Realizing noise – creating space for unknown expressions

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Abstract

This essay considers noisy expressions as potential space providers that defer an anticipatory attitude of classification. It questions how our accustomed aurality prevents us from listening to emergent voices and noises around us. Feminist new materialism is combined with indigenous resonant studies and critical readings of information theories to examine and undo the negentropic exclusion of noise for knowledge production.

Noise causes reverberations not only because of its contribution to information but also due to its unavoidability as an interference pattern. However, congruent to the one-sided interpretation of agency, noise's affectivity has been rendered dismissible within Western modernity. Despite suppression, distortion, or being declared incomprehensible by Western metaphysics, interferences, when considered in its complexity, noise discloses itself as an equally destructive and creative force.

However, by perceiving reverberating interferences as noisy signals, their material affectivity shifts the affordance of response/i/ability. Thus, this essay argues that a re-interpretation of noise fundamentally contributes to widening the frequencies for meaning/mattering urgently needed for the pressing tasks of un/learning.

Keywords

noise, listening, unknowable, unlearning.

Prelude

Commonly, no consideration concerns the pebbles that my feet move with each step. No to little concerns go to the molecules of the body and other matter that are pushed and moved by the in- and exhale of each breath or the ways of a butterfly or snail distorted by my movements. Their expressions may be too familiar or out of the range of human audibility. Nevertheless, noises often accompany these interferences as imminent signals of their existence. Noise can also be visual: torn leaves, plastic in the sea, or the rubble of earthquakes or wars. Despite the negative connotation associated with noise's interfering behavior, namely that it disturbs the status quo, it must be emphasized that interference is unavoidable. Noise as an attendant of an event cannot occur without considering one's movements and ensuing interferences. Interferential noise indicates expressions of contact through affective vibrations. Karen Barad thus demands "to stay in touch with the material-affective dimensions of doing and engaging science" by considering response-ability.[1]

In this speculative essay, noise takes the stance of the signal construed as affective touch, literal or not. It is the carrier of interferences, or their reverberations, generated by sound or light waves transferred into the range of human perceptibility. As sounds in the broadest sense, these signals unsettle, announcing incipient stages of squeaks or visual ruptures. Foremost noise communicates as a disruptive signal by establishing tactile events on a vibrational level of affect for the eye or ear (wavelength) emerging from beyond predetermined (known) boundaries. If the unknowable usually escapes attention, noise, as a warning indicator for the deemed unintelligible, directs toward those signals or calls emerging from a specific setting. As examples from outer space research indicate, noise can call attention to barely audible and decipherable messages.[2]

While the essay takes some recourse to sound studies, it is often only to defy or re-interpret them. This move does not intend to dismiss Western auditory studies fundamentally, but instead, it occurred by diving into the problem of noise combined with attention towards a critical listening positionality (Robinson). Noise, as equally listening, considered within the Western canon of sound studies, come with their respective definitions. While noise is something one hears and is potentially annoyed by, listening entwines certain aspects of understanding. This point is exemplarily discussed around the well-known John Cage work *4'33"*[3] and concisely brought to a point by Greg Hainge that "the recuperation of noise by music necessarily annuls noise".[4] Due to space issues, I leave it by this short detour to this seminal experimental sound work to elaborate that as soon as noise is incorporated within the representational system into the realm of music, it strictly spoken loses its function as an interfering signal. In Cage's case the 'noisy' silence of a performance space, including its audience, becomes a musical work through the durational framing of *4'33",* which is also

[1] Barad, Karen, "On Touching--The Inhuman That Therefore I Am," in *differences* 23 (3), pp. 206–223. DOI: 10.1215/10407391-1892943. (2012), 208.

[2] https://science.nasa.gov/science-news/science-at-nasa/2013/01nov_ismsounds/, https://www.dw.com/en/is-there-noise-in-outer-space/av-57089095 [accessed 31.03.2024]; see also cosmic noise (CMBR).

[3] 4'33" is a piece by the American composer John Cage, which premiered in 1952; https://en.wikipedia.org/wiki/4%E2%80%B233%E2%80%B3 [accessed 31.03.2024].

[4] Hainge, Greg, *Noise matters. Towards an ontology of noise* (New York: Bloomsbury Academic, 2013), 59.

the title of the piece. This is not to say that there is no disturbance in Cage's or other 'noise' music pieces, nor that all music is immediately decipherable in all its expression. However, the musical framing categorizes it. Only noise's persistence, as interference carries the remnant aspects of an outside to the representational and recalls "the artefact of expression itself, that which arises in the in-between of an expression passing between different poles". Importantly, this remnant position marks its engagement as an expression of relationality that escapes semiotically or otherwise coerced meaning.[5]

As this prelude expounds, while touching on acknowledged sound studies, this essay directs its main focus instead towards the problem of sounding and listening otherwise. The problem of noise and its non-relation to the representational is relevant in this regard. It offers an access point to connect to Dylan Robinson's resonant theory for indigenous sound studies and its proposal of a critical listening positionality. As a Western-based methodology, Karen Barad's Agential Realism offers the onto-epistemological possibility of listening beyond the norm. By way of an 'opening slit' (exteriority-within-phenomena) allows to extend the terrain minimally and eventually to probe Robinson's 'guest listening'. However, in the component of practice-based research experiments, our own entwinement with Western epistemology foreshadowed many definitions. In the struggle with emerging questions regarding what is a thing and if all things sound equal lay the realization that systemic redefinition is mandatory. Importantly, staying with noise as a relational expression leads to reassessing information theory's original definition of noise's potential contribution ability. As such, it is critical as a signal of the unknown. From Cecile Malaspina's epistemological redefinition of noise, which argues against strict (negentropic) exclusion but considers the contingency of noise for information, interpretations of noise's ability as a space opener towards unlearning/re-learning emerge.

