Paradigm Shift: Making Paper That Navigates What It Means to Live in Southern Louisiana Now

HANNAH CHALEW

Detail of Flotant. **BELOW:** *Hannah Chalew,* Flotant, *2020, 76 x 48 x 34 inches, metal, sugarcane, disposable plastic waste, soil, living plants, iron oak gall ink, ink made from shells. Photo: Jonathan Traviesa. All photos courtesy of the artist.*

I grew up in New Orleans in the 1990s and can remember being told in high school that Louisiana was losing a football field of land to the Gulf of Mexico every hour. But as a teenager this statistic felt abstract and easy to ignore. Fifteen years after high school, after Hurricane Katrina, and after a general global acceptance of climate change and its realities, I found myself living in Detroit with my husband, trying to convince him to move back to my hometown, a city below sea level in a time of global warming.

In 2017 I prevailed upon my husband and we returned to New Orleans. With fast-rising sea levels and ever stronger hurricanes barreling through the Gulf, I decided to devote my art practice to exploring how southern Louisiana reached this precarious situation and create art that helps inspire a livable future. Papermaking has become an integral part of that journey.

In 2018, I participated in Fossil Free Fest (FFF), a festival that explored the ethics and complexities of accepting fossil-fuel philanthropy to fund art and education. In New Orleans, mega fossil-fuel companies fund art and education to "wash" their reputations and give themselves a social license to operate.[1] At the Audubon Aquarium in downtown New Orleans, the main fish tank incorporates the base of an oil rig, positing for generations of children that this structure is an ideal and natural habitat for our Gulf ecosystems. This tank is flanked by prominent branding of fossil-fuel companies. Louisiana prides itself on being an oil-and-gas state, and these industries have made themselves seemingly inextricable from our economy and culture. As Louisianans find themselves on the bleeding edge of both the causes and effects of global warming, FFF was a place to have these difficult conversations and collectively envision a new way forward.

As part of FFF, I participated in the "Toxic Tour" through Cancer Alley, the nickname for the industrial stretch of petrochemical infrastructure along the Mississippi River between Baton Rouge and New Orleans, where residents suffer higher-than-average rates of cancer and illness.[2] This tour connected the legacies of enslavement with our current petrochemical age. Many of the

communities in this region, once home to plantations growing sugar, cotton, and other crops with enslaved labor, were founded by formerly enslaved people. In between these communities, there are a few plantations preserved as tourist attractions, and fields of sugarcane still being farmed. Looming over the landscape are hulking industrial petrochemical complexes letting off flares, polluting the homes of mostly poor descendants of freed people of color. The legacy of capitalism and white supremacy continues to exploit and extract resources from the land and the people.

This tour has had a profound and lasting effect on me and my work. Growing up in Louisiana, what I learned about enslavement was sanitized and whitewashed. I was taught that the fossil-fuel industry was an inseparable part of our landscape. Living downriver in New Orleans, my health risks from fossil-fuel pollution are less acute, but I wanted to make work that would draw attention to these issues and raise awareness that everyone in southern Louisiana is ultimately bound in one networked ecology. I began to volunteer with environmental-justice groups in Cancer Alley and in New Orleans, and started to integrate these historical legacies with our current realities in the making of my work.

Inspired by FFF, I have sought to divest my studio practice from fossil fuels as much as possible by choosing recycled, free, and sustainable materials; powering my artworks and studio practice with renewable resources like solar power and rainwater collected by my solar cart;[3] traveling by bike to and from my studio; and not accepting fossil-fuel funding for my work.

The materials I am now using are also specific to this landscape and cultural history. After learning that paper was made from sugarcane in Louisiana in the 1850s,[4] I explored the possibilities of combining sugarcane—a staple chattel-slavery crop and also one of the most dangerous crops for enslaved people to harvest and process—with plastic, which is produced from the toxic materials refined in Cancer Alley. Sugarcane is still a major crop in Louisiana, and bagasse, the waste product of sugarcane refining, is easily available for free. Similarly, given plastic's ubiquity as street litter in New Orleans, plastic waste is a renewable resource. I collect plastic litter around my studio both to use in my papermaking and as a micro-act of ecological citizenship. I ferment the bagasse with lye for a few months in the Louisiana heat, pulp it, and then combine it in the vat with shredded single-use disposable plastic waste. I call this paper "plasticane," and it embodies one of the most thrilling aspects of papermaking: its capacity to combine different fibers in water to alchemically create a new amalgam material. This paper itself holds the past and present of our landscape.

