Silence: The Power of Quiet in a World Full of Noise
Thich Nhat Hanh
2015

"There is beauty calling to us every day, every hour, but we are rarely in a position to listen. The basic condition for us to be able to hear the call of beauty and respond to it is silence…silence in ourselves" (3)

"There's a radio playing in our head…Our mind is filled with noise…" (3)

"We don't have time to listen to our heart." (4)

"Anxiety, fear, and uncertainty about future events prevent us from hearing…" (4)

"Mindfulness is often described as a bell that reminds us to stop and *silently listen*. We can use an actual bell or any other cue that helps us remember not to be carried away by noise around and inside us… When we hear the bell, we stop… making space for silence…The noise within just disappears and there is a profound spaciousness – it's very powerful, very eloquent." (4-5)

"We don't have the freedom that allows us to hear…" (5)

"[w]e practice a kind of silence called noble silence…We aren't doing [these] things and also talking…we are free to hear the deepest call of our hearts." (6) (interrelationality, talking about seated meditation in a group)

"I sat and practiced mindful breathing to establish silence in myself." (6) (agency over silence)

"There was silence. But I felt that silence was not as deep as it could have been, perhaps because people had been distracted...Right after the first sound of the bell of mindfulness, the silence felt quite different. It was real silence, because everyone had stopped thinking." (7)

"[O]ur collective silence generated a strong field of energy. Silence like this can be called thundering silence, because it's eloquent and powerful…I could hear…so much more vividly. Before that, I'd heard the birds and the wind, but not in the same way, because I didn't have the deepest kind of silence. Practicing silence to empty all kinds of noise within you is not a difficult practice." (7)

"With that kind of silence you are more capable of healing yourself…" (8)

"Silence is often described as the absence of sound, yet it's also a very powerful sound...I was staying at a hut near a stony creek, and there was always the sound of water falling…Wherever I was, I heard that sound of water falling. Day and night, I heard the same sound. I looked at

the bushes and trees around and thought, 'Since their birth they have heard this sound. Suppose this sound stopped and for the first time they heard the no-sound–silence.' Just imagine that, if you can…Think how surprised they would be to hear, for the first time in their lives, the sound of no sound." (9)

"Avalokiteshvara, the Bodhisattva of Deep Listening…can [also] utter five different kinds of sounds that can heal the world…The second sound is the Sound of the One Who Observes the World. This is the sound of listening, the sound of silence." (10) (silence has a sound, it is the sound of listening, the sound of observation of sound)

"God is a sound. The creator of the cosmos is a sound. Everything begins with the sound." (10) (good opening quote?)
that against which we hear = god? everything?
silence is that against which we hear
silence is absence
silence itself is a sound
silence is the sound of listening, the sound of observation, evidence of observation taking place, the necessary condition for observation

"If a teaching is too complicated, it's not the sound of the Buddha. If what you're hearing is too loud, too noisy, or convoluted, it's not the voice of the Buddha." (12)

"Every one of us has an ultimate concern that has nothing to do with material or affective concerns. What do we want to do with our life? That is the question. We are here, but *why* are we here?...[W]ith mindfulness, you can hear [these questions'] response yourself, when you have some silence within." (14) (silence as a way to see through affect to something beneath it – the untouchable? the self? the response to the ultimate question)

"Mindfulness gives you the inner space and quietness that allow you to look deeply" (15) (intersensoriality)

"All the wonders of life are already here. They're calling you. If you can listen to them, you will be able to stop running. What you need, what we all need, is silence. Stop the noise in your mind in order for the wondrous sounds of life to be heard." (17) (noise as opposition to silence, noise as presence, but a specific kind?)

The Structure of Scientific Revolutions
Thomas S. Kuhn
1962

Eisenlohr ch. 5, talking about quantitative measurement / formal analysis:
"sonic movements can be brought to light though such formal analysis in ways that are

not possible through discursive means."

