# Ray-Flats

## Fabulating with Environmental Illness Narratives in A Permanently Polluted World

In 1981, the Department of Energy's Human Interference Task Force put out a call for proposals for a long term nuclear waste warning message. The proposal requested ideas for communicating with humans 10,000 years in the future about the dangers of nuclear waste buried in the land. In response, philosophers Françoise Bastide and Paolo Fabbri proposed the idea of a living radiation sensor in the form of some species that would persist alongside humans and be engineered to change appearance in the presence of nuclear chemicals, which they called "Ray-Cat." Alongside, they proposed inventing a body of folklore, passed on through proverbs and myths, that would warn people to flee when a cat changes color.

In response to Ray-Cat, Ray-Flats tell stories of environmental pollution in the present through the lens of environmental illness, making visible the toxic waste and industrial chemicals already lurking in our everyday landscapes today.

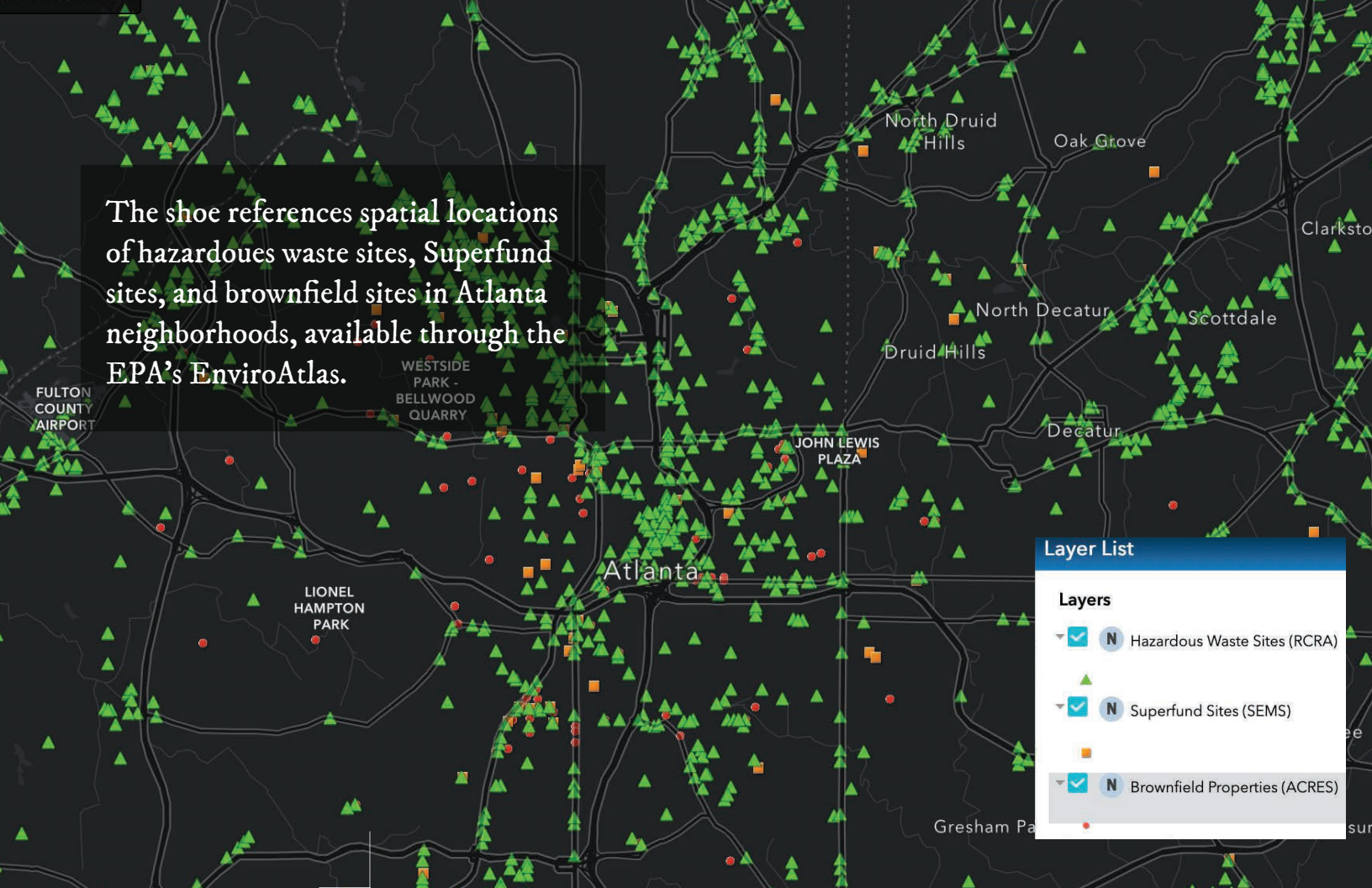
Instead of fleeing, Ray-Flats explore how we might notice the complexities of places marked as "toxic" and attune to the more-than-human entanglements of living with toxicity in a permanently polluted world.