The drawings I create on the plasticane paper are both beautiful and dystopian. Plants and abandoned infrastructure intertwine and hybridize, creating a vision of a future that might exist if we fail to change course and do not hold these industries accountable. The drawings need to be quite large to accommodate this imagery on the rough surface of the plasticane paper, creating a bodily relationship of viewers to the drawings, which become landscapes in themselves. As viewers approach the drawings, the imagery breaks down and they begin to understand that the bits of color and shininess amidst the drawing are plastic waste; they may even recognize some of the trash and rethink the whole experience of the artwork and their relationship to their environment.

Hannah Chalew, Becoming with: A rhizomatic solar cart, *2019, dimensions variable, metal, wire, plastic, cement, sugarcane, oops paint, soil, Louisiana native and locally adapted vines, LED grow-lights + solar panels, batteries and electrical components, rainwater collection tank, and water pump. Photo: Rush Jagoe.*

Ditch outside a coal export facility in Cancer Alley, Louisiana, where the artist collected fossil-fuel pollution to be processed into ink. Photo: Hannah Chalew.

As I honed the plasticane process I started making my own inks from the landscape so that my drawing material can also hold the specificity of place. I made a dark-sepia iron oak-gall ink from galls found on Louisiana live oaks around New Orleans, some of which are centuries old. I also made a white ink from ground-down sheetrock salvaged from dumpsters around the city. For the past two years I have collaborated with Ms. Gail LeBoeuf, an activist in Cancer Alley, to make an ink from fossil-fuel pollution. Ms. LeBoeuf co-directs Inclusive Louisiana (IL), a grassroots community advocacy organization dedicated to protecting St.

Hannah Chalew, Embodied Emissions, *2020, 61 x 92 inches, iron oak gall ink, ink made from shells on paper made from sugarcane combined with shredded disposable plastic waste ("plasticane"). Photo: Jonathan Traviesa.*

James Parish and neighboring parishes from harmful industrial pollution. With her guidance, I identified a coal-export facility where coal runoff is visible in the ditches alongside it. I created a cool-black ink from this waste material, which unfortunately is another renewable resource in southern Louisiana. I received grant funding that allowed me to directly support IL in honor of Ms. LeBoeuf's help on this project.

Throughout my paper explorations I have been developing a sculptural technique combining sugarcane, lime, plastic waste, and recycled paint to create orb-like forms that act as planters for Louisiana native plants. I weld structures from recycled plumbing pipes—riffing on the language of pipelines and other industrial infrastructure—to connect these orbs into outdoor installations that are meant to, both literally and metaphorically, shift the viewer's perspective as they explore them. Recently I have combined this sculptural language with the plasticane paper into stand-alone 3-D forms I refer to as "sculptural-drawings." These works are built from pipes that support the orb planters out of which sprout living plants, as well as paper drawings of plants and infrastructure colliding and metamorphosing. The paper elements are drawn on and cut so that they react to gravity, mimicking the reference plants on which the drawings are based. I am also casting the drawings over chicken wire to create paper pipes, which further blurs the lines between 2-D and 3-D, living and dead, natural and manufactured. These forms look as though they are balancing precariously and floating in space. They are

Ms. Gail LeBoeuf (right) and Hannah Chalew with the banner the artist created for Ms. LeBoeuf's organization, Inclusive Louisiana, using the fossil-fuel pollution pigment.

inspired by the flotant,[5] a form of marsh endemic to Louisiana that is not anchored in the soil beneath but instead can rise and fall with the water level. My sculptural drawings draw on this natural adaptation as a model for how we can coexist and change with the Earth as seas rise and things get hotter. Living plants thrive in these works and also act as a reminder of the resilience of plant life: they will be here even if we are not.

