Deborah Stratman

Tactual View of a Belief in the Unseen
In Steve Goodman’s recent book Sonic Warfare (2009, MIT Press) he writes about a tactic named the Urban Funk Campaign, which was utilized by the Audio Harassment Division of the CIA during the Vietnam War.

The UFC used helicopter-mounted devices called sound curdlers: oscillators that can deafen those within earshot, causing anxiety, irritation, fear and panic. Curdlers, or “people repellers” (as they are known for their usefulness in dispersing crowds), work with a simple public address system and a 350-watt amplifier and have the capability to emit intelligible speech within a range of two-and-a-half miles. But when the devices are deployed with more powerful amplifiers, as they were in Vietnam, the curdler is able to form a sonic pyramid up to 3,500 meters in height, extending down from the helicopter to the landscape and people below.

This idea of an invisible, drifting architecture described by a volume of vibrations rather than a material physicality suggests the uncomfortable feeling of being enclosed without any visual referent to entrapment. The mind compresses just considering it. Like the pressure waves generated by fighter jets, which are forced closer and closer together as the jet’s speed increases, until eventually they merge into a single shock wave, producing a sonic boom. The boom is a reliable remainder of modern warfare on its speedy way to somewhere else, but it may also be used as its own fly-by weapon, as in the densely populated Gaza Strip, where in 2005, night after night, Israeli jets flew low, breaking the sound barrier and sonically strafing the terrorized population.

A supersonic jet’s presence is revealed as a series of overpressure points forming a boom cone behind its trajectory. The trailing sonic shock wave might be coordinated by a series of listeners left in its wake: to connect the dots of each boom would be to track the line of the jet’s course. This sort of layman’s radar was more monolithic before planes reached supersonic speeds. During World War I, British troops used massive concrete parabolic dishes or “sound mirrors” as a pre-radar technology to detect incoming aircraft. The mirrors worked by amplifying and focusing the noise of incoming engines onto a microphone placed at their center, revealing the location of planes before they could be seen. This was technology presaged by the acoustic experiments of 17th century German Jesuit polymath Athanasius Kircher, who designed a variety of sonic structures that utilized properties of wave propagation. Kircher was commissioned on occasion to install hidden sonic surveillance structures within palace walls to facilitate eavesdropping or communication between rooms, and he experimented with scores of other structures designed to focus and reflect sound back to discrete points.

As a psychological modulator of feelings and behavior, sonic weaponry defines the coordinates of its blast range via vibrational relationships dialed to particular frequencies and hyperdirected by an unseen hand and eye. The effect is that of a breath without a body, a rumble without a tank, a prison with no bars. In the case of tones emitted from devices like the curdler, they are often infrasonic – below the range of human hearing and instead felt as intense pressure and unease within the body. Even the frequencies that the ear can acknowledge generally provide no visual indicators of the intensity of sonic force behind them and leave no material artifact in their wake. Their afterlife, though, the ghost of their effect, can ring in the ears long after the shock waves have been received.
The phantom noises were literalized in a Vietnam-era gambit called The Wandering Soul. In his book Heroes (1986, Vintage Press) journalist John Pilger describes:

"His favorite tape was called 'Wandering Soul,' and as we lifted out of Snuffy he explained, 'What we’re doing today is psyching out the enemy. And that’s where the Wandering Soul comes in. Now you’ve got to understand the Vietnamese way of life to realize the power behind Wandering Soul. You see, the Vietnamese people worship their ancestors and they take a lot of notice of the spirits and you know, ghosts which we’ve simulated in our studios. These ghosts, these ancestors, are going to tell the Vietcong to stop messing with the people’s right to live freely, or the people are going to disown them.' The helicopter dropped to within 20 feet of the trees. The Psy-Ops captain threw a switch and a voice reverberated from two loudspeakers attached to the machine-gun mounting."

The Wandering Soul is evoked as a decoy to arouse a particular fear in those who hear their own ancestral ghosts in its manufactured sound. In a trench, a bunker or during nighttime combat, the only method to assess your surroundings may be through what you hear. World War II Allied soldiers, such as those in the U.S. Army 23rd Headquarters Special Troops, frequently employed sonic decoys. Toward enemy troops, the Ghost Army would broadcast sounds of moving tank battalions or bridges under construction, deceiving the German listeners as to the Allied troops’ location, activity and size. Han Dynasty Chinese generals (206 B.C. to 220 A.D.), no strangers to sonic deception, would fly kites with Aeolian harps attached over enemy camps at night to unsettle the soldiers’ sense of reality. The kites and harp were effectively invisible to the troops, so the wind seemed to bow imaginary strings at its own caprice, leaving each soldier to envision a personal narrative to make sense of the eerie, persistent cries from above.