"Also, as I hope to make clear in the remainder of the book, such formal analysis of sonic events by no means sidelines what my interlocutors told me about the sonic aspects of na't recitals. I do not include the spectrographic and waveform diagrams and my discussion of them in order to establish a scientific "truth" about sound that competes with what my interlocutors told me about the sonic dimensions of a na't khwan's voice. On the contrary, such formal analysis complements and builds on my interlocutors' insistence on the transformative and literally "moving" aspects of sonic experiences. As a trained linguistic anthropologist, I take a cue from that subdiscipline; linguistic anthropologists engage in grammatical and other formal analysis of languages used by their interlocutors in the field, even if the latter are not fully aware of such categories and cannot fully verbalize their uses of them, however consequential they may be. Of course, instances of such grammatical analysis can be found in chapter 4. Certainly, the purpose of such an analysis is by no means to render what my interlocutors said less important, but to complement it. In similar ways, a formal analysis of sonic events does not render what my interlocutors told me less relevant but, instead, emerges from the ethnography. When some of my interlocutors said that the sound of a performer's voice carries them away to another place, or that listening to such a voice is like getting on a bus that takes one elsewhere, the striking congruence between such descriptions of sonic effects and neophenomenological approaches to atmospheres points to the necessity of a closer engagement with sonic dynamics, including formal analysis, to get at what such sonic suggestions of movement consist of. No single approach to the sonic, whether discursive or the formal analysis of sonic events, is sufficient in itself."
Goes on to describe reverb scientifically in order to explain how humans experience it. Also explains how you can observe timbre on a spectrogram and that helps explain the terminology used by her practitioners.

Berger *Stance* ch. 1 p. 11 (pdf) "[O]ur constant need to balance in the earth's gravitational field and our negotiation with physical objects are the fundamental, preconceptual bodily processes that allow the physical world to present itself to us…the time-scale of the tempo, the very notion of harmonic and melodic interval, and the stric- tures of overtone, timbre, sonority, and blend all emerge, not from a realm of free-floating imagination, but from an imagination rooted in a body that interacts with a sonic world."

Berger *Stance* ch. 2 p. 9 (pdf) "Exploring the multifacetedness of our engagement with the world leads to a related issue: the multifacetedness of the things in the world themselves."

What's Our Problem, definition of scientific perspective

Kapchan from Berger p. 4 (pdf) “the intersubjective and empirical world.”

Kapchan from Berger p. 6 (pdf) “ mediated images at a distance produce an embodied and ethical response. This is a post-phenomenological position [Judith Butler’s], one that takes account of the role of technology in perception.”

Kapchan from Berger p. 8 (pdf) “When I think of my body and ask what it does to deserve that name,” notes theorist Brian Massumi, “two things stand out. It moves. It feels.” (re: cogito ergo sum)

Kapchan from Berger p. 8 (pdf) “Every oscillation is in fact a vibration, and every vibration has a sound, however inaudible to the human ear. What we cannot hear, we can feel or intuit.”

Kapchan from Berger p. 11 (pdf) “Human experience does not begin and end at the visual parameters of the body, but is intermeshed and continuous with other bodies, technologies, and environments. This idea is not anti- humanist but is post-humanist.”

Kapchan from Berger p. 12 (pdf) “subjectivity is, in the words of Anahid Kassabian (2013), always “distributed” across bodies with different cultural histories and intentions. Bodies are enfolded in the flesh of the world.”

Kapchan from Berger p. 12 (pdf) “When we leave the ve senses, and include intuition (the sixth sense according to Henri Bergson), what happens to phenomenological description? Are we in another realm (fantasy? science?) or is there a way of maintaining a sensate ground in the more-than-human realm of affect?”

Kapchan from Berger p. 12 (pdf) “Both phenomenology and affect theory examine the fundamental entwinement of person and world. (This is why the epoché, the phenomenological reduction, is so important: it is the method by which the world is known.)”

Kapchan from Berger p. 14 (pdf) “The world is what I perceive, but as soon as we examine and express its absolute proximity, it also becomes, inexplicably, irremediable distance.” (Merleau-Ponty)

Kapchan from Berger p. 14 (pdf) “a relation of the visible with itself that traverses me and constitutes me as a seer, this circle which I do not form, which forms me, this coiling over of the visible upon the visible…” (Merleau-Ponty)

Kapchan from Berger p. 15 (pdf) “if we expand concepts of the body to include what I call the sound body—“a body able to transform by resonating at different frequencies” (Kapchan 2015)— then perception and intuition also expand to include a larger eld of phenomena.”

