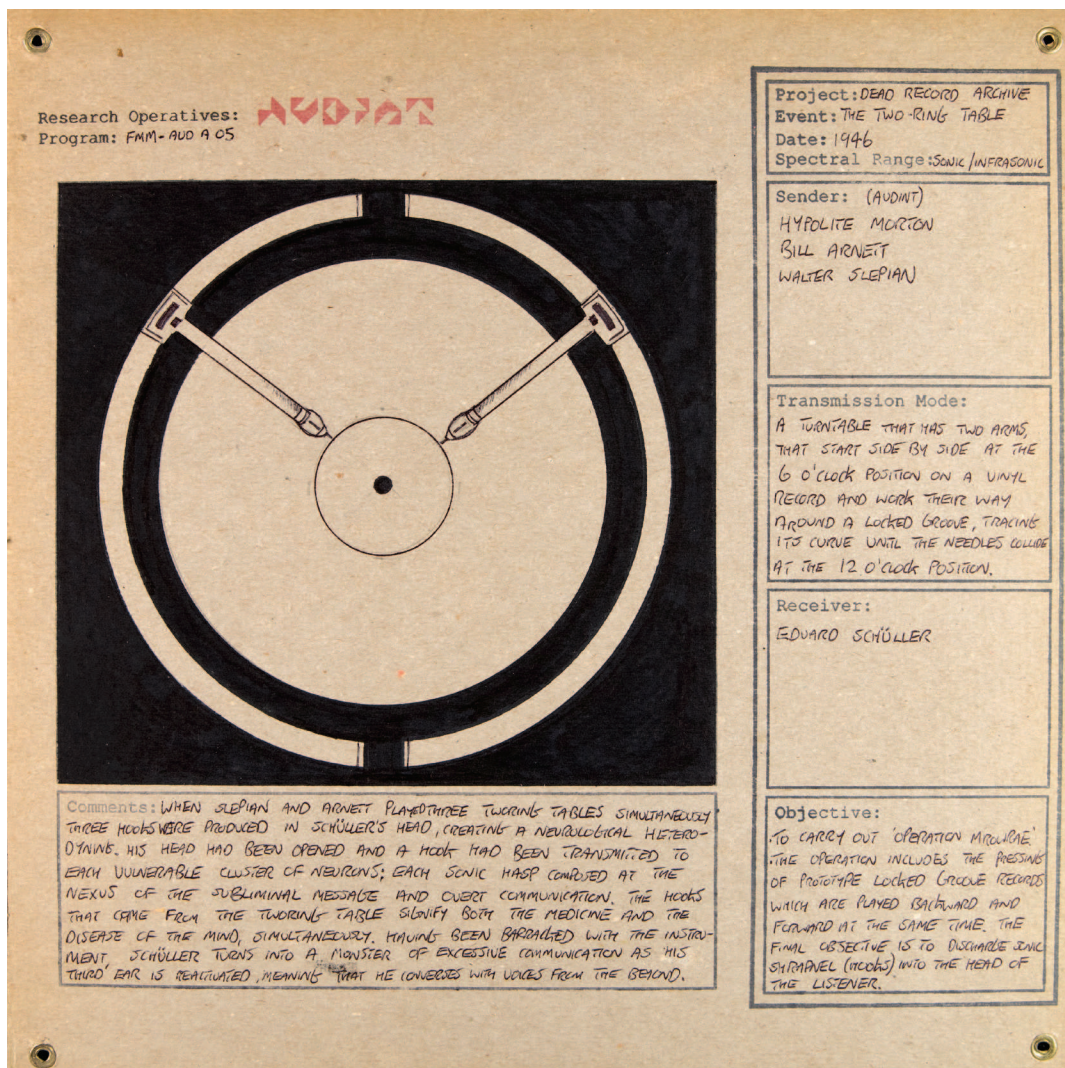




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Humming through Salt: AUDINT's Spurious Frequencies

