## Transcript for Walled Unwalled (2018)

Lawrence Abu Hamdan: It was rumored that Danny Lee Kyllo grew the best weed in all of Oregon. In the early '90s, his product was famous for coming with strict instructions: SMOKE ONLY, NO BAKING, NO BROWNIES. It was so strong that a single toke produced a strange high, one that could both settle your nerves and heighten your senses. If you smoked just a little too much, you would start feeling agoraphobic and claustrophobic at the same time. Kyllo's weed found local infamy when a parent reportedly found her teenage son, high as hell, nestled in the corner of his room, gibbering, "I no longer know what there is behind the wall. I no longer know there is a wall. I no longer know this wall is a wall. I no longer know what a wall is. I no longer know that in my room there are walls, and if there weren't any walls, there would be no room." By 1992 the product had spread from the inner city and permeated deep into the suburbs, catching the attention of police officers as it wafted outwards.

Eventually the police received a tip-off to Kyllo's whereabouts. One night, as he was attending to his weed and replacing a bulb in one of his high-intensity heat lamps, the police were outside on a stakeout. With the curtains drawn and no search warrant, nothing unlawful could be detected from the exterior of the property.

A year prior to this stakeout, a law was passed that allowed the police to acquire surplus equipment from the military. Assault rifles, Humvees, choppers, boats, and sniper scopes began transforming police departments into combat-ready infantry units. This is how an as-yet-unused Ajima Vision 2-10 Thermal Imager found its way into the trunk of the unmarked police car parked outside Kyllo's home.

Conscious that it would be considered trespassing if they were to set foot inside the boundary of his private property, the officers creeped up as close as they could get. With their legs pressed against the outer surface of the well-worn, waist-high wooden perimeter, they peered through the viewfinder of the military-grade thermal camera. The exterior wall of Kyllo's home appeared to be aflame. The image was saturated with white-hot amorphous blobs that loosely marked the outline of the high-intensity heat lamps beating down on the plants behind the wall.

Kyllo was arrested. Though it would be another 10 years until he received his final verdict. His case went up through the entire court system, eventually ascending to the Supreme Court, where Kyllo's hot wall became a matter of constitutional magnitude. The debate came down to one irresolvable technicality: Did the police officers illegally see through the wall into his home, or simply observe the heat as it emanated from the wall's exterior surface? Was the heat that passed through the wall of his home into the air outside public or private property? The contest in court became like that Orson Welles film, the one where Charlton Heston plays a Mexican and has to figure out if a murder in no-man's-land happened in Mexico or America. Here the internal fabric of the wall became the legal gray area—not between two nations, but between that of public and private space, between the technologies permitted for police work at home and those used by the military abroad.

After much heated debate in their chambers, the judges returned to court and concluded for once and for all this border dispute. Kyllo walked free. It was ruled that anything migrating through a wall—be that liquid, heat, or sound—that was not detectable by human senses unaided by technology was a breach of the border that separates the home from the city, the private from the public. A line in the sand was drawn, and this trial set a precedent that meant Kyllo's wall became a legal barrier for all US citizens. It has since been invoked to protect the information stored behind the screen of your phone and even behind the membranes of your skin. While the police continue to buy technologies designed to make Iraqi and Afghani walls invisible, and Iraqi and Afghani bodies transparent.

**Kenneth Lerner:** "I think that's a very dangerous road to go, when we start talking about imagers and technology, because what it's capturing really is molecular information that migrates through our walls, and therefore, if we are now saying that we can capture that kind of information without a warrant, we can reduce our whole world to that type of wave and molecule and our walls mean nothing."

Lawrence Abu Hamdan: In the year 2000, construction began on tens of thousands of kilometers of border wall. It was to be called the Great Belize-Guatemala, Botswana-Zimbabwe, Brunei-Limbang, Bulgaria-Turkey, Morocco-Spain, Costa Rica-Nicaragua, China-Korea, Egypt-Gaza, Estonia-Russia, Macedonia-Greece, Malaysia-Thailand, Hungary-Serbia, Hungary-Croatia, India-Bangladesh, India-Burma, India-Kashmir, Iran-Pakistan, Israel-Area C, Kazakhstan-Uzbekistan, South Africa-Zimbabwe, Pakistan-Afghanistan, Saudi-Yemen, Saudi-Iraq, Slovenia-Croatia, Turkey-Syria, Turkey-Iran, Turkmen-Uzbekistan, Uzbekistan-Afghanistan, Ukraine-Russia, UAE-Oman, Mexico-United States Wall.