Stanford Encyclopedia of Philosophy, "Descartes' Epistemology"

"'I began by taking everything that was doubtful and throwing it out, like sand…' The theory whereby items of knowledge are best organized on an analogy to architecture traces back to ancient Greek thought…Descartes views Aristotle's foundationalist principles as incomplete, at least when applied to metaphysical inquiry. His method of doubt is intended to complement foundationalism. The two methods are supposed to work in cooperation…" (on skepticism)

"The central insight of foundationalism is to organize knowledge in the manner of a well-structured, architectural edifice. Such an edifice owes its structural integrity to two kinds of features: a firm foundation and a superstructure of support beams firmly anchored to the foundation. A system of justified beliefs might be organized by two analogous features: a foundation of unshakable first principles, and a superstructure of further propositions anchored to the foundation via unshakable inference."

"'[T]he primary notions which are presupposed for the demonstration of geometrical truths are readily accepted by anyone, since they accord with the use of our senses...In metaphysics by contrast there is nothing which causes so much effort as making our perception of the primary notions clear and distinct…[T]hey conflict with many preconceived opinions derived from the senses which we have got into the habit of holding' … These "preconceived opinions" must be "set aside," says Descartes, "in order to lay the first foundations of philosophy" (May 1643 letter to Voetius, AT 8b:37, CSMK 221). Otherwise, we're apt to regard, as first principles, the mistaken (though prima facie obvious) sensory claims that particularists find attractive."

- so Descartes argues that metaphysical first principles cannot be derived from the senses, which yield preconceived opinions that may be mistaken or too narrow to be foundational

"As the canonical formulation has it, I think therefore I am (Latin: cogito ergo sum; French: je pense, donc je suis) – a formulation that does not expressly appear in the Meditations…The most significant ongoing debate concerns whether Descartes intends the cogito to be an intuition (i.e., roughly, self-evident), or instead an inference."

- in this context, an intuition is….what? an experience (my assertion), vs. an inference (deduced with abstract logic)

"the transition from I think to I exist is non-logical – indeed, the statement that "I do not exist" is not logically incoherent." (Hintikka's analysis, pro-intuition)

"'I must finally conclude that this proposition, *I am, I exist*, is necessarily true whenever it is put forward by me or conceived in my mind.'" (Second Meditations)

- he was attempting to be skeptical in an orderly way

Max Planck Institute for the History of Science, "Inventing the Decibel: An Episode in the History of Sonic Thinking"

"In late 1920s New York, telephone engineers publicly measured city noise using equipment from mass hearing tests, and named the results as percentages of hearing loss. This is the context in which noise was first systematically quantified in terms of loudness and the unit of the decibel was developed."

"The Genealogy and Efficacy of the Decibel"
"...the noise intensity is fifty-five sensation units above quiet"

The Culture We Deserve
p. 109 "This threefold division – science, social science, humanities– which is convenient for academic organization, contains the germ of the evil that has infected nearly every attempt to reinvigorate and derive benefit from the humanities. By becoming 'subjects' grouped over against other subjects termed nonhumanistic, the humanities inevitably become specialties like those other subjects. And thus their original purpose has been perverted or lost."

p. 3 "[T]he term *culture* began to split like the atom…Culture now is any chunk of social reality you like or dislike."

Encyclopedia Britannica, "Decibel (dB)"
"In ordinary usage, specification of the intensity of a sound implies a comparison of the intensity of the sound with that of a sound just perceptible to the human ear."

"The unit decibel is used because a one-decibel difference in loudness between two sounds is the smallest difference detectable by human hearing."

"Decibel (dB), unit for expressing the ratio between two physical quantities, usually amounts of acoustic or electric power, or for measuring the relative loudness of sounds. One decibel (0.1 bel) equals 10 times the common logarithm of the power ratio. Expressed as a formula, the intensity of a sound in decibels is 10 log10 (S1/S2), where S1 and S2 are the intensity of the two sounds; i.e., doubling the intensity of a sound means an increase of a little more than 3 dB."

Fans & Ventilation
"From our knowledge of noise levels it is appreciated that the decibel (dB) is the ratio of one level with respect to a reference level. It therefore has no dimensions. To obtain absolute values the reference level must be known."

"Methodological Issues in the Study of Pauses"
"Silent, empty or unfilled pauses are characterized by the absence of significant amplitude…"

"The reason for setting a minimum threshold to the duration of a silent pause is that the silence associated with the closure phase of a voiceless stop segment can sometimes last up to about 180 msec or so, depending on the overall rate of speech…"

“Filled pauses are language-specific.”

Mazzarella
“The intimate and the impersonal have conventionally been imagined either as opposites or as prosthetic supplements.”