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A slow dive into the world of AUDINT is a little like that old folklore fallacy of salting the tail of a bird. Or even better, its variation: salting the backs of witches. The analogy is that through the impossible task of sprinkling salt on either bird or witch one gains power over it, slows it down, weighs down its insubstantial or contested body. Extending this analogy, to pour salt on the backs of AUDINT's researchers is to give weight to the metaphorical body of their archive of ghosted histories. To slow down the algorithm—a profuse generation of texts and tendrils and esoteric wanderings and viral intrusions—so that we might find the space needed to submit to the idea that truth is stranger than fiction, and that the AUDINT divide tends to err here on the side of truth. We could run our rattrap straight into their rabbit-hole and waste days doing online research into people that couldn't possibly have existed, into government programs that sound fake—but turn out to be real. The jarring effect of this quickly becomes disturbing. We could willingly submit to virulent websites and translate German in desperation, to seek out the biographies of sketchy historical figures. I won't lie: I did all of this. In the end, chucking an entire salt shaker in AUDINT's direction might have a better chance of slowing the RPMs enough to make the connection, than my cautious castings of singular grains.

Above: Card from *Dead Record Archive*. Image courtesy of AUDINT.

Next Page: AUDINT, *Delusions of the Living Dead*, 2015, stills from animated video. Images courtesy of AUDINT.

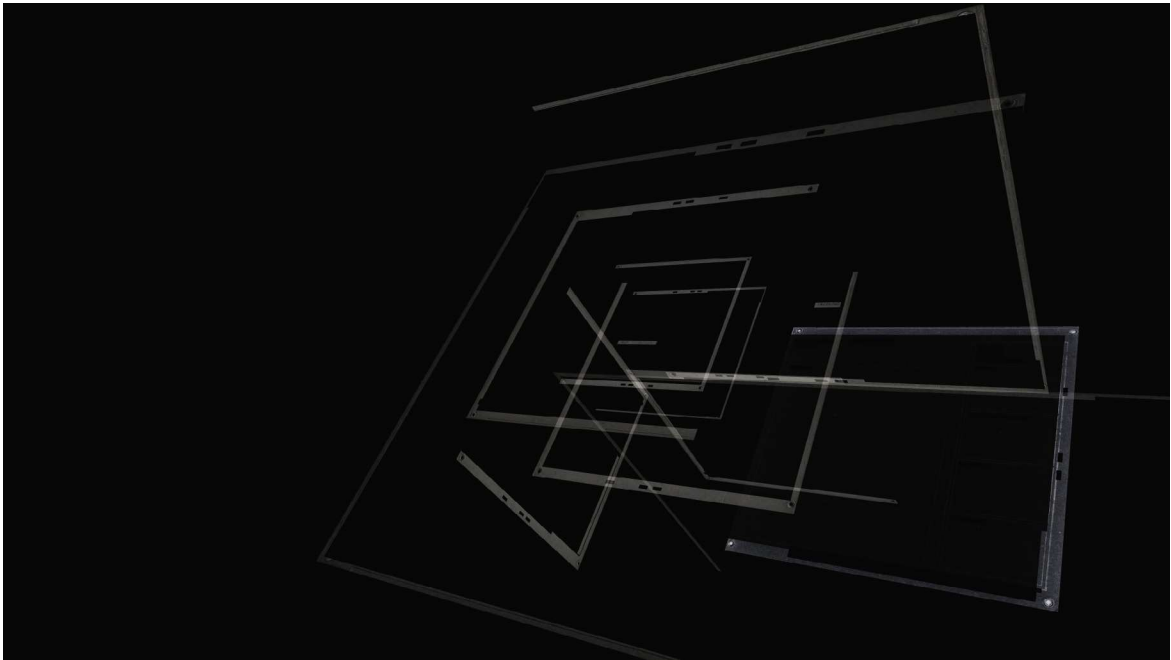
➡ Go to Pg. 47 for the accompanying track on the CD insert.