The ground

My rather earth-bound interest orients toward what is deemed an inaudible signal, frequently neglected by repression or even extinction due to the deliberate affordance of sameness. It is an interrogation of the production and acceptance of (systemic) redundancy, outlining what belongs in the zone of the known/able. The reduction of noisy elements, humming insects, and possibly stinging, similar to

the classification of plants as 'weeds', can subsequently be interpreted as the extension of uniformity. Disregarding these missing or dying noises or voices as signals indicates the loss due to zoonotic overflow and extinction brought by such sameness. In their status as lost experiences these only can been archived as indicative of environmental generational amnesia.[6] Such negative proof, though, prone to fading, is also telling. Read metaphorically, this silence depicts how disregarding ways of knowing/being of differing humans and non-humans enforces immense planetary costs for the unending extension of comfort for some.

Such comfort comes with disorienting information politics caused by continuous media connectivity and rapid technological change,[7] causing again a different sense of noise. In a pre-social media article on noise as a clinical symptom, Sands and Ratey argue that stressful disorientation incites regressive reorganization attempts towards a 'lower' or familiar level.[8] Transferred onto posthuman technological extension-based societies, this proposes a psycho-social structure that reflects a shift of decisive factors. Considering that the depiction of the earth as 'blue marble',[9] brought back by early space travel, diminished almost any assumed outside visually. Such facticity similarly becomes apparent in globalizing efforts and epistemologically in the rise of systems thinking and cybernetics.[10] This development fosters a logic towards a systemic closure and foreclosing what is deemed too noisy. Self-induced noises and interconnections are excluded, while evaluations for an outside or other are subdued to the dominant interpretations. At the same time, any evaluations for an outside or other are subdued to the dominant interpretations. Such comprehension does not depict a new development but requires attention as the inversed interpretation of information entropy into negentropy originates here and facilitates this move. I will elaborate on this later, though, for the moment, the focus is the specification of my methodological framework.

An inclusive part of this framing is also an attentiveness towards retaining the non-huMan (Wynter).[11] It is evident in the dehumanization of women, indigenous people, people of color, refugees, and low-income groups, indicating not only a bifurcated conception of nature/culture but also an epistemologically embossed superiority. To emphasize this split, I use a capital m in the spelling of human, which follows Sylvia Wynter's analysis of the *homo oeconomicus*, which discerns a conception of overrepresentation of the human as (capital m) 'Man' defining itself as "if it were the human itself".[12] This self-imposed understanding installs the frame

[5] Hainge, Greg, *Noise matters.* (2013), 54

[6] Kahn, Peter H. *Technological nature. Adaptation and the future of human life.* (Cambridge, Mass: MIT Press, 2011), 168-171.

[7] see Ai developments (e.g. chatGPT).

[8] Sands, S.; Ratey, J. J., "The concept of noise," in *Psychiatry* 49 (4), pp. 290–297. DOI: 10.1080/00332747.1986.11024329, (1986), 294.

[9] NASA: "Gallery: Blue Marble 50 Years Later" https://epic.gsfc.nasa.gov/galleries/2022/blue_marble [accessed 31.03.2024].

[10] Mendes Flores, Teresa, "The Global Imagination: from "The Blue Marble" Photograph to "Google Earth"." Proceedings of the 4th International Colloquium of EUTIC: Challenges and Uses of Information and

Communication Technologies, Lisbon, CITI- Centro de Investigação para Tecnologias Interactivas, F.C.S.H., 2009, pp. 605- 625.

Teixeira Pinto, Ana "The Whole Earth: In Conversation with Diedrich Diedrichsen and Anselm Francke." In *eflux Journal*, issue #45, 05/2013. https://www.e-flux.com/journal/45/ [accessed 31.03.2024].

[11] Scott, David, "The Re-Enchantment of The Re-Enchantment of Humanism: An Interview with Sylvia Wynter." *Small Axe* 8, pp. 119–207, (2000).

[12] Wynter, Sylvia "Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation--An

for the dehumanization of certain humans, unfitting this scheme and epistemological structure. Rather than the imprecise specification of the West, I prefer the spelling of huMan with capital m to point to this incorporated bias. In continuation, so-called 'natural' sounds and noises (including from huMan-made waste) are also deemed unworthy of being considered voices, and their contributions to the background hum are declared marginal.

Can the 'we' become a thing amongst others and imagine listening and being listened to?

However, basic things considered trash, such as disposable cups and other so-called single-use packaging, contribute to this orchestra of sounds that generates a general (planetary) hum. Even if it is a very high pitch, 'we' could amplify or transfer it into the audible realm. Considering this option demands a listening that scrutinizes 'our' established system of action and thought through its reverberations.

In determining how to explore voices woven into interference patterns, the practice-based research project *reverberating interferences* (2020/2021)[13] got its orientation from a poem by Mary Oliver, where the wild geese's call announces the writer's/reader's place "in the family of things".[14] Nevertheless, addressing "thingification" uncritically from within the Western canon brings up neglected residues.
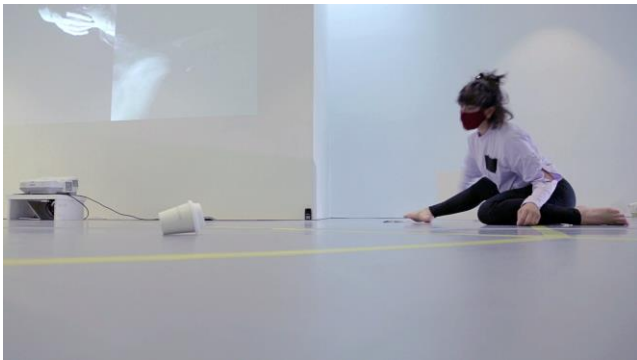

Figure 1. Experimental film project *reverberating interferences – explorations into thingness* (2020/2021), performers: Pepa Ubera and paper cup. © image: monika jaeckel.

