

Environmental Racism in Death Alley, Louisiana
Submission to the UN OHCHR

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Forensic Architecture
Goldsmiths, University of London
London SE14 6NW
United Kingdom

T+44 (0) 20 7078
5387

[www.forensic-
architecture.org](http://www.forensic-architecture.org)

About Forensic Architecture

The following submission summarises research conducted by [Forensic Architecture](#) (FA), an investigative research agency based at Goldsmiths, University of London. Since 2010, FA has developed original and ground-breaking investigative techniques and deployed them in over 70 bold and impactful investigations. We work in partnership with communities affected by human rights violations and state violence, alongside leading [media](#) outlets, activists, legal teams, and [NGOs](#) including Greenpeace, Amnesty, Bellingcat, and Human Rights Watch. We have provided spatial research and evidence for numerous human rights investigations and prosecutions under international law, including at the UN General Assembly in New York in October 2013 and the Human Rights Council in Geneva in 2014 ([on drone warfare](#) via the UNSRCT).

Context

In the US state of Louisiana, along 85 miles of the Mississippi River between Baton Rouge and New Orleans, a region known as the Petrochemical Corridor overlays a territory formerly called 'Plantation Country'. By the time slavery was abolished in 1865, more than five hundred sugarcane plantations straddled the river. Today, more than two hundred of these fallow plantation sites are occupied by some of the nation's most polluting petrochemical facilities. Residents of historic, majority-Black 'freetown' communities that grew from the ruins of former plantations are today's 'fenceline' communities that breathe some of the most toxic air in the country and suffer some of the highest rates of cancer, along with a wide variety of other serious health ailments. Residents call their homeland 'Death Alley'.

As the petrochemical industry poisons the air of local residents, they crush the remains of their ancestors, who were buried on those same grounds. Sugarcane was historically the most dangerous crop to cultivate. To accommodate a negative demographic growth rate among the enslaved population, each plantation established at least one, and sometimes as many as three cemeteries for its enslaved population. The majority of these burial grounds were omitted from historical maps. Over the decades, all outward traces of many of these cemeteries have been erased. On rare occasions, cemeteries resurface – when petrochemical corporations break ground on new construction sites. For generations, Black descendant communities have held fast to knowledge of their ancestral sites against the white supremacist tide of erasure. Today, they search the ground for evidence of these sites' locations – but are denied access by private landowners.

In September 2020, RISE St. James, a fenceline community activist group based in St. James, Louisiana, and the Center for Constitutional Rights, their legal counsel, commissioned Forensic Architecture to develop a predictive method for identifying the locations of antebellum Black cemeteries *before* industry breaks ground and to gather evidence in support of their claims for corporate accountability and reparations. Our multifaceted investigation¹ draws focus to elements of the climate of racism that linger just beyond the threshold of visibility: the lethal chemical agents that pervade the air, and the traces of erased Black cemeteries that cling to the surface of the earth.

Investigation: Air

Louisiana's air emissions standards are among the lowest in the US.² According to ProPublica, the state 'does not regularly monitor air near major polluters like other states... [and w]hile the EPA considers the effect of a variety of chemicals, taken together, Louisiana only looks at one chemical at a time, potentially undercounting the true effect on air quality.'³ Working with researchers from the Department of Mechanical Engineering at Imperial College London, FA developed a fluid dynamics

¹ <https://forensic-architecture.org/investigation/environmental-racism-in-death-alley-louisiana/>.

² Tristan Baurick, "Welcome to 'Cancer Alley,' Where Toxic Air Is About to Get Worse." *ProPublica*, October 30, 2019, <https://www.propublica.org/article/welcome-to-cancer-alley-where-toxic-air-is-about-to-get-worse/>.

³ *ibid*.

simulation to track the spread of a range of airborne pollutants from three dozen facilities and over dozens of communities along the Mississippi River under simulated meteorological conditions, drawing on ten years of data from a local weather station. Our simulation reveals the scale and concentration of chemical gassing of communities throughout Death Alley.

The saturation of Black descendant communities with toxic and criteria air pollutants is sanctioned by local and state authorities. In 2014, the governing council of St. James, Louisiana, passed a comprehensive plan that wrote off the district's majority-Black communities – the hometowns of our partners with RISE – as 'industrial' and 'existing residential/future industrial' sites.