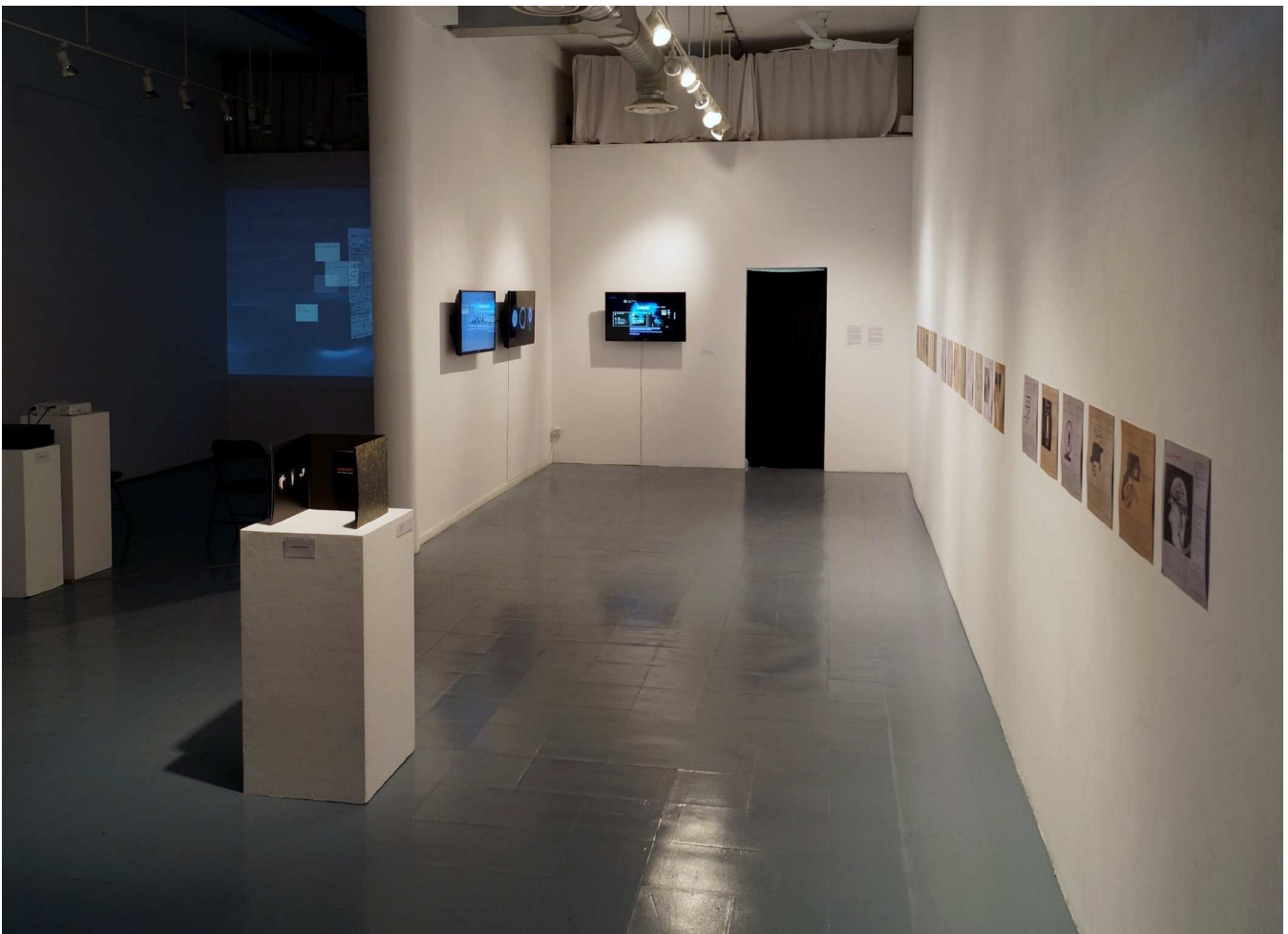
Formed in 1945, AUDINT was originally composed of Hypolite Morton¹, Bill Arnett, Walter Slepian, and the ill-fated Eduard Schüller; since its 2008 incarnation, Toby Heys and Steve Goodman have been two mainstays, with others floating in and out. AUDINT's original members were ex-members of the Ghost Army, a mobile WWII deception unit populated by artists and theatre technicians².