The objective in interpreting noise as the expression of marginal voices in an experimental performance work was to extrapolate the position of objectified entities (human and non-human), stressing huMan's inevitable interferences and provoking a change in response-ability. In working with and through willful acts of movement, the performer aimed to dissolve their (huMan's interferences) exclusive status. Their motions simultaneously contributed to the general background of noise, which in return became the sound they acted and danced upon. When noise becomes sound (art), a shift in mattering occurs, and it is generally elevated into the auditory domain of the performative (music or else).[15] However, while the intention was to make the sounds recognizable as orchestrated within the performance context, the outcome did not aim at a purely pleasurable listening experience. The imprint, retained by the not clearly translatable, causes a certain indecipherability of resonance. As a situated experience, the project objected to whether awareness of these sounds can generate a difference in listening and responding toward levels of mutual exchange and accumulation as interdependent interference.

Built on a shifted definition of agency towards a new materialist doing-being (Barad), such exploration aims to conceive via pluriverse and multi-leveled entanglements to break "the delusion of stability, the phantasy of omnipotence" ingrained in Western metaphysics.[16] A deception exemplified by agency's one-sided assignment to certain humans, whose selectively defined exclusivity Sylvia Wynter marked through a capital M in huMan. My attempt for a re-interpretation counters the unsatiable desire for control over ways of knowing resulting from this self-assignment of exceptionality for some. It accentuates noise's co-constitutive role in forming knowledge by diverting from the Cartesian method of "an ideal knowledge without noise".[17]

The sense of the touch in noise

The project's engagement with methodological and conceptual implications of experiences of moving and affectively being moved aims to determine the specificity of situatedness concerning eventual responses caused by and to 'our' interferences. The 'we' and the 'our' in quotation highlight a positionality within a knowledge production predominantly centered on Western metaphysics. These markers accentuate preconceived attitudes and point to the necessity of disruption.

The shifted understanding of agency sought to undermine the steadfast belief in the absolute control over a self's doing as expressed in the episteme of Western metaphysics. An interpretation of movement that emphasizes being moved to moving realizes an embodied mode of being-knowing stirring against the general impulse to view human motion as the sole result of willpower. However, the question is whether and how these interferences could become tangible despite their neglect within Western modernity's episteme.

Argument." In *CR: The New Centennial Review* 3 (3), pp. 257–337. DOI: 10.1353/ncr.2004.0015, (2003), 260.

Wynter, S. (2007). Human being as noun? Or being human as praxis? Towards the autopoietic turn/overturn: A manifesto. https://bcrw.barnard.edu/wp-content/uploads/2015/10/Wynter_TheAutopoeticTurn.pdf [accessed 31.03.2024].

[13] *reverberating interferences – explorations into thingness* (2020/2021), performance project, https://www.aim.mindgap.org/projects/reverberating-interferences-explorations-into-thingness/ [accessed 30.03.2024].

[14] Oliver, Mary, *Dream work* (Boston: Atlantic Monthly Press, 1986).

[15] Hainge, Greg, *Noise matters*. (2013), 53-59.

[16] Braidotti, Rosi, "Afterword." *Angelaki* 17 (2), pp. 169–176. DOI: 10.1080/0969725X.2012.701056, (2012), 174.

[17] Malaspina, Cécile, Brassier, Ray, 2018. *An epistemology of noise* (London: Bloomsbury Academic, 2018), 9-10.

Most verbal expressions of human locomotion neglect the general (inter-)dependency on specific conditions and engagement with so-called objecthood, such as the ground for walking or the street or track for riding a bicycle, car, or train. Moreover, these objections only touch on a level accessible to human visual perception, excluding any wavelength outside most humans' visual and audible range. Understanding the incitement to move that excludes affective inducement ignores what Christopher Watkin labels prepositional thinking in Michel Serres. Due to their procedural attitude, prepositional adjuncts declare "'almost nothing' while they 'affect the destiny of all whom they visit'".[18] Serres' "cybernetic figure of the disruptive, transformative parasite" occurs in a similar vein. Marie Thompson's Spinozist reading and writing combines Serres' approach of the ambiguous parasitic position with Shannon's information theory to provide a "disruption of the definitive correlation of noise, 'unwantedness'"[19] characterizing noise through its instantaneous affectivity.

The essential question for the projects described below was how to transpose the response-ability of other matter(ings) into a perceptible range without being just approached on a metaphorical level. The first performance of this series used amplified extensions that allowed the transference of audible interference patterns on an electromagnetic level. The German-based interface designer Gabriela Guasti Rocha, originally from Brazil, had developed responsive textile pieces (*INTUERI* 2018)[20] as tactile induction transmitters to make electromagnetic waves palpable on the wearer's skin. Modified into an audible version, split the focus of affectivity bi-directionally, integrating to actively affect next to the experience of being affected. Further, the lack of specific selective filters transferred any interference to and with electromagnetic waves in the space, including those caused by the audience and nearby devices. Despite being only one version of a high-sensitivity signal, it depicted the thought of a general situation-based background hum.[21] It thereby further exemplified the unavoidability of causing interferences for others in reacting (like dancers) to those emerging from 'our' matterings of movement. Concurrently, sounds caused by interferences became the score for further movements directed by their feedback momentum. While not an unusual intention for live performances, it aimed to reverberate the attention toward the events (gestures) that caused these irritations (signals/noise).