“Ray-Flats” is a speculative pollution sensing shoe that glows when near toxic sites, metaphorically positioning the wearer as a “living sensor,” a concept that has long been used in disability communities to describe people living with environmental illness, whose bodies react to trace amounts of chemical toxicity.

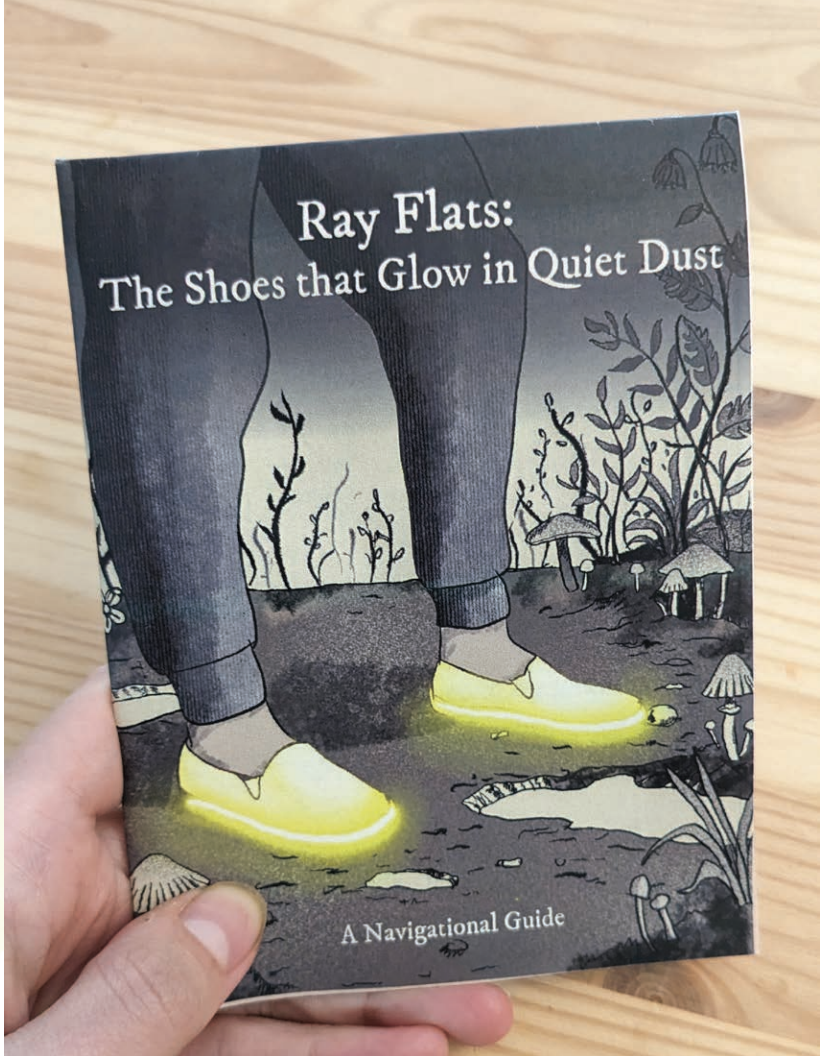





The glow is achieved with LED lights, a GPS module, and a microcontroller. The microcontroller is programmed with GPS coordinates of sites marked as toxic, taken from an EPA database. The GPS detects the live location of the shoes. The brightness of the lights corresponds to the distance between the shoes and the marked sites - glowing when one approaches the sites, dimming when one recedes.