An encyclopedia of acronyms and codenames are the brick and mortar of AUDINT's foundation—a “splinter research cell” with nestled connections to similar cells: OSS, Operation Paperclip, OAR, JIOA, Operation Wandering Soul, SAIN, and others—all accounted for in the files of their *Dead Record Office*. AUDINT itself is a contraction of “audio” and “intelligence.” The arc of the whole outfit is a sub-liminal world, where the institutional language of organizations has been amplified into something insane, unsound, with its rogue operatives left to avoid stepping on the mortar blast eggshells they have laid out for themselves. AUDINT was born out

¹ An interesting link to the name of a salt company, and the name of a road in Windsor that serves as an entry to a salt mine.

² Famously using “battle DJs” who remixed reality with field recordings of the sonic imprints of war—and using inflatable tanks as props—the Ghost Army was a diversion tactic to confuse Nazis on the whereabouts of Allied troops.





AUDINT, *Delphic Panaceas*, 2015, documentation of exhibition at Artcite Inc.

of a crisis, a reification or an embodiment of the damaged psychic landscape of the years following WWII and its veiled surface-level “schizo-lithium calm.”³ It was initially founded out of a place of cooperation with militaristic powers, but in succeeding in its assigned directives a little too well, its members defected and spirited away their research to the underground: “that space in which technological innovation meets speculative thinking...”

SALT

The specific presence of AUDINT’s infiltration into the Windsor-Detroit area has a lot to be shared with the subterranean. With salt. And with a most aberrant effect of sound. The Detroit River splits the two cities apart on the surface, but beneath the surface, a massive 1500-acre salt mine joins two countries back together, 1200-feet below. The mines exist as a network of rooms held up by salt pillars—solipsistic architecture that is a result of the blasting method. The interior walls are sheared off with explosive charges, the collapsed chamber hollowed out again, crushed, and conveyor-driven up. There, the shock of surface air hits deposits that haven’t seen the light of day since the Devonian period, 400 million years ago. The mine blasts decouple the slow capital production of the earth.⁴ Locals remember riding down into the mines for public tours, past the Saint Barbara shrine—the miner’s saint of safety—and spilling out with schoolmates into the sparkling rooms. Licking at the air. In the Chladni plate experiment, grains of salt are dusted onto metal plates. When the plate edge is run over with a violin bow, the vibration causes the grains to reorganize into corresponding patterns of resonance. The patterns are formed by the plate’s nodal lines—areas where the surface stays still. Those blank spaces *between* sound are where the salt attracts, creating Chladni figures. Those metaphorical nodal lines—the spaces of negation and collision—are where AUDINT’s sonic research interests lay.

Salt is contradictory. Tossed off over the shoulder it is a cleansing—or a superstitious tic. At a chemical compound level, the sodium pentothal that plays a part in AUDINT’s animated film, *Delusions of the Living Dead*, gains sentience as an agent of truth. But those who fall under its power—narcosynthetes—their revelations pass into the territory of the legally inadmissible. Surrounding an unclean house, it is protective. And yet, its mining in the Windsor-Detroit area once generated legends about the inevitable collapse of the region down into its own bowels. A sinkhole *did* appear at the Windsor side of the mine in the 1950s, around the same time AUDINT was blasting away at the degenerating edges of their colleague Eduard Schüller’s mind.

CIPHER

From September 17-October 24, 2015, AUDINT’s *Delphic Panaceas* exhibition was on view at Artcite Inc. in Windsor, Ontario. Their *Martial Hauntology* project is a cipher to the expanded works in the exhibition—a collation of four years of sonic research released in a limited edition of 256 copies. An LP contains two chapters: *Delusions of the Living Dead*, and *DRNE Cartography*. A selection of cards from the *Dead Record Archive* and a 112-page book, *The Dead Record Office*, record the history of AUDINT.

With the *Dead Record Office*, AUDINT have created a historical record of the acoustic and unsound universe. The archival information cards hint at the presence and infiltration of AUDINT’s agents throughout the history of physical sound media; innocent devices

3 Unless otherwise noted, all quotes are excerpts from the *Dead Record Office* book included with the *Martial Hauntology* release.