The following piece, *reverberating interferences – explorations into thingness*,[22] aimed for a more traceable noise/interference transmission for the dancers' and the audience's sake. The signal release causing disturbance incited by gestures/moves should become a more poignant and traceable expression. While planned for a live setting, the pandemic's interference allowed only the performance and recording of a version without audience inter/intra-action.
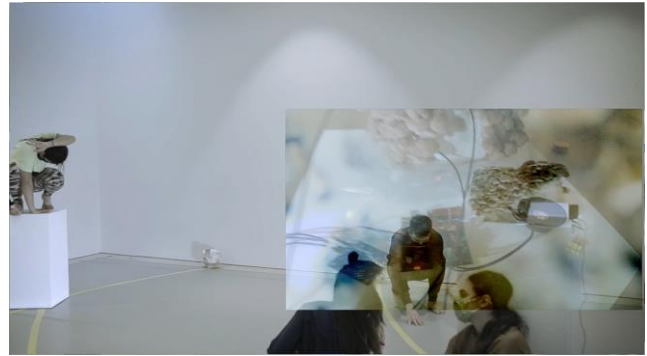

Figure 2. Experimental film project *reverberating interferences – explorations into thingness* (2020/2021), performers: Louiseanne Wong, plinth, mushroom, Giulia Iurza, Paolo Pisarra, Selene Travaglia and mushrooms. © image: monika jaeckel.

Noise as expression of unknowing

The consideration of 'our' situatedness was essential in defining the project. In some ways, it attempted to create what Dylan Robinson's resonant theory for Indigenous Sound Studies describes as a critical potential when approaching listening positionality as an intersection of perceptual habit, ability, and bias.[23] Any awareness respecting a critical listening positionality must include attention to cultural coinage and, in many cases, the inability to value and respect differing attitudes of hearing. Robinson's conception of a critical listening positionality complies with a practice of "guest listening, which treats the act of listening as entering into a sound territory".[24] Such a conscious or open form of listening not only incites a feeling for the transference of the heard but is conscious of the intersections of the temporality and location of the act and event. It contrasts with the indigenous meaning of 'hungry listening', which addresses a devouring auditory habit that omits "awareness of how the consumption acts in relationship with those people, the lands, the waters who provide sustenance". This practice that attempts to move towards an anticolonial impetus "requires that the "fevered" pace of consumption for knowledge resources be placed aside in favor of new temporalities of wonder disoriented from anti-relational and non-situated settler colonial positions of certainty".[25] Such possibilities for a different hearing-reading open up when

[18] Watkin, Christopher, *Michel Serres. Figures of thought.* (Edinburgh: Edinburgh University Press, 2020), 172-173.

[19] Thompson, Marie, *Beyond unwanted sound. Noise, affect and aesthetic moralism* (New York: Bloomsbury Academic, 2017), 42

[20] INTUERI (2018), modified version, https://design.udk-berlin.de/2018/11/gabriela-guasti-rocha/ [accessed 30.03.2024].

[21] Robinson, Dylan, *Hungry listening. Resonant theory for indigenous sound studies* (Minneapolis: University of Minnesota Press, 2020).
Thompson, Marie, *Beyond unwanted sound.*, 4.

[22] See FT 13

[23] Robinson, Dylan, *Hungry listening.,* 2, 37

[24] Ibid.,,53

[25] Ibid., 52-53

established narratives are intervened and eventually broken, releasing so far unacknowledged options.[26]

The explicit background hum that informs these performative experiments and actual theoretical excursions of 'our' listening abilities (including reading) contextualizes them within a Eurocentric educational framework. An evaluation as inaudible fosters an often unconscious, though widely spread and comfortable, habit of suppressing the affective background and provokes a major limitation specific to this positionality.[27] Any attempt to cross into the yet unknown(able) describes a "defenselessness of not knowing yet" that contradicts universalizing attitudes. The writer Emily Ogden defines it as "a capacity to hold the position of not knowing yet", possibly never reaching knowing.[28] A position of opening that creates a gap for or a momentary glimpse upon a different interpretation, i.e., comprehension.

The new materialist thinking of Agential Realism[29] appears appropriate to convene such a position. While excluding a reachable general' outside position' Barad's theory offers openings for different moments of knowing attainable through exteriority-within-phenomena. Such ensuring situatedness administers new or additional knowledge only as referenceable via intra-actions. This situatedness ensures that new or additional knowledge only can be referenced via intra-actions. This movement of thought and knowing picks on Haraway's idea of pushing the boundaries from within, supporting the intention to learn from other knowledges rather than subduing them to the dominant episteme. The approach entails reworking current thinking methods by addressing their epistemic foundations through an un/learning of the known towards making space for different insights and narratives. In this perspective, experimental performances that reveal 'failures' or, better, flaws in 'our' thinking (as ours did) transmit a compelling message since they force 'us' to become aware of as-yet unfathomable unknowns. In this case, our non-reflected idea of thingification, which disregards our complicit situatedness within Western metaphysics, laid bare its snares. It became apparent that the directive to view 'us' as a thing amongst other non-human items, without paying attention to the historical as well as ongoing colonization of nature and other humans,[30] attempts to decenter, however, disregards huMan ascribed levels of capacity.

This failure ensues due to a willful flattening of ontology that adjusts the call to "our" place among things to Westernized interpretations. Thereby again actuating the systemic neglection that coercion of an excluded majority to constitute this thingy background, which in a doom loop establishes the exceptionalist zone of the 'West'. Again, it is a universalizing interpretation that deflects from the violence of its listening attitude. Contrast it with Viveiros de Castro's description of an indigenous worldview "of immanent humanity, where the primordial assumes a human form". This view interprets the human not as an idealizing form but rather radically opposes the episteme that constructs the huMan as outside of the primordial bifurcated as nature.[31] The persistent anthropocentric effort in Western philosophies insists on excluding the huMan from the background hum, while it renders anything it dehumanizes ('thingifies') inaudible.

Noise, guarding and invading the knowable (comfort) zone

Considering that huMan actions such as clear-cutting or mining also belong to the widely inaudible noise, how exactly is the background hum rendered inaudible? A point that gives way to the more specific inquiry, 'What is the meaning of being assigned noisy'? Deafness due to redundancy omits perceptible noises that are manifestations of the hum of daily consciousness, seen as belonging and imperceptible through socio-cultural coinage. However, classifying audibles as noise by exceeding the normative threshold also leads to blanking out sounds.

