

Cage's Echoes of the Anechoic

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IT IS AMONG THE MOST OFT-TOLD TALES IN CAGEAN LORE. ALONGSIDE 4'33" AND HIS USE OF the *I Ching* to create indeterminate music, there is John Cage's visit to the anechoic chamber at Harvard. On his 1959 album with David Tudor, *Indeterminacy*, Cage told the story with a koan-like lack of embellishment, while Tudor, in another room, played random selections from Cage's compositions and tape music:

It was after I got to Boston that I went into the anechoic chamber at Harvard University. Anybody who knows me knows this story. I am constantly telling it. Anyway, in that silent room, I heard two sounds, one high and one low. Afterward I asked the engineer in charge why, if the room was so silent, I had heard two sounds. He said, 'Describe them'. I did. He said, 'The high one was your nervous system in operation. The low one was your blood in circulation'.

Cage and Tudor cannot hear one another. Occupying different sonic spaces and practices (storytelling, music making), there is a purposeful nonrelation to their collaboration, one that is nevertheless brought into relation in the perception of the listener. Tudor so happens to generate a high whistling sound and low scratchy rumbling just as Cage begins the tale. As a listener, I find it impossible not to hear these as foreshadowing representations of Cage's nervous and circulatory

systems, even though they are plainly not so. Or, at least, not intentionally so. This phenomenon happens repeatedly on the album, as in the previous story, when the utterance, 'The pen was tearing the paper to shreds' is immediately punctuated by a dissonant piano chord. Interestingly, the more often I listen to *Indeterminacy*, the more wedded these sounds and their 'meanings' seem to become.

This is a perplexing and delightful aspect of Cage's provocations—the listener's oscillation between the ontological and the representational, the concrete and the socially constructed, the random and the intentional. In his book *Silence*, Cage undermines such dualities with characteristic pith:

If words are sounds, are they musical or are they just noises?
If sounds are noises but not words, are they meaningful?
Are they musical? (42)

The coincidences of the 90 stories and the electronically and acoustically generated sounds on *Indeterminacy* allow me to observe my own mind as a fabrication plant where sense, through sense-making, becomes something that 'makes sense'.

Like the Zen practice that inspired Cage, *Indeterminacy* shines a light on the contingent and insubstantial nature of our coming to believe in something. This enlightening potential of the album is dependent on the 'acousmatic' distance that sonic mediation provides—the non-seeing, non-hearing space that separates Cage and Tudor, as well as the temporal and physical distance that prevents me from seeing the pair (Schaeffer). This distance—paired with my knowledge of the distance—allows me to glimpse the stochastic aspect of knowing anything at all. The meaning of Tudors' whistling and rumbling wasn't *there* but now it's *here* and I can't unhear it. Tempered in the furnace of the mind, a contingent association between sense and sensemaking becomes an alloy harder and sharper than anything one might call 'the world itself'.

Which brings me back to the anechoic chamber. Built at Harvard's Electro-Acoustic Laboratory for the purpose of taming noise and enhancing communication in combat during World War II, the chamber was a 50-foot room built of sound-deadening concrete and fiberglass (Samuel). Since its construction in 1943, a number of other anechoic chambers have been built for research purposes and a certain amount of lore has developed around them. In the popular imagination, these are haunted spaces, places individuals enter alone to encounter the phantoms that haunt their minds and auditory systems. Places where people would go mad, if left alone there long enough.

Like Cage's 4'33", the anechoic chamber tempts us with the novelty of silence, but immediately our attention is drawn away: first, to the sounds that come to fill the silence, then to the meanings we inevitably make of these sounds, and then to the thoughts, feelings, and desires generated by those meanings. This is precisely what happens to Cage himself. He enters the chamber to hear silence, but instead hears the two sounds, high and low. He then wants to know the meaning of these sounds, which the engineer is only too happy to supply. Cage is highly receptive to the engineer's interpretation, as it reinforces certain intellectual and affective investments he has already made. He becomes attached to this sound-meaning relationship, incorporating it not only into his sense of silence, but also into his sense of self, as made clear by a disquietingly all-caps pronouncement in *Silence*:

THERE IS NO SUCH THING AS SILENCE, GET THEE TO AN ANECHOIC
CHAMBER AND HEAR THERE THY NERVOUS SYSTEM IN OPERATION
AND HEAR THERE THY BLOOD IN CIRCULATION.