4 In 1906, a 1000-foot shaft was pierced into the heart of what would become the underground rock salt city, now that salt is used to de-ice Michigan roads. It eats away at crumbling concrete and melts the city and its cars season by season.

are hijacked electronic witnesses to experimental agendas. The media formats that they feed upon record, reassemble, and broadcast the sonified fodder of PSYOPs—and for the *Ohrwurm*—which we have all experienced. Histories of technology are filled with hypothetical worlds running in tandem with unauthorized adaptations overtaking intended use. For every Edison phonograph, there are consequent mumblings about rumors for lost plans for “ghost telephones.” Historical figures like Valdmir Poulsen are underlined as essential conduits in the growth of affective sonic experiences in the 20th and 21st centuries. And for every house cat we cohabitate with, there is the paranoia that we could be living with an “acoustic kitty,” a vile and delusional program launched by the CIA to send “trained cats,” equipped with surgically implanted antennae and microphones, to spy on Russian embassies.

The animated video installation, *Delusions of the Living Dead*, is “the story of sound recordist and designer Walter Slepian’s 1949 plan to purloin and photograph French neurologist Jules Cotard’s notebook: an arcane medical document that holds information pertaining to the process and methods required to ‘seed walking corpse syndrome into a subject’s bed of cognition.’” The title of the show, *Delphic Panaceas*, is in fact a reference embedded in the same film: “A black humored reference to the idea that Cotard Syndrome could be an answer to AUDINT’s problems of connecting with the undead.”⁵ The soundtrack integrates the sonically audible voice of “Ms. Haptic” against soundscapes composed by Goodman and Heys and the more insidious use of an integrated infrasonic band, hidden among the digital weeds.

HUM

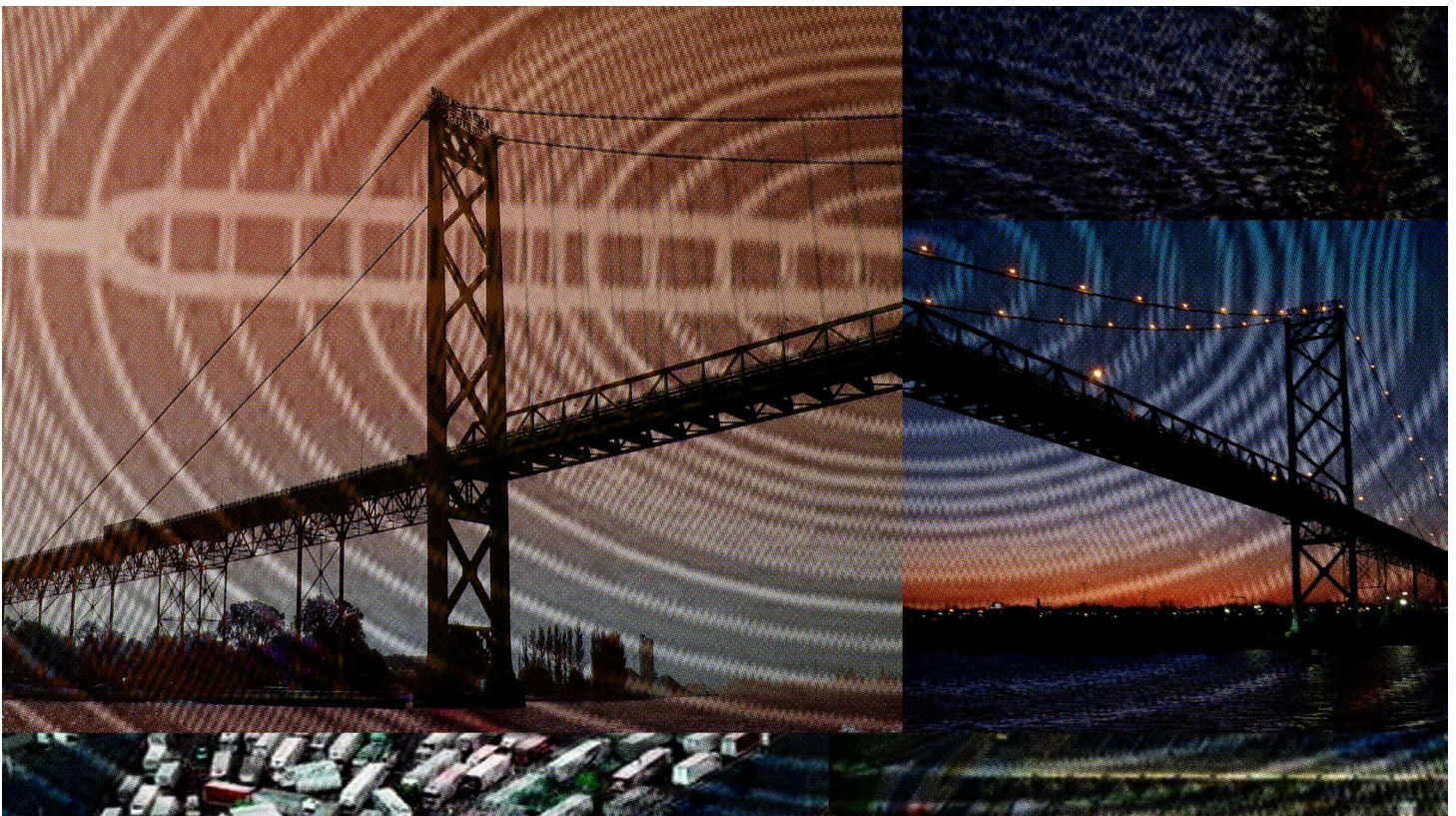
Describe the Windsor Hum. A deep time bass rattle. A quivering in the gut. Night terrors. The creak of windows skirting collapse. Vibrating eyes and dark shadows running on repeat around corners. Viral rumors of otherworldly cause and intervention. Salt and steel dancing on air and down into the lungs. Ominous rumblings of the anthropocene. The Hum is a sonic spectre of the clash of environment and industry. The Hum is an artifact of the environment we have created, a sub bass virus that is a global archetype.