Such multiple layering leads to Martin Daughtry's appliance of the palimpsest in sound studies attempting "to situate music listening within the sonorous matrix that accompanies and complicates it, and to take this matrix seriously as a rich cultural artifact in its own right". His intention to blur "the line between the musical object and the sonorous world" to allow in "the cacophony of the world [...] and to place the politics of navigating through this complex and noisy world at the center of discussions of listening"[32] provides a step toward listening differently.

Despite the limitations like historical unidirectionality, the obscuring of listening's radical situatedness, and its hyperliterate Western impetus, Daughtry's metaphorical appliance aims "to think of audible phenomena as complexly layered and to imagine the traces of human activities that have been silenced." This imposed noiselessness becomes imagined "as faint but legible presences rather than nonentities".[33] However, the implied omnidirectional conception considers a "privileged vantage point from which all sounds can be heard",[34] revealing its origins in the "antirelational

[26] Eyal Weizman at the conference *Die Zivilisationsfrage: Day 1* in the talk "Material Histories: Evidence Against the Standard Narrative" at the HKW, Berlin, 27.05.2022; https://hkw.de/en/programm/projekte/veranstaltung/p_188723.php [accessed 30.03.2024].

[27] Thompson, Marie, *Beyond unwanted sound.*, 4

[28] Ogden, Emily, *On not knowing. How to love and other essays,* (Chicago: The University of Chicago Press, 2022), 6.

[29] Barad, Karen, *Meeting the universe halfway. Quantum physics and the entanglement of matter and meaning*, (Durham, NC: Duke University Press, 2007).

[30] Césaire, Aimé; Kelley, Robin D. G, *Discourse on colonialism,* (New York: Monthly Review Press, 2001).

Scott, David, "The Re-Enchantment of The Re-Enchantment of Humanism: An Interview with Svlvia Wynter.", 119–207.

[31] Castro, Eduardo Batalha Viveiros de, *Cannibal metaphysics. For a post-structural anthropology.* With assistance of Peter Skafish, (Minneapolis, MN: Univocal, 2014), 62-63.

[32] Daughtry, J. Martin, "Acoustic Palimpsests and the Politics of Listening," in *Music and Politics* VII (1). DOI: 10.3998/mp.9460447.0007.101, (2014), 10-11

[33] Ibid., 28-29.

[34] Ibid., 29.

and nonsituated settler colonial positions of certainty".[35] Nevertheless, Daughtry attempts to think through specific barriers by tracing the "ghosts of the manuscript" to excavate "aural traces of history: echoes, whispers, and voices". Such lingering, ghostly noises "may productively haunt" listening as "a decolonial practice of critical listening positionality [that] actively seeks out (or allows itself) to become haunted".[36] When asserting that "[e]very concept is haunted by its mutually constituted excluded other," Barad references Derrida's remark about the necessity of speaking to ghosts "in the name of justice".[37] Barad thereby introduces a thinking that orients itself along Niels Bohr's concept of complementarity[38] and exceeds linear conceptions of space and time.

Expanding 'our' understanding of temporality toward a multi-directionality, Barad demarcates distinctive historical markers encompassing each other as relational occurrences. In her example, it is the beginning of European colonization, reoccurring or even enhanced by the horrific (atomic) explosion of technological fantasies: "1492 as […] inside 1945, for example, and even vice versa?".[39] This insight entrenches positionality as situated multi-directionality aside of space also in time and demands to dismiss temporalities rooted in antirelational and nonsituated positions of colonial certainty.[40] It thereby postulates to acknowledge the background hum of each positionality in its radically differing multi-linearity, appearing in accordance with the complex layering of a specific position.

A voice, eventually indistinct, but of own means

Through realizing intra-active mattering, Agential Realism provides a tool to acknowledge matter's "ongoing hauntological transformation" as inscribed in colonizing and terraforming projects of Western modernity and in the human and non-human bodies impacted by these.[41] Nevertheless, the divide between nature as mute and eloquent culture is within this framework and its more recent posthumanist thinking, one fundamentally entangled and further intersected by technological means. Noises such as scorched earth, eroded hills, plastic islands, and the push of specific humans and non-humans towards extinction could be realized as perceptible/audible rather than being argued as side effects extruded by the efforts of sameness (globalization). However, extending the 'ordinary' background hum demands a framework of knowledge production beyond the subsumption of experiences within specific acknowledged categorizations. That means an acknowledgment of 'non-belonging' disturbances rather than extrapolating them to the intolerable of disorder, thus into the impossibility of a definable expression. A

"'meaningful' expression becoming such only by contracting noise into a form that no longer seems noisy. When we attend to the noise of expression, such delusions are dispelled and the apparent matter of factness of existence fades away, matter itself being unveiled as expressive".[42]

While these aspects demarcate the subsumption as noise not as a given trait but as a normative category,[43] Cécile Malaspina states that, as a rule, "beyond the reference to unwanted sound, [noise] reveals itself to be conceptually polymorphous". Rather than providing a framework to classify or evaluate "phenomena that qualify noise as a particular type of disturbance," the assessment of something as noisy is "about the relation between contingency and control".[44] For Malaspina, thus, the parasitic element noise is referenced as being "associated with the absence of order, of work or of the norm – be it the statistical, moral or aesthetic norm". At worst, noise may be "identified as a threat to the norm and subversive of work and order".[45] Slipping "between different disciplinary fields: it carries through the walls that separate science, acoustics, economics, politics, art, information theory and law"[46] and permeates all substance.[47]

Marie Thompson's re-access of Shannon and Weaver's information theories brings forward their counterintuitive designation of noise as "an inextricable component of not just communication systems but also material relations more generally".[48] Thompson's transdisciplinary-oriented approach, developed in the broader frame of sound studies, argues against stigmatizing noise and for an affective relationality. Taking recourse to influential redefinitions in cybernetics, it is primarily Malaspina's epistemological re-evaluation across various fields that problematizes noise as "polyvalent and polymorphous".[49] Her interest focuses less on "the knowledge of diverse phenomena understood as noise, but with the idea of noise in the relation between the known, the unknown and the differently known".[50]

The sense of mastery in information theories vs the virtue of unpredictability

The classical information theories by Shannon and Weaver focus on correcting deviation to increase and ensure the reliability of an initially transmitted message. Both

[35] Robinson, Dylan, *Hungry listening.,* 53.