Investigation: Ground

During the first half of the 19th century, in the lead-up to the American Civil War, colonial land grants were rapidly consolidated into industrial plantations spanning thousands of acres and worked by hundreds, and sometimes thousands, of enslaved people. The vast scale of industrialised agriculture necessary for the profitable cultivation of sugarcane laid the ground for the region's spatio-economic transition to industrial petrochemical production.

While most cemeteries were left unmapped, when we do find them (whether because they are known to local residents, located by sympathetic archaeologists, or stumbled upon during the course of industrial development), they appear at first to exist where one would least expect them: isolated in seas of cultivated sugarcane fields. Through our research, we have analysed the racist spatial logics that led to this peculiar siting, their general omission from the cartographic record, and their subsequent topographical erasure over time.

FA sourced and interpreted a collection of primary source documents spanning 300 years, discerned and analysed plantation spatial logics, and built a platform that 'mosaics' and 'anchors' aerial imagery and maps, enabling us to track the reconstruction of the land according to racist, profit-oriented principles. We began with a 1719 chart of Indigenous territory used by colonists to prefigure the genocidal dispossession of the region's original inhabitants. From there, we identified US Coast Surveys from 1877-78, Mississippi River Commission charts from 1894, and aerial imagery spanning seven decades, from 1940 to the present.

The spatial logics of the plantation also dictated the siting of Black cemeteries. Slave masters would not sacrifice valuable land for Black cemeteries. Enslaved people were thus interred in uncultivated lands at the back of the plantation, at the edge of the cypress forest. Denied headstones, enslaved people sometimes planted trees to mark the graves of their loved ones, retaining a pan-African tradition of cultivating 'sacred groves'. As plantations expanded from the mid-1820s until the Civil War, cemeteries became islands of trees and vegetative overgrowth, isolated amid seas of sugarcane. Such clusters of trees or uncultivated patches of land are referred to by archaeologists as 'topological anomalies'.

Our platform enables us to travel back and forth in time and identify anomalies that were present in 1940 but subsequently erased by agricultural or industrial development. We identified close to 1200 anomalies in the 1940 aerial images; by 2021, only around 350 of these remained.

Still, many sacred groves are likely to have been topographically erased prior to the earliest aerial photography of the 1940s. In the absence of photographic traces, we determined that we could estimate the probable locations of cemeteries by combining multiple factors of 'plantation logics' drawn from our cartographic analysis. We created a 'field of probability' that local residents can use to help narrow their search. Anomalies that fall within redder areas of the field have a higher probability of being unmarked antebellum cemeteries.

In order for possible cemeteries to be confirmed, residents must work with archaeologists and human rights advocates to conduct ground surveys. Yet they are impeded by competing and superseding property rights of majority-white landowners (many the descendants of slave masters) who wish to sell their land to industrial developers. The recovery of ancestral sites thus faces an inherent conflict of interest that can only be overcome through public advocacy and legal overhaul in line with the

Durban Declaration and Program of Action. Local residents are beginning to use our research to recover these sites, demand access to possible sites, and demand radical legal overhaul that would place Louisiana state and US federal law in line with the goals of the DDPA. We are now in the process of building a public platform that will place our research at local fingertips, in support of longstanding local efforts to protect ancestral sites and demands for a moratorium on the further expansion of the Petrochemical Corridor.

A summary of our investigation and a 35-minute investigative video are available online: <https://forensic-architecture.org/investigation/environmental-racism-in-death-alley-louisiana/>.

The full report on our sources, methodology, and findings is enclosed.

Some elements of our research were reported on by The New York Times: <https://www.nytimes.com/interactive/2021/06/27/us/louisiana-graves-enslaved-people.html/>.

Please do feel free to reach out to me or my colleagues with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'IJBrown'.

Imani Jacqueline Brown
Researcher, Forensic Architecture

For more information, please contact:

Imani Jacqueline Brown, Project Coordinator, ijb@forensic-architecture.org
Samaneh Moafi, Project Coordinator, sm@forensic-architecture.org
Eyal Weizman, Director, ew@forensic-architecture.org