As these walls were being constructed, millions and millions of invisible cosmic particles called "muons" descended into Earth's atmosphere and penetrated meters deep, through layers of concrete, soil, and rock. Scientists realized that these deep-penetrating particles could be harvested, and a technology could be developed to use their peculiar physical capacities to pass through surfaces previously impervious to X-rays. Muons allowed us to see for the first time the contraband hidden in lead-lined shipping containers and the secret chambers buried inside the stone walls of the pyramids. Now, no wall on Earth is impermeable. Today, we're all wall, and no wall at all. **Witness:** "And to me, the cry, my lady, it was a cry of pain."

**Lawyer:** "May I ask you this, Miss [unintelligible], was the crying soft, loud, low pitch, high pitch?"

**Witness:** "The crying was very loud and very close. I even thought it could be inside the house. It was very loud and very, very close."

Lawyer: "And the pitch of the cry?"

Witness: "It was very loud."

Lawyer: "When I consulted with you, I asked you if you could just make [unintelligible] resembled that noise? I know it won't be as loud, but just to give the court some idea of what you . . ."

Witness: "The crying was like: huuuuuuuuoh wooooah."

Lawrence Abu Hamdan: On Valentine's night 2013, in Pretoria, South Africa, Michelle Burger awoke to the sound of a woman screaming, followed by a volley of four gunshots. She re-created the screams she heard that night in a court of law when the event she witnessed became the subject of a murder trial. The trial of the athlete Oscar Pistorius was dedicated to discovering if he had intended to kill Reeva Steenkamp through the bathroom wall or if it was an accident. Pistorius testified that he believed he was shooting at an armed intruder behind the wall when he shot Steenkamp. The wall became the last line of his legal defense. Accepting that he could not see through the wall, the attention of the court turned to how permeable the structure was to the sound of her voice.

The wall was built from 20-centimeter-thick concrete masonry blocks, through which a scream would likely lose much of the frequencies that contain the distinct characteristics of a human's voice. However, the bathroom wall had a bathroom door, and the bathroom door was a three-centimeter-thick, medium-density fiberboard with a millimeter-thin veneer. This door is not only weak enough to allow a sound of that intensity to pass through its fibers, but of the frequencies it is able to block, absorb, and deflect, it is weakest at preventing the low- to mid-range frequencies of the human voice from passing through. The dip of the door's acoustic absorption perfectly matched the peak intensity of Steenkamp's scream. The weakest point of the weakest point of this wall was a hole perfectly sized for a female voice to squeeze through.

The door and the wall filtered her voice, but in doing so intensified it, blocking entirely his capacity to see her, yet paradoxically amplifying the clarity at which he could have heard every idiosyncrasy of her scream. **Ronald Reagan:** "My name is Ronald Reagan. Last year the contributions of 16 million Americans to the crusade for freedom made possible the World Freedom Bell, symbol of hope and freedom to the Communist-dominated peoples of Eastern Europe, and built this powerful 135,000-watt Radio Free Europe transmitter in western Germany. This station daily pierces the Iron Curtain with the truth, answering the lies of the Kremlin, and bringing a message of hope to millions trapped behind the Iron Curtain. [...] Remember, the Iron Curtain isn't soundproof. Radio Free Europe gets the truth through."

Lawrence Abu Hamdan: During the Cold War, radio waves were used to transgress the thousands of kilometers of border wall that divided Europe. The forces of the West built broadcast stations in Munich and Lisbon, while here, in the east of Berlin, the Soviet Bloc constructed a huge radio recording facility. This was the largest complex of recording studios in the world at that time. It was dedicated to creating radiophonic propaganda that could leak throughout the Soviet Bloc, seep through the Berlin Wall, and bleed into the apartments in the west of the city.

