



Xtine Burrough
xtineburrough@gmail.com
Leticia Ferreira
Leticia.Ferreira@utdallas.edu
The University of Texas at Dallas

The Radium Girls: A Radically Advancing Tour of Exit Signs

Keywords: Labor; Worker Rights; Sound Art;
Feminism; Participatory Installation.



The Radium Girls: A Radically Advancing Tour of Exit Signs juxtaposes stories about technology used to produce exit signs with the story of the Radium Girls. The Radium Girls were female factory workers in the 1920s who were exposed to radium when they painted watch dials with radium-infused glow-in-the-dark paint. Many were injured or fell deadly ill. The workers fought (and lost) a long judicial battle over reparations, which did, however, help to establish new policies on worker's rights and radioactive materials safety laws in the United States. *The Radium Girls: A Radically Advancing Tour of Exit Signs* is presented as a self-guided tour of the exit signs in an exhibition space. It presents audio as captured voices in bird cages that hang in front of or near exit signs. The tour mixes facts about the production of the exit sign with historic details to unveil the fate of the Radium Girls.

1. ARTIST STATEMENT

The Radium Girls: A Radically Advancing Tour of Exit Signs engages the public by inviting them to explore an omnipresent and often overlooked piece of public architecture: the exit sign. The self-guided tour connects scientific information and information about the standards of exit signs in the United States with the often unknown struggle of the Radium Girls. The tour reaches the public literally where they stand to raise questions about factory, female, and immigrant labor, worker rights, and the social cost of technological advancements.

Most of the Radium Girls died from radium poisoning. "Radium Jaw" was an occupational disease radium workers fell victim to because the body substitutes calcium for radium found in the bone tissue (Moore, 2017, 94). Bones become fragile and porous, which can cause necrosis and severe distortion of the mandible and maxilla. When the women first started working with radium, its toxicity was not yet widely known. When scientists realized the effects of radium on the human body, company managers would not go near it. In addition, they did not create safety protections for the workers, who handled the toxic element. In some cases, factory workers were specifically instructed to lip-paint, using their mouths to align brush bristles before and after dipping it into radium. Since radium shines in the dark, the workers — led to believe it was safe — would play with the glow-in-the-dark paint, covering their nails, teeth, and clothing with it. When the Radium Girls became sick, it took them years to find a lawyer who would accept their case and sue the company. When they started the juridical procedures, the company's executives would use their influence and resources to try to demoralize the women. Statements were published to attack the workers' sexual behavior and morals, indicating that the workers were sick as a result of sexually transmitted diseases. The companies positioned themselves as charitable because they hired disabled women, who in turn were ungrateful by their attempts to seek justice. After the legal processes were in motion, the company would try to push the dates of trial further ahead, so the women would be dead or physically incapable of attending court. Some of the workers settled with the company to compensate for payment of their medical bills and never received the reparations they deserved.

The physical pain and horror of the Radium Girls and the repulsive behavior of the company that formerly employed the women generated discussions about safety in the radioactive workspace, creating standards that are still followed today. This work of art honors those bodies and the social and political changes they provoked,

and rescues a story about techno-industrial workers that continues to take place in different versions today. When operating or utilizing technological infrastructure ubiquitous in contemporary society, we often do not think about the human labor involved in the production of such invisible signals and connections. While some of us live in updated conditions for our safety and health, many people work in conditions familiar to the experience of the Radium Girls.

The Radium Girls: A Radically Advancing Tour of Exit Signs creates a space within everyday places for the public to hear stories of people who were voiceless in their lifetime. We instigate participants to connect the past to the present, and to consider how relationships and legacies of class, production, and socio-technological standards impact the human condition.

2. A HISTORY OF *THE RADIUM GIRLS: A RADICALLY ADVANCING TOUR OF THE EXIT SIGNS*

This work has undergone several iterations since its first inception in November 2016 when it debuted as a face-to-face tour, which we led at The Dallas Museum of Art at a DADA-inspired “Late Night Art Bytes” event (Figure 1).