One day as I sat at the breakfast table of a relative, skimming through a pile of newspapers that should have been recycled months before, I felt the vague disturbance of familiarity. As the smoke cleared, I realized the image on the front page of *The Detroit Free Press* was of my first Windsor apartment. Apparently the sickly yellow walkup in Old Sandwich town had become newsworthy, falling within the territory of the latest manifestation of The Hum.

Late one night in 2002, while standing insomniac-prone in that kitchen, I looked out the back window. I was surprised to find that sky was on fire. A total apocalyptic vision. Gigantic orange plumes brighter than the sun trailing up into a gradient of ochre yellow, puke green, and a soft warm purple. Assuming some great industrial disaster was about to roll toxic fumes over the river, *Crazies* style, I pounded on my roommate’s door and stuttered my worries about the great cataclysm in the sky. This is when I first heard the (pillow-groaned) words: “Don’t worry. It’s just Zzzzzug Island.”

In early 2011, Windsor began to play host to a low frequency bass rumble, spiking at 35Hz. In most descriptions, it was something “felt more than heard.” Bodies bootlegged to feel incessant monotone pressure on the eardrums. Opening their curtains expecting to find an idling car booming bass—residents found nothing. Tracing the location of the Hum is always difficult,

5 Via email with Toby Heys, October 2015.



similar to describing neural pain and ghost limbs, pinpointing where one flesh ends and the ghost twin begins. Not everyone can “hear” the Hum, but the vibroacoustic effects of infrasound can cause physical suffering in the sensitive: fatigue, insomnia, depression, anxiety, migraines. And on the flipside, its effects can mimic the tropes of traditional haunting.

In 2013, hard nosed scientists captured the “temporal and spectral” (their words, not mine) signature of Windsor’s Hum. First, they proved it existed, and second—all of those accusing fingers pointed towards Zug Island transformed into high-fives, as the VLF waves produced by US Steel’s electric arc blast furnace were cited as the Hum’s “likely” cause. The *Ohrwurm* of industry circles the city today, a cross-border sounding and a special kind of biomechanical violence.