“affect theory alerts us to the uncanny fold in which inner and outer life are disjunctively blended: the zones of the intimately impersonal and the impersonally intimate”

Downey capoeira
“sensing is an inherently social and cultural phenomenon”

“cultural and social influences play an important role, not merely in the linguistic or symbolic "interpretation" of music, but in its very sensual apprehension”

Henriques
“The effects and affects of the intensity or overload of sound may be compared to the extreme underload' that is produced both in the absolute silence of anechoic chambers, in meditation techniques using an image or repeated sound 'mantra' and in experimental conditions of sensory deprivation. Such extreme low threshold states break the norm of modest amounts of sensory stimulation.”

“ In 1860 Gustav Fechner published Elements of Psychophysics in which he described his experimental measurement of sensation and the physiology of the senses. 72 Fechner's concern was to establish a quantitative relationship between mind and body, which is mental sensation and material stimulus.28 He investigated the minimum sensitivity of the sensory system at the lowest possibly thresholds of audibility, visibility and tactile sensation. To do this he developed the methodology of the just noticeable difference UND) as the basic unit of the measurement of the intensity of sensation.”

“It is only because the voice has once been embodied that it can subsequently be disembodied.” (same for sonic measurement?)

“Transduction describes a process of transcending the dualities of form/content, pattern/substance, body/mind and matter/spirit. “

“The sonic dominance of the Reggae sound system session generates its own particular state of being and its own particular logic and distinct and different form of rationality. Traditional Aristotelian logic, which

is considered as the rational norm, eschews contradiction...Dancehall culture readily embraces such apparent contradictions."

"Both the material and ethereal aspects of sound evidently and intimately connect us to our body."

"My use of the term transduction, as a connection or homology between physical and social circuits, flows and fields, is not intended as any kind of reductionism. Rather it is intended to open up the imaginative and scientific possibilities"

Noise Pollution: The Unquiet Crisis, ch. 2: What Is Noise?

p. 51 "[F]or all practical purposes noise can be defined subjectively as unwanted sound…The physical or acoustical measurement of noise involves understanding three characteristics of sound: intensity, frequency, and duration."

p. 51 "The physical measurement of a given sound is determined by measuring its pressure relative to a base or reference sound pressure. This difference indicates the intensity of a particular sound, or its sound pressure level (SPL). Decibels are dimensionless units used to describe sound intensity." (dimensionless is an important word)

p. 51 "...P0 indicates the reference pressure considered to be the weakest audible pressure a young ear can detect under ideal listening conditions (0.0002 microbars)."

p. 55 "To assess community noise, it is important to consider more than overall intensity, because noises of this type generally are not pure tones. Sound waves generated by sources of community noise consist of a range of frequencies… The frequency of sound represents the number of times a complete cycle, consisting first of an elevation and then of a depression below atmospheric pressure, occurs in one second…A frequency analysis is used to determine the way in which noise intensity is distributed… Two noises having similar overall sound pressure levels can display completely different frequency distributions."

p. 55 "Of the three scales [A, B, and C weighted dB], the A-scale has become the most popular weighting network in community survey work, because its frequency response corresponds to the way the human ear perceives sound."

p. 55-56 "The duration of a noise is the third consideration. Hearing loss, for example, is directly affected not only by intensity and frequency but also by the duration of exposure." (loss isn't caused by our experience of loudness – it's caused by sustained SPL over time)_

p. 58 “Duration is also important when evaluating subjective responses to noise. A patterned noise…allows the perceiver to generally tolerate the noise level…In contrast with random noise, which has a startling quality…”

p. 58 “In addition to the physical noise measurement, several subjective measurement schemes have been developed to evaluate human responses to noise. A commonly used measurement of annoyance is the perceived noise decibel (PNdB) scale that considers both sound intensity and frequency distribution. The PNdB ostensibly compares noises on the basis of their subjective acceptability or their ‘noisiness.’ A series of equal ‘noisiness’ contours was developed by Kryter based upon the judgments of equal annoyance for bands of sound one-third octave wide…[T]he Ministry of Aviation devised an index which, it believes, more accurately appraises annoyance responses to aircraft noise than does the PNdB. The Noise and Number Index, as it is called, is a modification of the PNdB since it additionally considers the number of aircraft per day as a key annoyance factor.”
These have been used as the basis for regulations around aircraft operations. There is also a Traffic Noise Index, which is used to determine distances from roadways to buildings.