

science
and fiction

laurent
grasso

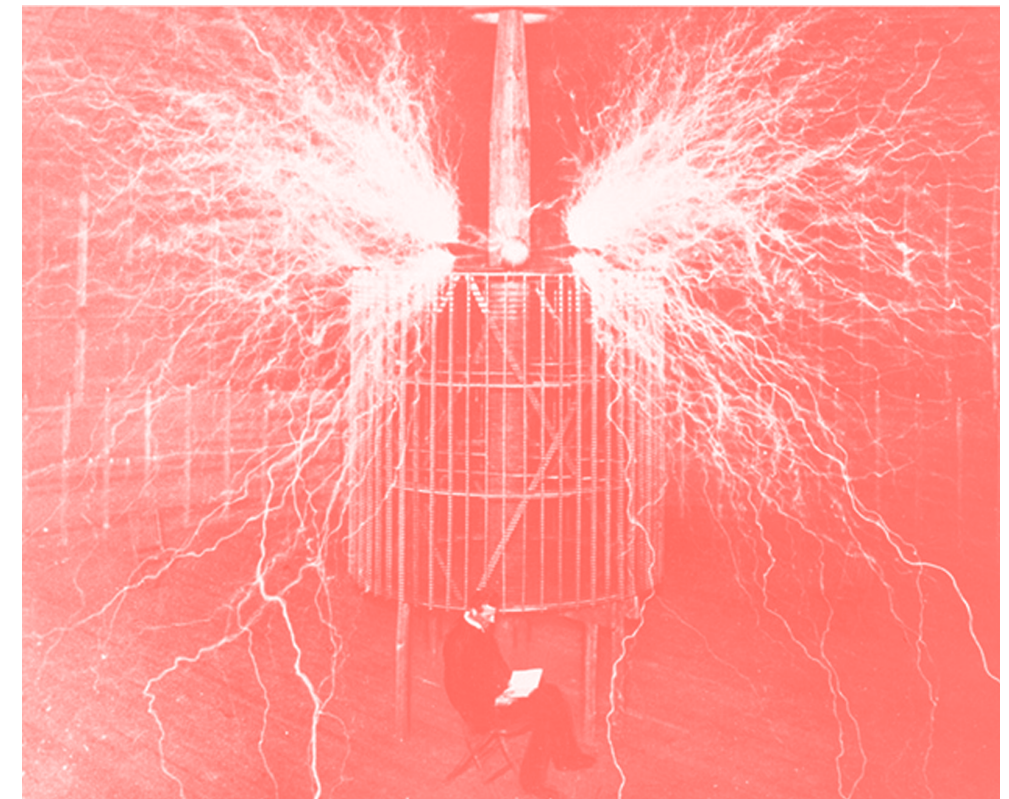


fig 1

in the electromagnetic sea

What is in the electromagnetic realm around us? Laurent Grasso's HAARP installation bends our attention to an unseen world, to invisible regions in this field of radiation, to zones that people have believed to be populated by the voices of spirits, the chatter of government conspiracy, the emanations of aliens, and even the echoing traces of the origin of all that is.

We know this world well historically. It is a world nudged into being in the nineteenth century, when physicists and others claimed that the universe was made of waves, of vibration. In the 1860s, Hermann von Helmholtz called the portion of this vibrating domain beyond our perception "the invisible atmospheric ocean," and spiritualists and scientists alike ventured into this sea. Gillian Beer, in her writing on waves and literary modernism, asks, "Signs, science, séances: how were they to be distinguished?"¹

This vibrating world sat just outside of signification, in the not yet articulated, the not yet heard, the not yet sensed or sensible. It was a territory of what Jeffrey Sconce has called "haunted media,"² a world explored by such people as radio hobbyists convinced they could navigate the electric sea to contact aliens, angels, and the dead (the real-time radioed sinking of the *Titanic* in 1912 turns out to be important here).

Why has the electromagnetic realm become so ... eerie? Because, many of us moderns have come to believe, it is simultaneously ethereal and material. Some of this belief is grounded in the materiality of the human sensorium—not so magnetically tuned as, for example, that of birds, who use the magnetosphere to fly north or south. But the eeriness arrives as well from how Western science has come to *think* about the electromagnetic. As the background to everything.

But whence this belief? Or, better, whence the sometime claim that scientists can still hear the echo of that largest pulse of all time, the Big Bang? In *Making Noise*, Hillel Schwartz argues that the Big Bang should be thought of as a cultural creation of its era, the 1960s—the days of VHF television, electric guitars—when everything turned out to have a background hum.³ In other words, the Big Bang is not only what Grasso calls an ancient "sound fossil," but is also a fossil of more recent vintage. It is in addition to a scientific finding, a social fact of its day, filling a heretofore-empty space with modern noise.

Compare space to ocean. In the 1950s, Jacques Cousteau called the sea "the silent world."⁴ By the 1960s, however, it was a riot of noise—even earlier, actually, for scientists who did not enter its water as tourists. Anti-submarine warfare was predicated on training submariners to listen

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closely for pings, boings, and echoes, all manner of which could be confusing, misleading, and might even be illusions.

That underwater sound world was something like an audible version of the weird and multiple space that is the ionosphere, that zone of the atmosphere that the High Frequency Active Auroral Research Program (HAARP), a US government research enterprise, is dedicated to studying. HAARP, the subject of Grasso's artwork, examines how this region, which serves as a kind of channel for radio transmission, is ionized by solar radiation. HAARP enacts its examination by stimulating the ionosphere with high frequency radio transmissions.

