. While bass materialist cultures make tangible the physicality of the inaudible via the manufacture of vortical, tactile spaces, recent technological tendencies, hand in hand with brain implantation of

microchips soldered into the auditory cortex, smuggled in with their implicit politics of silence, seem to carry the desire to extinguish older modes of audition, operating instead through the direct modulation of the brain and rendering the audible spectrum redundant. Here, frequency modulation as a *modus operandi* of societies of control is taken literally, with cities and their populations attuned and entrained by the generation, modulation, oscillation, filtering, synthesis, and isolation of frequencies and amplitudes.

In the economy of attention, reality has become tunable. The micropolitics of frequency points toward the waves and particles that abduct consumers immersed in both the transensory and nonsensory soup of vibro- capitalism. The backdrop here is an electromagnetic environment that is saturated by radio and television broadcasting transmissions, police, military, air traffic control and meteorological radar, satellite communications systems, and microwave relay links. To the foreground lies the infrasonic and ultrasonic ecology of hydraulic gurgles, industrial rumbles, the seismology of traffic, a cultural tectonics and the synthetic birdsong of alarms, ring tones, bleeps, indicators, and crowd repellents.

(...)

What a body can hear is a question, not a forgone conclusion, for artists as well as security experts. Because vibrational ecologies traverse the nature- culture continuum, a micropolitics of frequency is always confronted by strange, unpredictable resonances. As Dunne argues, the computer maps that show the propagation of radio waves, for example, and the footprint of their field strength “reveal that hertzian space is not isotropic but has an electro climate defined by wavelength, frequency, and field strength arising from interaction with the natural environment.”¹³ This vortical energetic terrain in the interzone between the artificial and natural environment constitutes the atmospheric front of sonic warfare.” (Goodman, 2009: 187-188)

Note 13: A. Dunne, *Hertzian Tales: Electronic Products, Aesthetic Experience and Critical Design* (Cambridge, Mass.: MIT Press, 2005), p. 102. (Goodman, 2009: 249)

REFERENCES

Chion, Michel. (1994). *Audio-Vision. Sound on Screen*. New York: Columbia University Press.

Chion, Michel. (2016). *Sound: An Acoulogical Treatise*. James A. Steintrager (translator). Durham and London: Duke University Press.

Goodman, Steve. (2009). *Sonic Warfare. Sound, Affect, and the Ecology of Fear*. Cambridge and London: The MIT Press.