Fig. 1. *The Radium Girls: A Radically Advancing Tour of the Exit Signs* at the Dallas Museum of Art, presented as a face-to-face tour in November, 2016. (Photo by artists).



Fig. 2. Flyer for the “Big Dada” exhibit planned by LabSynthE at The Dallas Museum of Art, where the *Radium Girls: A Radically Advancing Tour of the Exit Signs* was first presented. (Photo by artists).



The portion of the title, “A Radically Advancing Tour” is derived from *The Little Review*, a quarterly publication started by two DADAist women in New York City from the 19-teens to the late 20s (Sawelson-Gorse, 1998). We imagine the exit signs on our tour demonstrate the Review’s idea of an “advancing point” toward which the “advance guards” are always advancing. Since we developed the project for this DADA-related event (Figure 2), the story is told in fragments with an absurdist turn, “a tour of the exit signs” as the conceptual container for the project. Each cage in this version of the tour plays a different fragment of the narrative. Thus the viewer may hear the complete story in variations of $(5*4*3*2*1)$ 120 possible orders, depending on which exit sign/bird cage pairing she chooses to listen to first, and so on.

In January 2017 Frank Dufour was the sound engineer who recorded and edited our first tour script as an audio submission to The HearSay Audio Festival. We were finalists in the international competition. We decided to reuse the audio, cut into five segments, in the next iteration of the piece.

In March 2017, we exhibited this project as a sound installation using directional speakers in a hallway that had four exit signs visible from a central location (Figure 3). As participants walked beneath each exit sign she would hear that portion of the story.

In May 2017, we exhibited the piece with birdcages and Raspberry Pis, but the audio played on a loop and we used speakers in lieu of pull-cords. This enabled us to install the cages from the ceiling, near the exit signs (Figure 4). However, the audio looped and created noise throughout the duration of the exhibition.

Fig. 3. *The Radium Girls: A Radically Advancing Tour of the Exit Signs* as a sound installation using directional speakers aimed at nearby exit signs, March 2017. (Photo by artists).



Fig. 4. The birdcage acts as a physical metaphor of *The Radium Girls* as canaries in the coalmine for workers’ rights. Each cage traps the audio, and its playing technology, in our fragmented narrative. (Photo by artists).



This fall we teamed up with The Gizmology Lab at The University of Texas at Dallas to code the Raspberry Pis so they would be triggered by pull-cords on each cage. The project was first exhibited in this iteration at HASTAC in Orlando, November 2017 (Figure 5) followed by its inclusion in the Ammerman Center for Art & Technology's 16th Biennial at Connecticut College in February 2018.

For xCoAx we will rewrite and re-record the audio for our fragmented tour. Kate Moore's *The Radium Girls: The Dark Story of America's Shining Women* became available in late 2017, after we began working on this project and had already recorded the first set of audio files. Since reading her publication we have edited the narrative using quotes and new information about the Radium Girls provided by Moore. What we have realized in the past two iterations of the project follows Jussi Parikka's notion that "Geology becomes a way to investigate materiality of the technological media world". We ask viewers to investigate the immateriality of the radium girls — that is what is left now, their story — who unknowingly became mediated by a fiercely dark technology. Our space-based sound installation uses the exit sign as a conceptual trajectory.

Fig. 5. *The Radium Girls: A Radically Advancing Tour of the Exit Signs* at HASTAC, Orlando, November 2-4, 2017. (Photo by artists).



Fig. 6. A video about the piece is accessible on Vimeo: <https://vimeo.com/210988384>



The Radium Girls: A Radically Advancing Tour of Exits Signs

NOT YET RATED

1 year ago | More



References:

Moore, Kate. *The Radium Girls: The Dark Story of America's Shining Women*. Naperville, IL: Sourcebooks: 2017.

Parikka, Jussi. *A Geology of Media*. Electronic Mediations, Volume 46. Minneapolis: University of Minnesota Press, 2015.

Sawelson-Gorse, Naomi, Ed. *Women in Dada: Essays on Sex, Gender, and Identity*. Cambridge, Mass, The MIT Press, 1998.