[36] Ibid., 62

[37] Derrida, Jacques, *Specters of Marx: The State of the Debt, the Work of Mourning, & the New International,* (Kamuf, New York: Routledge, 1994), xix.

[38] Barad, Karen, "Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice-to-Come," in *Derrida Today* 3 (2): 240–68. https://doi.org/10.3366/E1754850010000813, (2010), 253.

[39] Barad, Karen, "Troubling time/s and ecologies of nothingness: re-turning, re-membering, and facing the incalculable." *New Formations* 92 (92), pp. 56–86. DOI: 10.3898/NEWF:92.05.2017, (2017), 57.

[40] Robinson, Dylan, *Hungry listening.,* 54.

[41] Barad, Karen, "Quantum Entanglements and Hauntological Relations of Inheritance:" 298.
Robinson, Dylan, *Hungry listening.,* 54.

[42] Hainge, Greg, *Noise matters.,* 18.

[43] Malaspina, Cécile, Brassier, Ray, 2018. *An epistemology of noise*, xi.

[44] Ibid., 203.

[45] Ibid., 3.

[46] Thompson, Marie, *Beyond unwanted sound.*, 1

[47] Hainge, Greg, *Noise matters.*, 12.

[48] Thompson, Marie, *Beyond unwanted sound.*, 57.

[49] Malaspina, Cécile, Brassier, Ray, 2018. *An epistemology of noise*, 9.

[50] Ibid., 11.

researchers worked at the time of the publication of their respective theories for telephone companies, which explains that their investigations were oriented towards reliability rather than exploring the variations inherent to the transference process. Nevertheless, both acknowledged noise's contribution to the 'readability' and generative potential of the alleged signal, although the value of information is commonly associated with a reduction of noise-induced uncertainty.[51]

The desire "to have mastery over noise", though not for communication efficiency but for aesthetic reasons,[52] also coerced the initial interest in the "uncontainable complexity" of noise, the masculinist, "proto-fascist" Futurist movement had shown at the beginning of the 20th century, by the appliance of a "strict taxonomic categorization".[53] Indicating the modernist impetus of control the contained noisiness with which the Futurist movement embraced "triumphalist modernism" designated "an underlying insecurity or fear in front of such radical breaks, changes and new modes of production" rather than an enthusiasm of noise's "ability to evoke or bring into being the mysterious and unknown".[54]

Katherine Hayles detects a conservative bias in Shannon's "distinction between signal and noise"[55] due to a rigorous setting that excluded any remainder "of the received message [as] the 'not' signal or noise".[56] Yet, the enforcement of a dichotomous set of consistent in- and exclusions, rigorously accounting or negating, aims for a static – once and for all – situation. Such distinct discretion contradicts generative and developmental systemic insights that Malaspina stresses as essential distinctions "between information and noise [as] always a process in the making". She argues for a definition of noise "*outside* the channel of communication" by rethinking the information transfer process as fundamentally intertwined with uncertainty, as expressed in Shannon's indication of information entropy.[57]

From a systemic perspective, noise might diminish the functioning of a system while simultaneously being an irrefutable element, adding new and unpredictable information. This "co-constitutive role of noise in the formation of knowledge" is the focus of Malaspina's conceptual reworking of noise's epistemic basis.[58] It is the generative ability enforced by the omnipresent and unavoidable interference (noise) that causes unpredictable events, coercing "systems to reorganize with greater complexity and variety, increasing their capacity to act".[59] While the generative impulse of noise for the emergence of "a new system is more complex than the simple chain",[60] such occurrence is still conceived

in strict linear directions distinguished only between excessive information and redundancy's monotony. However, the binary containment of noises' characteristics produces a "curious reversibility",[61] with both ends terminating unreadability, indicating that certain bits "of unpredictability and hence uncertainty" must be allowed to spread throughout information/exchange transmission. A point that does not propagate a general disorder but what Shannon calls 'information entropy' or Weaver's 'freedom of choice'. It is noise's contribution to an opening for "an unthinkable" variety to choose from.[62]

Malaspina's contribution adds the insight that the binary sorting criticized by Hayles is, in fact, the neglect of the free-floating 'loss' that denotes opportunities of choice "relative to the unpredictability of a message".[63] While Shannon's term of information entropy does not indicate a "conceptual opposition between information and noise", the threat of disorder allowed the neologism of negentropy to be imposed "as the negation of entropy, and more generally as the negation of disorder, meaning negation of everything contingent or unpredictable". This definition has been mainly applied across the natural and human sciences by the prevalent embracement of Norbert Wiener's "cybernetic theory of self-regulating systems with feedback", which conceptualized the value of entropy in information transference as a "measure of unwanted variability, imprecision or error – in any case, a value to be eliminated for the sake of efficiency and certainty: entropy henceforth becomes synonymous with noise".[64] Thus, in cybernetic terms, "any system, can be put [...] as a set of organized constraints on contingency, in other words, as the organized negation of noise".[65]

Noise erasing/breaking a narrative to create space for different versions

The project idea of giving 'a voice to objects' by equipping them and the performers equally with sensors capable of transferring the unpredictable interference noise of intra-active affectivity raised several epistemic issues rooted in the Western metaphysical matrix.[66] One is the assignment of different agency levels within the Western episteme, which on a huMan level are addressed by Frank Wilderson's concept of capability. Even though Wilderson developed his definition of capacity in the North American context, it provides relevant umbrage for producing dominant epistemes