In their day, these sound studios were the most advanced example of radio architecture, in which almost any acoustic world could be conjured. The floors were divided into multiple surfaces in order to be able to create the sound of footsteps on gravel or wood, marble or sand, snow or tiles. Creating the sounds from outside, inside. Rooms in which an arrangement of modular partitions could create acoustic spaces of any shape and size. Rooms where the walls themselves could revolve, transforming between different surfaces that could reflect and reverberate the rich diversity of life on the other side of the wall.

During those same years the East German Republic also perfected the acoustics of incarceration. Building a prison where the walls were used as weapons; creating prisoners who see nothing but hear everything, who are both completely confined and yet totally exposed. They exported and built this archetype throughout the '60s and '70s in the Eastern Bloc, Colombia, Angola, Egypt, Lebanon, and Syria. The combination of its German origins and its three-pronged star design meant that wherever it was built, they locally referred to it as the Mercedes-Benz of prisons. In 2016, I learned the full extent of this acoustic architectural design when I began an acoustic investigation into a prison that was modeled on this GDR archetype.

The Mercedes-Benz of prisons in Syria, the one I investigated, is called Saydnaya. Since the beginning of the 2011 protests, the regime has used it as a torture prison and execution center. The prison is inaccessible to all except those detained there and those detaining them. The only way to access what's happening inside its walls is through the memories of a small selection of detainees who were one day unexpectedly released. These survivors were blindfolded as they entered

and exited. Most of them never left their cell for the entire period of their imprisonment, and so they only ever saw the four walls of that cell. Like prisoners all over the world, they got to know these walls intimately; every crack and fissure can be identified as they run their eyes over the topography of the concrete surface again and again and again. With these walls becoming the limits of their visual world, they had to train their ears to surpass them, listening to every sonic sign and signal to try and gather as much information about the place in which they were incarcerated, the people who were incarcerating them, and the forms of torture they were being subjected to.

For a sound to vibrate the walls of a room from two stories above through the security-grade thick concrete structure. it would need to be of a magnitude that no human strike could create. And yet all of the witnesses insisted to me that the walls of their cells shook from the beatings that took place in distant and un-locatable areas of the prison. Later I understood why. The shape of the building, the dimensions of the corridors mean that sounds made in the cells are reflected towards the central tower. This is a listening tower, allowing the guards positioned here to hear everything happening in all the cells across the three wings. This listening tower has a staircase spiraling all the way from the basement to the roof, which creates an opening, and so a great column of air stands in the center of this building. All the sounds made in the prison are by design directed towards this listening tower, making this column of air act like a huge megaphone, funneling and forcing sounds throughout the three wings in ways that defy proximity. The sometimes-shrill hiss of a whisper spoken in wing A, cell 3 could be heard louder in wing C, for example, than in its neighboring units.

There was one sound, however, that wherever it occurred, all the cells in each of the three wings would hear it. This was the sound of the thick green plastic plumbing pipe striking a human body. As it is completely forbidden in Saydnaya to utter a sound of pain when one is being tortured, witnesses heard only the sound of this half-centimeter-thick pipe with a four-centimeter hole in the middle striking a corporal surface. At the moment of its percussion, the vibrations catapult the air out of both ends of the hollow pipe, creating a blast wave, like the gases firing out of the muzzle of a gun. The walls shudder, not from the force of the strike, but from the blast's resonance. This sound then fires out of the cell. funnels into the column of air, and spirals around the central listening tower, where it becomes broadcast throughout the prison, from the group cells on the third floor to the solitaries in the basement. As it dissipates it loses the initial crack of its impact, and what is left to bleed into the cells below is a muddied thud. A muffled lowmid frequency booms through the prison at 250 Hz, the exact frequency at which the walls of Saydnaya are built to vibrate. Like a loose object on the dashboard of your car that only shudders at specific speeds, these cell walls react vibrantly to the peak frequency at which this pipe resounds. And so the building's design is such that when one wall resonates with the sound of the pipe's strike, all the walls in every cell shake

vibrantly in response, creating the illusion that the sound is emanating from within the walls themselves. By the time the sound of torture reverberates in the lower floors and distant wings, it becomes dominantly felt as a vibration rather than heard as a sound. As torture rings through the porous and yet inescapably solid membranes of this structure, "it doesn't sound like something is hitting a body," Jamal explains, "it feels like someone is demolishing a wall."