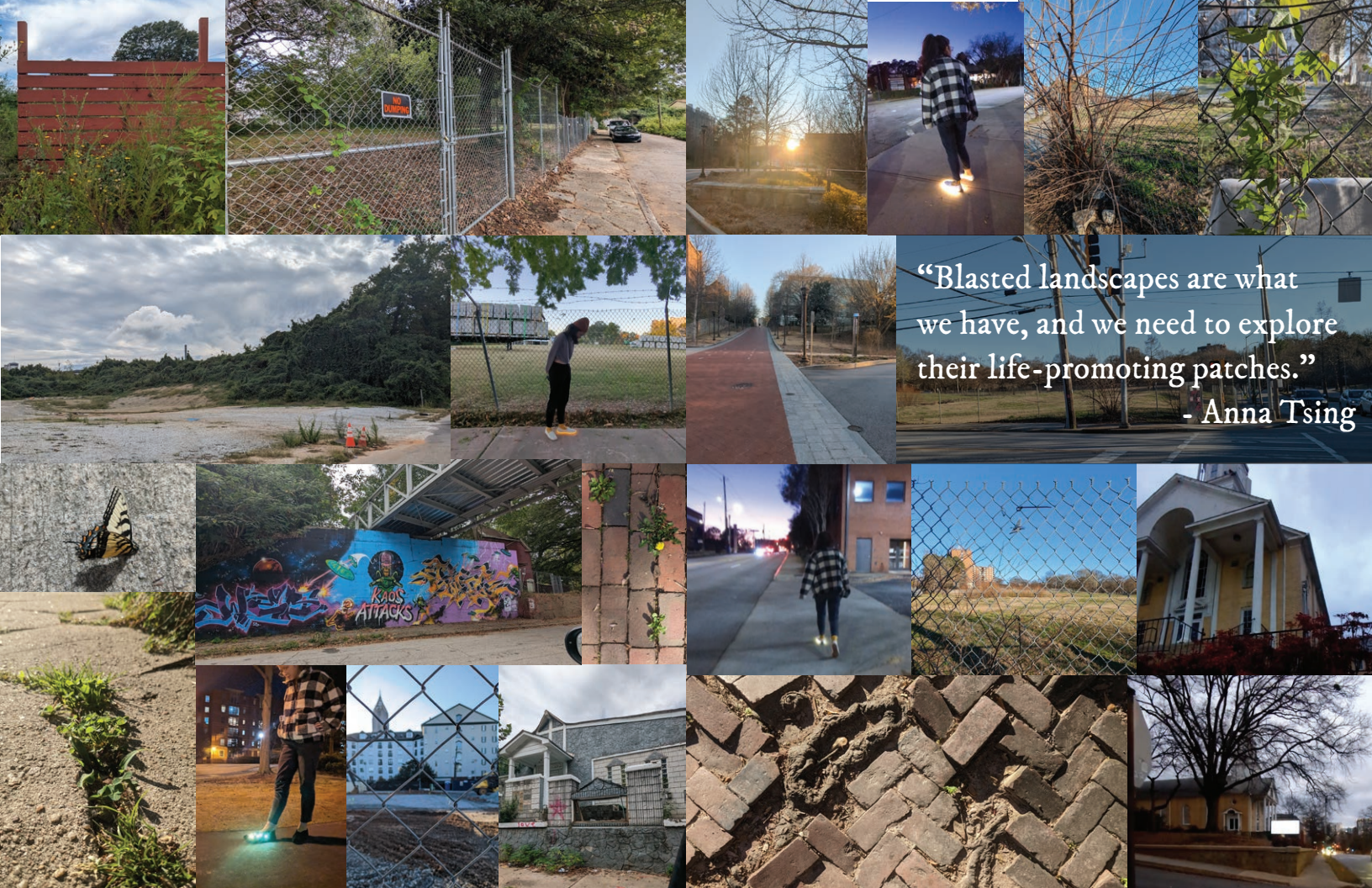

The shoe references spatial locations of hazardoues waste sites, Superfund sites, and brownfield sites in Atlanta neighborhoods, available through the EPA's EnviroAtlas.
North Druid Hills
Oak Grove
Clarksto
North Decatur
Scottdale
Druid Hills
Decatur
WESTSIDE PARK - BELLWOOD QUARRY
FULTON COUNTY AIRPORT
JOHN LEWIS PLAZA
Atlanta
LIONEL HAMPTON PARK
Gresham Pa
Layer List
Layers
Hazardous Waste Sites (RCRA)
Superfund Sites (SEMS)
Brownfield Properties (ACRES)

Alongside the shoe is a fictionalized navigation guide, which serves as a world-building tool that articulates the "mythology" of Ray-Flats, positioning it in a near but alternative present world centered on environmental illness experiences. The story describes a community of people, known as the Sensitives, who lead efforts in charting safe paths through a deeply contaminated city and build tools to navigate toxicity.





The project aims to highlight both the lived reality of people with environmental illness, in which feeling and negotiating pollution is always already a part of daily life, while foregrounding their embodied knowledge in navigating toxicity, sensing precarity, and "staying with the trouble" of living in a polluted world. At the same time, these lived experiences offer hope: they continue to find liveable paths and patches even in a deeply polluted world.


NO DUMPING
"Blasted landscapes are what we have, and we need to explore their life-promoting patches."
- Anna Tsing
KAOS ATTACKS

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