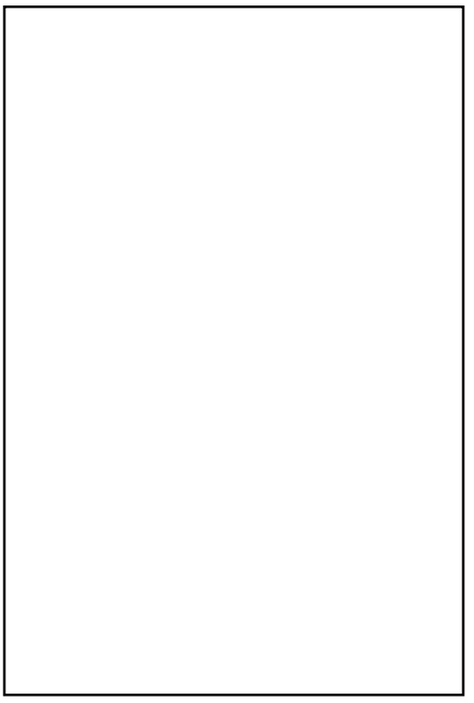
Hannah Chalew, Tremblante, *2021, 72 x 48 x 60 inches, metal, sugarcane, plastic, lime, recycled paint, living plants, soil, paper made from sugarcane combined with shredded disposable plastic waste ("plasticane"), iron oak gall ink, ink made from shells. Photo: Jonathan Traviesa.*

Hannah Chalew, Petroplexus, *2019, 108 x 132 x 2 inches, iron oak gall ink, ink made from shells, on paper made from sugarcane combined with shredded disposable plastic waste ("plasticane") over rebar. Photo: Jonathan Traviesa.*

I engage with unlikely materials to help shift the viewer's perspective both on our role on the planet and on the paradigm of the extractive industries as an inherent part of this landscape. By turning pollution and waste into an art material, I wish to alter our collective perception of what our world looks like and what changes we can make individually and societally so that we can imagine together the future we want our children to inherit. I am immensely inspired by the Black women activists of Cancer Alley (including Ms. Gail LeBoeuf) who have been rising up, fighting petrochemical expansion and pollution, and winning—all the while showing that Black bodies will no longer be seen as disposable. I dedicate this article to those brave leaders blazing the trail for the fundamental changes we all need to fight for.

NOTES

1. *"About Fossil Free Fest," https://www.fossilfreefest.org/fff2020/ (accessed October 31, 2022).*
2. *Tristan Baurick, Joan Meiners, and Lylla Younes, "Welcome to 'Cancer Alley,' Where Toxic Air is About to Get Worse,"* ProPublica, *https://www.propublica.org/article/welcome-to-cancer-alley-where-toxic-air-is-about-to-get-worse (accessed October 31, 2022).*
3. *"Solar Cart" on Hannah Chalew's website, https://www.hannahchalew.com/solar-cart-mainpage (accessed October 31, 2022).*
4. *Lilian Bell,* Papermaking with Plants *(Chelsea, Michigan: Liliaceae Press, 1990), 114.*
5. *Bob Thomas, "Delta Journal,"* Times-Picayune, *March 29, 2008, C-7.*



Paper Sample: Plasticane Paper

HANNAH CHALEW

"Plasticane" paper is a combination of bagasse, the waste product of sugarcane production, and shredded disposable plastic waste, the byproduct of fossil-fuel extraction. This material connects the legacy of colonization and enslavement with the current petrochemical age. Since the time of forced-labor plantations where sugarcane was a staple chattel-slavery crop, Louisiana's people and their ecologies have been extracted and exploited. This capitalist, racist mindset continues into our current era of fossil-fuel extraction, burning, and refining.

Both raw materials for this paper are considered waste products in Louisiana, but I view them as renewable resources. I gather the bagasse from sugarcane refineries that produce mountains of this byproduct, and I collect plastic waste from the urban environment around my studio. To be as fossil-free as possible, I ferment the bagasse with lye in my studio courtyard for several months, instead of cooking it. Regular stirring and the passive forces of heat and time break down the fibers until they are ready for washing. After pulping the bagasse in my Hollander beater, I add 1 part abaca to 3 parts bagasse to strengthen the paper. I also add calcium carbonate, methyl cellulose, and sizing to the pulp. Then, I shred the plastic waste with a paper shredder and regularly add it to a vat of the pulp as I pull sheets. I produce this paper with a 12 x 12-inch mould and deckle. As I couch the small sheets, I overlap and tile them to form large 4 x 6-foot pieces of papers.

I use plasticane paper for both traditional drawings and a three-dimensional technique I call "sculptural drawing." In my work, plasticane holds the history of how we got to this moment in time, and my drawings present a future our descendants might inherit if we don't change course. How can we break these cycles and imagine a livable future for Louisiana and beyond? Through my work with renewable materials from my ecosystem, I offer a paradigm shift on how we can relate to our world.