[51] Thompson, Marie, *Beyond unwanted sound.*, 51, 56.
Malaspina, Cécile, Brassier, Ray, 2018. *An epistemology of noise*, 23.
[52] Thompson, Marie, *Beyond unwanted sound.*, 55
[53] Hainge, Greg, *Noise matters.*, 49.
[54] Ibid., 51.
[55] Hayles, Katherine, *How we became posthuman. Virtual bodies in cybernetics, literature, and informatics (*Chicago, Ill., London: University of Chicago Press, 1999), 63.
Thompson, Marie, *Beyond unwanted sound.*, 56
[56] Hayles, Katherine, *How we became posthuman.*, 63
[57] Malaspina, Cécile, Brassier, Ray, 2018. *An epistemology of noise*, 25-26 (italics in original).
[58] Ibid., 9.

[59] Thompson, Marie, *Beyond unwanted sound.*, 56.
[60] Serres, Michel; Latour, Bruno, *Conversations on science, culture, and time* (Ann Arbor: University of Michigan Press, 1995), 14.
[61] Malaspina, Cécile, Brassier, Ray, 2018. *An epistemology of noise*, 2
[62] Ibid., 4, 12.
[63] Ibid., 4.
see also: Thompson, Marie, *Beyond unwanted sound.* 51.
[64] Malaspina, Cécile, Brassier, Ray, 2018. *An epistemology of noise*, 4.
[65] Ibid., 4.
[66] Jackson, Zakiyyah Iman, "Outer Worlds. The Persistence of Race in Movement "Beyond the Human."" *GLQ: A Journal of Lesbian and Gay Studies* 21 (2-3), pp. 215–218, (2015), 216.

relating back to the Eurocentric framework.[67] Wilderson's concept of capacity exposes how other cultures are assigned specificities and then demarcated as de-, in-, or non-human realms. Through the double-bind assignment of subaltern and exalted, these definitions provoke a particular connection for othering through noisiness yet causing a specific deafness in those within the audible realm rather than possible entangled responses. Thereby, listening refutes the reflective abilities regarding one's ways of listening and "how this bounces back from the other".[68]

By neglecting the undecipherable (noise), these 'settled states' consistently block the occurrence of knowledge that pushes or shifts established boundaries. This point marks why, in the context of this project, the continuance of noisiness is essential while its subjugation within a knowledge system, like in Cage's case, into the musical tonality eventually erases the specificity of its expression. As traced by Malaspina, acknowledging the generative abilities of noise is essential for any transformational event that results from an unconditional acceptance of "the irreconcilable tension between the destruction and generation of form. This judgment, constituting cognition against the backdrop of its dissolution, is a function of the noise that enables the process of thought".[69] The term "settled state" holds not only the meaning of an imposed settler status still active on indigenous peoples as Dylan Robinson's resonant theory for indigenous sound studies described for today's Canada. It also suggests the dominant state of perceiving and thus knowing as the colonization of knowledge production, which ignores unsettling regional specificities.

Robinson's approach predicates a critical listening positionality that intersects with new materialism's emphasis on situatedness. As he further stresses, assumed voicings of other matter(ings) have "long been a quotidian fact of Indigenous lives and epistemologies".[70] To avoid strategies of appropriation through the dominant episteme, reworking (my) cultural coinage, as suggested by new materialisms, is of absolute relevance. While firmly located within the discourse of Western science due to its roots in physics, Agential Realism offers an engagement on the level of mutual affectivity in and through intra-action. Adding opacity, as phenomena only are accessible through a situated exteriority-within, new materialism undermines the ungraspable transparency of Western modernity's metaphysics. It provides a feasible option of intertwining different forms of knowing when positioned within the dominant system.

In her comprehensive redefinition of the epistemology of noise, Malaspina emphasizes, that any lost, noisy remnants demonstrate that "what we consider to be information must be carved out from noise".[71] Originating primarily from aspects of systemic impact, her exploration of Shannon's term 'information entropy' defines noise as a "state of indecision and confusion", thereby recalling that "information and knowledge are temporary" and never fixed for all solutions. As a reminder of "lived ambiguity, indecision and error," noise evokes the state of the unknown.[72]

Noise announcing the unknown

Critical listening positionality proposes the practice of guest listening, comparable to entering unknown territory, which brings listening to the vulnerable level, focusing on the affectivity of the sonic.[73] In order to accept voices and noises considered messy and unclear, it suggests suspending the "belief in the certainty of knowing what the act of listening is".[74] The problem with noise is the acceptance of unpredictability, the reach for something beyond the conceptualization of accepted knowledge. While partially leaving the structure of current understandings, the demand is also to partially remain close to known boundaries to keep an ability to address them. Regarding transdisciplinarity, Malaspina suggests the allowance of a "conceptual resonance" in the sustenance of noise between fields of knowledge.[75] To cross between differing ways of knowing, Robinson also argues that listening should be reworked towards non-judgmental affectivity, possibly extending towards noise as a 'clearing spaceholder'. The allowance for epistemological wrappings to be scratched intra-actively could enable opportunities to create listening abilities for and between trans-species and inter-world listening skills. The emphasis on guest listening in Robinson's concept crucially promotes recognizing that one is responding on the occasion of an invitation. Yet, parameters can be misunderstood and parasitically crunched on, thereby affecting an entire system. However, a system of interdependency may also unintentionally generate feedback as the "strategic margin of ambiguity" required for "the paradigmatic fluctuation that animates the circulation of concepts".[76]

[67] "Whiteness is parasitic because it monumentalizes its subjective capacity, its lush cartography, in direct proportion to the wasteland of Black incapacity. By "capacity" I have meant something more comprehensive than "the event" and its causal elements and something more indeterminate than "agency." We should think of it as a kind of facility or matrix through which possibility itself—whether tragic or triumphant—can be elaborated [..] It is a far cry [...] from pure abject- or objectness: without thought, without agency, "with no capacity to move." In short, White (Human) capacity, in advance of the event of discrimination or oppression, is parasitic on Black incapacity: Without the Negro, capacity itself is incoherent, uncertain at best." Cited from: Wilderson, Frank B., *Red, white & black. Cinema and the structure of US antagonisms* (Durham, NC: Duke University Press, 2010), 45.

