CNN style

By reviving a century-old patent for blue paint, this architect reflects on a powerful, lesser-told history

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DECEMBER 1, 2024

Amanda Williams has repainted two buildings in New Orleans for the Prospect.6 triennial — but the blue paint she used is years in the making. Tom Harris/Amanda Williams LLC

A century ago, the scientist and inventor George Washington Carver filed two patents related to his new method for making paints and stains from Alabama's clay. He had discovered the iron-rich soil could be used in a chemical reaction with a potassium compound and nitric acid to produce a vibrant blue pigment. It was a familiar hue: Prussian Blue, as it is known, had already changed the course of art history around 1705 when a paint maker in Berlin accidentally discovered its chemistry. It's the same pigment Pablo Picasso used in his melancholic "blue period," the rich hue Japanese artist Hokusai chose for the monumental tides of "The Great Wave off Kanagawa," and the color used in architectural plans that gave "blueprints" their name.

Carver, however, had found a way to readily produce it straight from the ground. Despite his numerous inventions over the course of his life — including his best-known experiments with peanut-based products — this discovery was one of the only ones he patented.

But his paint pigments were never commercialized, and Carver's method became just one of millions of patents forgotten in the archives; his pigments were only seen by those who witnessed it painted around Tuskegee University, the historically Black school where Carver taught, and in nearby towns.

But over the past three years, the Chicago-based artist and architect Amanda Williams has been reviving Carver's blue with the help of researchers and scientists.

"Typically, blue is produced synthetically… but he was able to source that from this ingredient they had in abundance," Williams said in a video call with CNN. "So there was a practicality to it, but there was also ingenuity in figuring out that things around you can yield unexpected results."

An arts building at Xavier University painted in Carver blue. Tom Harris/Amanda Williams LLC

Williams knew that Carver had a lesser-known artmaking practice — he had even exhibited a painting at the 1893 Chicago World's Fair. But she wondered why, out of all of his output, two out of the three inventions he chose to patent were related to pigment-making. (The third was a peanut-based pomade.)

"It just struck me as very strange. Given all the work it takes to receive a patent — especially in that era, (for) a Black man, when they were so often denied — why would he expend all this energy on paint?" she posed.

Her inquiry took her to Tuskegee's library and the labs of The University of Chicago, the latter where she partnered with chemistry students to revive and update Carver's method to produce the deep blue from clay.

Now, as part of the art triennial Prospect.6 in New Orleans, Williams has painted two architectural structures important to African American history in Carver blue as both a testament to his capabilities and to Black innovation more broadly. The first is an arts building at Xavier University, the only Catholic HCBU — historically Black college or university — which was founded in 1925. The second is a shotgun-style house on the campus of the New Orleans African American Museum, located in Tremé, the oldest Black neighborhood in the country, where Williams notes there is a "lineage" of self-determination. Shotgun houses are modest railroad-style homes that proliferated after the end of the Civil War for African American families.

A shotgun-style house at NOAAM that was known for its pink exterior is now a mix of pink and blue. | Tom Harris/Amanda Williams LLC

The buildings will remain blue through the end of the triennial, and possibly for longer. Tom Harris/Amanda Williams LLC

With Williams having studied shotgun houses during her schooling as an architect, and having family in the South — including a cousin who supplied soil from Montgomery, Alabama, for the pigment testing — she connected “a really beautiful thread” to her own biography in the course of the project, she explained.

Color and race

Williams never expected to find herself in such a deep rabbit hole over Carver’s history — after all, the scientist was best known for his work with agricultural crops. But the two find parallels in an unexpected place: their beliefs of the potency of color within complicated systems of race, power and inequity.

For Carver, color was a tool to beautify the homes of the region’s poorest residents that could be achieved through natural resources. Like with his encouragement of local farmers to enrich themselves by growing bounteous crops (which included soybeans, pecans and sweet potatoes, in addition to peanuts), color was a key component of his plans for autonomy, dignity and prosperity for Black families in the South. He encouraged people to freshly paint their homes in bright colors, and wanted to provide the materials to do so.

Carver may be best remembered for his peanut-based products, but he was a painter as well. GBM Historical Images / Shutterstock

Williams has continued the idea of color as a vehicle for transformation in her home city of Chicago, but she has often employed it to highlight structural inequities. For her project “Color(ed) Theory,” from 2014-16, she painted condemned houses on the historically underfunded South Side neighborhood of Englewood in vivid monochromatic colors pulled from products marketed towards Black consumers — from the bright blue hair product Ultra Sheen to the deep purple of whisky Crown Royal’s packaging. But the colors also had a second meaning, as they resembled the shades on discriminatory government maps of US cities that were used to deny financial services to primarily African American neighborhoods in the 20th century. The practice, known as redlining, had deep effects that have continued to impact struggling communities today.

Williams' previous project, “Color(ed) Theory,” transformed a number of condemned homes in Englewood through paint. Courtesy the artist

The empty homes became sculptural, with a familiar color palette taken from products and services marketed to Black residents, that also spoke to systemic inequities. Courtesy the artist

But for her commission for Prospect.6, titled “In Her Rich Deposits of (Blue),” Williams chose to focus on “signaling joy, and not inequity or disparity,” she said. Part of its buoyant spirit comes from its highly collaborative nature, from researchers at Tuskegee who helped answer her questions, to the chemistry students who painstakingly tested and updated Carver’s methods, to her partners at the location sites who have helped realize the project at meaningful locations. Because the quantity of lab-produced pigments were quite small (Carver originally used large vats heated in the sun over a period of weeks, Williams noted), she also enlisted the help of paint brand Kramer to scale up production.

The triennial will end in February but how long the buildings remain painted are up to institutions, as well as time, as the paint differs from the long-lasting commercial latex types used on exteriors today.

“The expectation was that it wouldn’t last for more than a year, and then you repainted. So that’s why you get that beautiful, distressed color and texture with a lot of structures that have stood over time, but have that weathered look,” she explained. “I don’t expect it to last forever.”

Continuing the work

Thanks to Tuskegee's archivists, Williams has some answers to her questions, but others remain. Why patent the pigment process? Based on the documents they pulled, they inferred that Booker T. Washington, who founded Tuskegee and recruited Carver as an educator, saw the value in monetizing it.

"He was constantly looking for a way to be able to be autonomous," Williams said of Washington. "The idea of starting a company that would then produce this (paint) at volume could potentially be the financial source for being able to do other work."

Williams painting a home for "Color(ed) Theory" in Chicago, which she worked on from 2014-2016. Courtesy the artist

Carver may not have patented other ideas due to prohibitive costs and barriers he may have faced as a Black man, though the exact reasons were unclear. Nor could the archivists say why the paint company Carver and Washington founded eventually failed, though they had many things working against them to carve out a place for themselves in the commercial paint industry, Williams noted.

"It is easy to romanticize the story or to make leaps," she said. "I appreciated that they offered this scenario as an educated guess, as opposed to a definitive answer."

Williams has plans to continue the work and research, and keep associating Carver with the blue he found a novel new way to produce. She has thought about the artists who have become synonymous with particular shades, such as Yves Klein and International Klein Blue (or Anish Kapoor's controversial exclusive license of Vantablack).

"I'm making sure that he's elevated into the conversation, even if it's a different way that he was approaching the idea of color and pigment," she said.

"I find it very beautiful that despite his fame and the notoriety as a scientist, at his heart, he was a painter and an artist, and so this was equally important," she added.