I HAVE NOTHING TO SAY AND I AM SAYING IT. (51)

Cage hears the phantom self-noise of the nervous system, the very ground for any possibility of silence, speak for itself, superseding the primacy of the agentive, rational subject, leaving Cage himself speechless, yet nevertheless speaking. The true silence of the circulatory system could only mean death. In this understanding, sentient life is necessarily haunted by its own noisy silence.

Transmitted to others via Cage's many spoken, written, and recorded tellings, this phantom cluster of sound-self-meaning exercises its own agency, inserting itself into the nervous and circulatory systems of others, influencing their senses of sound and self, and prompting many of them to retell or write or amend or dispute the tale themselves. Some writers have passed along the anechoic chamber tale uncritically (it's not important to list them). Still others have claimed to debunk the physiology described, in the process constructing their own alternate senses of sound and self, which have nevertheless been influenced by Cage's story (it's not necessary to name them either). To trace all the discursive ripple effects and affective attachments set in motion by Cage's one brief stay in the chamber would be impossible. As anyone who has tried to sit *zazen* can tell you, silence spawns an incredible amount of babble. It seems unlikely that these ironic echoes of the anechoic will cease anytime soon.

In his recent book, *Echo*, Amit Pinchevski notes that echoes differ from reverberation and resonance in that their sound is both temporally distinct and qualitatively different from the sound that produces them. In an echo, one hears the past made strangely present. When it comes to both sound and meaning, echoes express the unavoidable influence of time and space, the inherent

relationality of everything we mistakenly label 'information', as if it could exist in the absence of its setting. 'It is', Pinchevski writes, 'the *context* of echoing that determines its effect: whether amplifying the message or subverting it' (102, emphasis added).

Pinchevski wrote those particular words in reference to the multivalent context of social media memes and retweets, but they are equally true of musical echoes. In her book *Echoes of History*, Helen Rees studies the seemingly unchanging tradition of Naxi ancient music to find rich social variation in its generative repetition. Witnessing how this music has served both Taoism and Buddhism, the Han majority and the Naxi minority, the Chinese state and foreign tourists, one comes to appreciate the everchanging meanings of tradition. Along a much shorter timeline, we can note minimalism's contextual transformation from a Downtown experimental form to a film soundtrack genre to a streaming productivity aid for knowledge workers. With each echo, the past is made present in a way that would be strange in the context of that past, and yet variation is perfectly in keeping with minimalism's musical ethos of transformation through repetition.

The very purpose of an anechoic chamber is to silence the context that forever remakes sound and meaning. The chamber functions by reflecting nothing back. The mission of the Harvard Electro-Acoustic Lab, after all, was to facilitate clear vocal communication in the bombast of war—to enable military personnel to speak and hear as if their bombs and engines were not deafeningly present. Today, anechoic chambers are used in research and development of loudspeakers, hearing aids, and other communication technologies. By killing context, the chamber attempts to give us access to 'the sound itself'. In a space devoid of all reflection, a sound can only be heard when transmitted directly from the transmitter to the receiver, like information. Acoustic engineer and science writer Trevor Cox once recorded a gun firing in an anechoic chamber. The sound of the gun, normally loud enough to damage one's hearing, was less impactful than the sound of a finger snap in a typical room ('One Man's Quest'). 'The sound itself', it turns out, was barely a sound at all.

On a perceptual level, then, even a sound with the violent potential amplitude of a gunshot can be said to barely exist without its reflective, echoic environment. To echo a familiar assertion, by the time we hear a sound, it is already in the past. That is, it has worked itself through, against, and away from the resonant space that is necessary for any sound to be heard at all. The assertion may be familiar, but its implications are difficult to assimilate. We want to believe that something *determinate* happened to John Cage in that anechoic chamber. That he heard two sounds—one high, one low. That if we could only dampen the noisy echoes of history, we could hear these sounds themselves, isolate the relevant information, and know its true meaning. But this is to embrace the false promise of the anechoic

over the truth of Cage's indeterminacy, the unavoidable and unpredictable creativity of time and space. The chamber was silent. It is the echoes that sound.

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