Grasso's HAARP installation—which reproduced in Paris's Palais de Tokyo a scale model of the antennae complex in place at the Alaska-based HAARP Station—plays with the invisibility of much electromagnetic radiation as well as the inscrutability of the instruments meant to operate on and within it. It flirts with conspiracy theories and off-kilter science. In his commentary on HAARP, Grasso suggests that he is drawn to "incomprehensible situations that sometimes produce forms." I am reminded of what art historian Henri Focillon wrote in his 1934 *The Life of Forms in Art*, "Form is surrounded by a certain aura: although it is our most strict definition of space, it also suggests to us the existence of other forms."⁵

Other forms. Forms suggest other forms. Those other forms, Grasso suggests, are often afterimages, echoes, diagnostic of our contemporary situation. No wonder the ionosphere has been full of, in rough historical order, the ghosts of American spiritualism, the aliens of the Cold War, and the secrets of clandestine government operations.

Believers in what Craig Baldwin called "specters of the spectrum"⁶ are still out there. In late 2010, I received a message on my office phone from someone claiming to be with an organization she called the "Nephelim War Council." The message said: "It has been brought to my attention that you have gleaned information from aliens regarding your underwater studies. You are to return it within forty-four hours or your life force will be terminated." Now, it is true that I have written about sociality and sound in submarines and that I have written a book entitled *Alien Ocean*⁷, but a reading of my work as resulting from extraterrestrial contact was not one that I had anticipated. Some Googling landed me at the caller's website, which turned out to feature speculations about the use of HAARP by government forces to tap remotely into people's innermost thoughts. The website was filled with spectrogram visualizations of ambient

vibrations recorded within apartments and other living spaces, which, the text claimed, revealed “electromagnetic harassment” operations by state (and, as it happened, university) forces. In the spectrograms, the site suggested, one could discern encoded messages and conversations. Figure 1, labeled as “Haarp altered dna with harmony,” for example, was described on the website as “a set of progressive photos showing what is transmitted at a hertz level not heard by your ears. . . much like a subliminal message on a self-improvement tape.”

I am an anthropologist, and, like Grasso, my job is neither necessarily to denounce nor to facilitate conspiracy theories (though I am happy to do this on occasion). Instead, I wish simply to observe that the electromagnetic sea seems to be these days imagined as flowing into our very gene pools. HAARP plays on the anxieties of our time, a time when “wireless” refers no longer to radio,⁸ but to an “invisible atmospheric ocean” that reaches not just into our souls, not just into our brains, but deeper, into the imagined harmonies of our DNA.

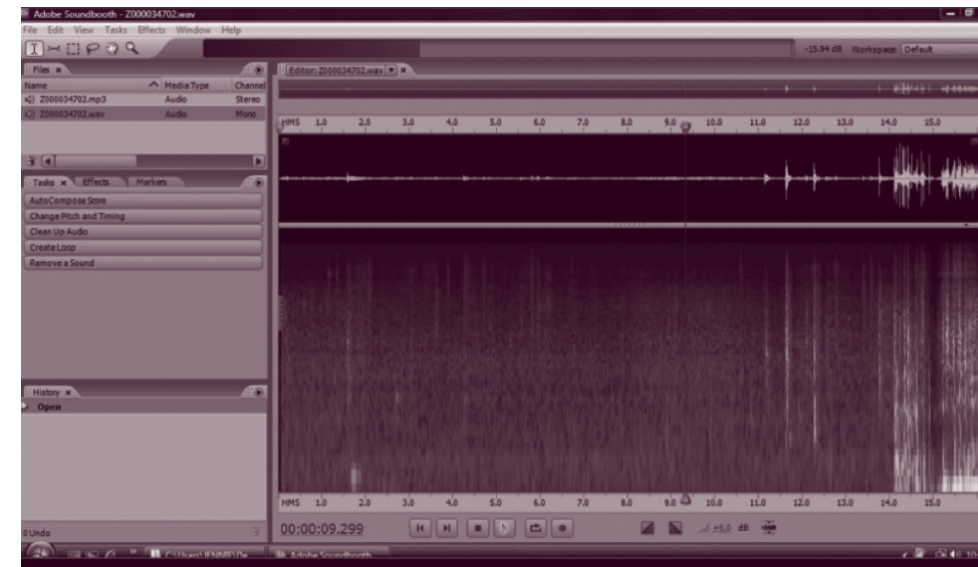


fig 7

- 1 Gillian Beer, “Wave Theory and the Rise of Literary Modernism,” in *Open Fields: Science in Cultural Encounter* (Oxford: Oxford University Press, 1996), pp. 295–318, here p. 312.
- 2 See Jeffrey Sconce, *Haunted Media: Electronic Presence from Telegraphy to Television* (Durham: Duke University Press, 2000).
- 3 See Hillel Schwartz, *Making Noise: From Babel to the Big Bang & Beyond* (New York: Zone Books, 2011).
- 4 See Jacques Cousteau (with Frédéric Dumas), *The Silent World* (New York: Harper and Brothers, 1953).
- 5 Henri Focillon, *The Life of Forms in Art*. [1934] (Cambridge, MA: MIT Press, 1989), p. 34.
- 6 Craig Baldwin, *Spectres of the Spectrum* (Other Cinema DVD, 1999).
- 7 The work I refer to here is my book *Alien Ocean: Anthropological Voyages in Microbial Seas*. (Berkeley: University of California Press, 2009).
- 8 See Adrian Mackenzie, *Wirelessness: Radical Empiricism in Network Cultures* (Cambridge, MA: MIT Press, 2010).



fig 6