[68] Kodwo Eshun, Interview for Mediatec, [online video], 1999, no longer available, sound file via https://contemporaryand.com/magazines/collective-practices-a-sonic-essay/ [accessed 30.03.2024].

[69] Malaspina, Cécile, Brassier, Ray, 2018. *An epistemology of noise*, xii-xiii.

[70] Robinson, Dylan, *Hungry listening.,* 79.

[71] Malaspina, Cécile, Brassier, Ray, 2018. *An epistemology of noise*, 110.

[72] Ibid., 168.

[73] Robinson, Dylan, *Hungry listening.,* 53.

[74] Ibid., 72.

[75] Malaspina, Cécile, "The Noise Paradigm." In Michael Goddard, Benjamin Halligan, Paul Hegarty (Eds.): *Reverberations. The philosophy, aesthetics and politics of noise* (London: Continuum Intl Pub Group, pp. 40–57, 2012), 71.

[76] Ibid., 71.

Transferring information theory's insight that the acceptance of noise can reinvent space for un- and possible re-learnings as the epistemological analysis of a singled-out phenomenon in terms of a wider onto-epistemological frame may appear risky. However, the move provokes crucial aspects that reverberate throughout the systemic, to realize

"a crisis for listening's settled state
to become uncertain of what listening is".[77]

Listening for Robinson attends "not just to sound but to the fullest range of sensory experience that connects [an indigenous person] to place".[78] In attempting to listen to (read) his resonant sound theory, I discovered a sense of relationality in which his critical listening positionality resonates in the effort to undo noise's negative connotations. Even though Cage may have attempted something similar, in contrast to Robinson, his move was one of integration rather than guest-visiting the unheard. The experience of being invited to an unfamiliar sonic territory, in which not everything is immediately comprehensible and classifiable, has the potential to influence alternative modes of thought.

Conclusion: vibrating - noise is a process

Noise indicates a shifting condition, not permanence. Combined with Nancy's differentiation of listening from hearing, possible meanings are "not immediately accessible".[79] In certain accordance with Robinson, Michel Chion realizes that "reduced listening requires the fixing of sounds". Even if this provides a rationale for tuning sounds in musical instruments, it diminishes the sense of "process, of movement, change, and complexity" typically inherent to noise. However, thinking, as in Chion's case, "of sound as an event rather than an object," the figure of vibration introduces material mattering.

"Vibration, figuratively and literally, fluctuates between particle and wave, object and event, being and becoming. Defying representation, it also gestures toward the immersive, undifferentiated, multiplicitous associations that aurality provokes".[80]

The maintenance of undefined noise's aurality is countered by a desire for something to cling to. The foreclosure to strangeness in the orchestra of sounds 'we' produce reverberates throughout the one-sided definitions of agency in the interpretation of Western modernity. While factually, any

movement unavoidably causes interference, mutual affectivity-inducing reverberations of vibrational interferences are often neglected. In filtering out 'information', i.e., accessible knowledge, these other vibrational signals of 'being listened to' become sediments of 'information entropy'. Regarding noise as potential information loss, rather than being excluded as unnecessary for negentropic concerns, it necessitates a different listening and response-ability. Despite being discounted as minor (noisy) signals (whether audible, visual, or otherwise), these reverberating interferences, tuning into the backgrounding soundscape, provide responsive voicings of material-discursive engagement. Matter not only speaks in this way but also haunts us through sedimenting murmur, expressed as decline, expulsion, or extinction (a.o.) across time.[81]

Interpretations of one-sided actions or non-entanglement thus can be argued to be based on 'settled' principles. These assumptions are also transferred onto posthuman compositions that technologically combine nature-cultures, often confounding information with data thought to be neutral. Due to amplifying processes, data is interspersed with information bits, transferring too noisy bits into the channel of the indecipherable. The distinction between "the contingency of both 'information entropy' and noise, [are] drawn solely by the intention with which a certain 'entropy of information' is chosen and transmitted as a message, against the backdrop of an accidental entropy that is discarded as noise".[82]

Dylan Robinson's critical listening positionality adds a point of access for extended sense-making, providing an orientation for approaching the unresolved or unclear and regarded as marginal. Shifts in the notion of listening and noise promote these reverberating interferences as affordances soliciting response/i/ability in their affective resonance. Assuming uncertainty "of what listening is" circumvents the closures prompted by an overflow of similarity (redundancy) already indicating pressing tasks of un/learning emerging. Reevaluating the role of noise emanating from the phenomena of current developments as caused by "our" noises contributes essentially to expanding the spectrum of the perceivable frequencies of meaning/matter regarding interfering reverberations.

[77] Robinson, Dylan, *Hungry listening.,* 109.
[78] Ibid., 72.
[79] Nancy, Jean-Luc, and Charlotte Mandell, *Listening* (New York: Fordham University Press, 2007), 6.
[80] Dyson, Frances, *Sounding new media. Immersion and embodiment in the arts and culture* (Berkeley: University of California Press, 2009), 10.

[81] Barad, Karen, "Troubling time/s and ecologies of nothingness: re-turning, re-membering, and facing the incalculable," 64.
Robinson, Dylan, *Hungry listening.,* 54.
[82] Malaspina, Cécile, Brassier, Ray, 2018. *An epistemology of noise*, 198.

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