CLASH

Avoiding the dilution of AUDINT’s *Dead Record Office* is important, but at its core, there are a few essential moments: the development of the TwoRing table, and the entwined fate this device shared with that of Eduard Schüller, the fourth member of the first wave of AUDINT. Schüller was a German ex-pat audio engineer who was brought to the US after WWII. While working for AEG during the war, he observed “how the dashing SS officers interfered with [technical] development, and how Jews suddenly went missing.”⁶ Schüller was the frail link in the group, given the black mark of his Germanic ancestry, despite his lack of connection with Nazi tenets. When a test subject was needed for AUDINT’s phono-experiments, Schüller submitted. His alienation was sealed after Arnett and Slepian met with Alan Turing, who planted in them the idea of the device they would name out of reverence: the TwoRing Table.

In the TwoRing table, the collision and the fragment are key: “It is the collision, in all its vibratory formats and excesses that interests AUDINT.” This mutated turntable spins a locked-groove record.

⁶ Translated from the German, a biographical entry at the City Museum of Wedel.

When two individual arms of the TwoRing table are propelled backwards and forwards, towards one another, and meet, their function negates one another in resulting collision. The sound-clash—and “the waveformed artificial intelligence” at its core—arrives, “meld[ing] matter with anti-matter, and fuses the covert back-masked message with the overt narrative refrain.” AUDINT’s investigative history, from this date onwards, proposes to find ways to “open the 3rd ear,” based on the simultaneous deployment of audible sound, and the channeling of ultra and infrasound—sound-waves that exist above and below human hearing.⁷ But in this collision of three sound types, normative reality is displaced, some kind of threat rises to take its place.

AUDINT add three turntables to the mix, and in playing the “GITH repeater” discs on the decks, a triangulation occurs, where the heterodyned intelligence discharges “sonic shrapnel known as hooks into Schüller’s neural flesh.” His sanity begins to stretch and unravel; the hook creates an earworm, or *Ohrwurm*—which awakens Schüller’s third ear. It gets complicated here, but in short, the *Ohrwurm* causes Schüller’s consciousness to mutate, and with a decoupled 3rd ear, his corporal flesh begins to take on the physical appearance of the media that it absorbed, growing grooves. When AUDINT go fully AWOL, realizing what they’ve unlocked in Schüller, they do so with their colleague suspended in a “magnetic coma.” Wrapped in reels of magnetic tape, Schüller is turned into a “monstrous payload,” an “embodiment of excessive communication.”⁸

⁷ Ultrasound exists above the upper registers of human hearing of 20kHz, but is recognizable in the shriek of a (silent to us) dog whistle or the echolocation of bats. Infrasound dips beneath the 20Hz range where “typical” human hearing bottoms out. Infrasonic specialists read the presence of these tones in tracking earthquakes, volcanic eruptions, nuclear and aerial blasts, and the geological rearrangement of rock (not music) underground. Animals running away from a forest is an early warning system, a natural harbinger artifact of their sensitivity to lower frequencies. None of these things are good.

⁸ The body is never silent as a medium. In the earliest versions of “the world’s most silent room”—the 1940 anechoic chamber at Bell Laboratories—the sounds of one’s own mortality are amplified and broadcast back unto themselves—internal sounds of the ears, electric hum of the nervous system.

CRYSTALLIZATION

AUDINT leans towards materiality often, letting loose with talk of the “alchemical properties of shellac.” In popular knowledge 78rpm records were collected during WWII “record drives,” shellac extracted and repressed into new records or used as wire insulation in field radios and military vehicles. Music was seen as disposable, and access to new recordings of popular music could only come from the literal physical negation of the old. In their founding years, AUDINT discussed “the implications of melting down records and casting them into forms, which can be used for ritualistic practices.”