Today’s sonic weaponry depends on a similar tactic: inject the body, or the mind, or both, with a ghost that shakes it to its core. Leave the eyes unsated so the only doomed possibility for acclimation is through a story unhinged from its soundtrack.

In the gallery, from just above, a meandering declaration ensues, slow-motion foley shrapnel from trumpets, sirens, bugles, bagpipes.

From below, subsonic frequencies belle our national anxiety, pulsing – unnervingly, because nearly inaudible – unsparingly, because we don’t know when it might come to an end, the vibrations of a war that most of the country has neither heard nor felt. We see its visual decoys on the news all the time as drone’s eye aerial visions, but its sonic frequencies have been flattened and sublimated into a national blase; a depression only alluded to by the ever-worsening economy. The vibrations occur unthertened from their source; the plot’s been lost.

– Lucy Raven
Lucy Raven is an artist who lives in New York.

In Robert Gardner’s 1997 film It Could be Good, It Could be Bad (Flying in Chile), the filmmaker flies in the cockpit of a helicopter flown by filmmaker and aerial cinematographer Robert Fulton, who asked Gardner to accompany him on a trip over the southern Chilean Andes. The two had rigged mics up to their headsets to record what they were saying to each other as they flew over the dramatic earth formations. Gardner tells Fulton a long joke to pass the time, whose repeated line, and eventual punch line, is the title of the film. The joke gains traction as each “good” set-up turns bad, and each “bad” situation ends on an upswing. The tension mounts not knowing on which end the punch line will occur. As a repeated line, it’s also a strategy for rethinking interpretation: any situation could turn out as its opposite, or be manipulated into its shadow. In the final sequence of Deborah Stratman’s 2002 film In Order Not to be Here, also shot from a helicopter, the camera’s all-seeing eye follows a running man below who may or may not have committed a crime. Is the camera’s operator the good guy or the bad guy? And in her recent film O’er the Land (2009), episodic scenarios often from an airborne perspective complicate the thin lines delineating power, surveillance, control and freedom.

1Astonishing accounts of Kircher’s acoustic investigations may be found in his Musurgia Universalis, written in 1650, and especially in his Phonusgus Nova, written in 1673.

2With only 1,100 men, the 23rd was repeatedly able to disguise itself as a much larger force, masking the Allies’ real operations. The Germans called them the “Phantom Army,” while the 23rd preferred the nickname “Ghost Army.”

3Aeolus was the Greek god of wind. Aeolian harps are wind-resonated instruments.

4A technical process by which sounds are created or altered for use in a film, video or other electronically produced work. Foley most frequently refers to film sounds that must be re-created and substituted for missing or poorly recorded originals.

Deborah Stratman (b. 1967) is a Chicago-based artist and filmmaker. Stratman works in multiple mediums, including photography, sound, drawing and sculpture. She has done site-specific projects with the Center for Land Use Interpretation, Temporary Services, Blaffer Gallery (Houston) and Ballroom Gallery (Manila). She has exhibited internationally at MoMA, Pompidou, Hammer Museum, the Whitney Biennial and numerous international film festivals, including Sundance, Viennale, Oberhausen, Ann Arbor and Rotterdam. Stratman is the recipient of Fulbright and Guggenheim fellowships and currently teaches at the University of Illinois at Chicago.
Acoustic Mirrors (World War I era parabolic structures used to monitor enemy planes), charcoal, pencil, acrylic on paper, 11" x 14"

Sonic Boom Shock Wave Progression, pencil on paper, 11" x 14"
Topography (Variant 1), charcoal, pencil, acrylic on paper, 11” x 14”

The Curdler (Vietnam era psychological operations [PSYOP]), charcoal, pencil, acrylic on paper, 11” x 14”
Credits: Sonic Compositions: Deborah Stratman and Jen Wang

Jen Wang’s work has been performed at the Wellesley Composers Conference, the International Computer Music Conference, the Bang on a Can Summer Institute, the California EAR Unit Residency at Arcosanti, the Music X Festival, and the SPARK Festival. She has held residencies at the MacDowell Colony and the Millay Colony for the Arts.

Front cover: Echo Corral (after Athanasius Kircher), charcoal, pencil, acrylic on paper, 11” x 14”

Inside front cover: F22 Raptor (with vapor cone and sonic boom cone), charcoal, pencil, acrylic on paper, 11” x 14”

Inside back cover: Aeolian Kite (sixth century B.C. Han Chinese PSYOP tactic for over-enemy night flights), charcoal, pencil, acrylic on paper, 11” x 14”

Back cover: Listening Equipment (1920s parabolic receiving shells produced by the Czech company Goerz [Waalsdorp Museum, the Netherlands]), charcoal, pencil, acrylic on paper, 11” x 14”

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Barbara Wiesen
Director and Curator
Gahlberg Gallery

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