While theories of residual hauntings linked to geophysical deposits of limestone are speculative guesswork, the communicative properties of quartz crystals are hard and fast. Quartz responds with an electrical backlash when placed under pressure: the skating of a phonograph stylus through a recorded groove puts stress on the quartz tip of the pickup—an electrical response acts as the signal that becomes the message to be heard. Quartz stabilized radio frequencies, and was the backbone of crystal radio sets, WWI-era sonography used to locate artillery. All of these devices worked on mineral frequency. In the presence of an excess of vibration, however, these same crystals that provided constancy in sound could also recoil and begin producing “spurious frequencies.”

In 1917, Alexander Nicholson, working for Bell Laboratories, turned to Rochelle salt when building one of the first crystal-controlled oscillators. All that Detroit rock salt (*sodium chloride*) being hauled up from the mines was inferior in its singularity. Rochelle salt (*potassium sodium tartrate*) is known as a “double salt,” with piezoelectric properties. Double salt, like the TwoRing table or Magdalena Parker’s ring modulated loops discussed below, is a tangential collision with AUDINT’s 3rd ear. As a mixture of two simple salts, polluting one another’s purity, a new crystalline structure is created, divergent from the two original structures. Most importantly, all those electronic devices that powered the early years of AUDINT’s research—microphones, radios, headphones, recorders—were operating off of crystal power and salt-derivatives. In the end, all those solid Rochelle crystals were prone to melting back into air.

OSCILLATION

In the Delphic Panaceas installation, a set of headphones plays the aural archive of Magdalena Parker, a second wave member of AUDINT, recruited in 1959. She was a “Chilean performance artist and filmmaker whose experimental work revolves around the use of the voice, magnetic tape, and the production of sonic cutup collages for ritual incantation.” The headphones repeat the contents of a compact cassette tape containing 15 analog synthesizer and tape loop sequences. It is joined by Side C of the project,

a 16th loop encased in resin, “to ensure that it is never heard,” in a move that hints at a dualistic properties of banishment and protection. The loops were created by way of ring modulation—a type of electronic sound processing that, like the TwoRing table, relies on the multiplied collision of two separate signals. The subsequent sound that is heard is both the sum and the difference of each individual waveform. So, both signals are layered on top of one another—but also a new signal that expresses the differences between those sounds, is a mutant third layer.

You could say that this effect is another example of AUDINT’s 3rd ear Other. If ring modulated frequencies are not in harmony with one another, the final sound is one of metallic bell chimes. The individual loops in Parker’s aural archive are constructed of those woozy repetitive chiming frequencies. They could easily embark the listener into a trance state, if it weren’t for the safety valve of fragmentation between sides dictated by the cassette tape format. Appropriate, given Parker’s apparent ability to induce states of possession among her audiences, and AUDINT’s own descent into the psychic history of the clang of the New York Stock Exchange Bell or the cross-dimensional communication potential of Vietnamese gongs.

QUEUE

As AUDINT’s members begin to bridge the analog-digital divide, new kinds of spectral economies arise. They tumble into the zone of reified technology, instigated by economic trade via IREX (irrational exuberance)—and the waking of a sentient supernaturalized virus called IREX2. Lying dormant in the hollows between those Chlandi plate nodes, IREX2 is pragmatic and self-replicating, awaiting the growth of the networked tangle of the World Wide Web to become thick enough so that it could run rampant without detection. It was apparently IREX2 who led to AUDINT’s current ranks being filled by Toby Heys and Steve Goodman, who were recruited/coerced into becoming members by “a spam email and Trojan horse” in 2008, due to their prior histories as sonic researchers and artists, as well as their “sketchy purchases” made on Silk Road.

I write about these elusive ideas of salt, of sound, of the materiality of media formats and landscapes, of the minutiae of the geological, of local history, in order to position AUDINT into the regional background in which their exhibition appears. To couch their history as a comfortable lock-groove within this specific time and place—a reciprocal feedback loop that has always been queued up, waiting for AUDINT’s arrival. Sound is a social beast, hungry for circulation.



Previous page: Kristen Gallerneaux, *Infrasound Ambassador*, conceptualization of the Windsor Hum, digital collage.
Above: AUDINT logos..