

Art & Science Collide:

How the Intersections of Art, Science, and Culture
Shape Our Future

Alexis Childress

Process/Methodology:

1. Defining the Problem
2. Making Observations
3. Forming a Hypothesis
4. Case Studies
5. Drawing a Conclusion

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Defining the Problem

Technology and industrial advancements have significantly transformed how we interact with the world, shaping our understanding of progress and innovation. However, these advancements often come with the unintended consequence of reducing people and cultures to data points or resources, overlooking their complexity and humanity.

For Black communities, this has meant exclusion from critical conversations and limited representation in both science and art. As a result, the narratives surrounding Black culture often fail to capture its depth, resilience, and contributions.

The question we face is this:

How can the collaboration of art and science create a future where Black culture is not only represented but central to shaping innovation and narratives?

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What is Technology?

the application of scientific knowledge for practical purposes, especially in industry.

“He begins by questioning what technology truly is, moving beyond the common view of it as merely a collection of tools or machines.

Heidegger argues that the essence of technology is not found in its physical artifacts **but in the way it shapes our understanding and interaction with Being.**”

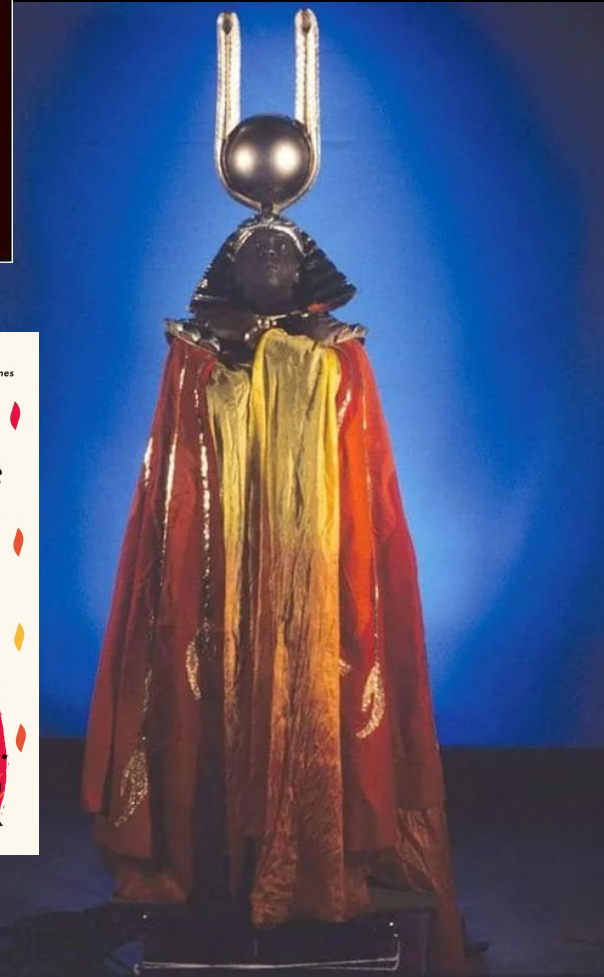
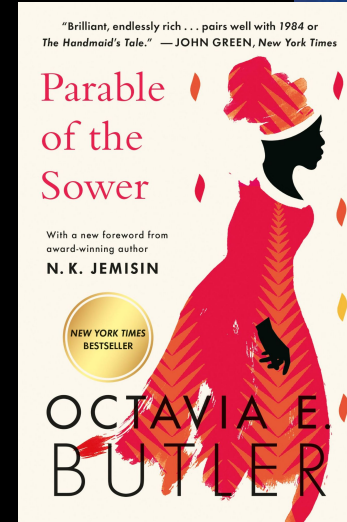
Being: The fundamental nature of existence or reality itself.

Afrofuturism:

Afrofuturism: is a cultural aesthetic, philosophy of science, and history that explores the intersection of the African diaspora culture with science and technology. It addresses themes and concerns of the African diaspora through technoculture and speculative fiction, encompassing a range of media and artists with a shared interest in envisioning Black futures that stem from Afro-diasporic experiences

Relaying back to Heidegger's definition of technology, sci-fi and afrofuturism create a context where technology becomes less about the mechanics and transforms into a medium for storytelling. It is a context where the technology is important but it is more about the way the tech is influencing the lives of the characters, their views on reality and how they interact with each other. Storytellers like Octavia Butler, challenge us to see Black identity not as something static but as deeply connected to the future.

Although it is a more artistic approach, building that psychological connection between the Black culture and scientific advancement, has seemed to pave way for a more scientific approach to integrating Black culture into the future of the Modern Era



Modernity

Modernity: A historical period marked by significant technological and industrial advancements, which has profound effects on culture, philosophy, and the way humans relate to nature and each other.

Heidegger critiques modernity for fostering a limited understanding of existence.

For Black culture, claiming space in this modern era is crucial. It's about ensuring that the tools shaping our future also reflect our past, our present, and our aspirations.

- Using technology to create databases and visualizations of Black history/culture. (The Colored Conventions Project, expansive database of Black History)
- The Code my Crown Campaign (instructional guide for coders and developers to code more diverse, true-to-life, depictions of Black hairstyles in 3D.)
- Studies on how to make AI algorithms more inclusive and accurate with people of color. (Health algorithms - Ruha Benjamin, AI algorithms)
- African Space Industry Initiatives (African Nations collaborate on satellite tech to address local challenges and support community)

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Modernity:

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Modernity and Afrofuturism offer contrasting but complementary perspectives.

Modernity often emphasizes industrial and technological progress but can alienate and exploit. Afrofuturism counters this by imagining futures where marginalized voices are central to progress.

Combined, modernity and Afrofuturism offer a powerful framework:

Modernity (science) provides the tools and structures to innovate.

Afrofuturism reclaims and reshapes these tools, recentring humanity and diversity.

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Hypothesis:

The collaboration of art and science has the potential to shape technological futures by integrating Black culture and aesthetics into the foundation of innovation. This integration can challenge biases, promote inclusivity, and redefine narratives, ultimately fostering a more equitable representation of Black experiences in media, institutions, and technology itself. By leveraging the transformative power of Afrofuturism and technological advancements, we can create tools and spaces that accurately reflect the diversity and resilience of Black culture, ensuring it becomes a central element in shaping the human experience.

Hypothesis Support

- Art and technology have historically influenced social change.
- Our relationship with technology directly affects our perception of reality, identity, and humanity.
- Representation matters—when technology includes diverse voices, it creates opportunities for authentic storytelling and cultural understanding.

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WORLD
WITHOUT
END

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GEORGE
WASHINGTON
CARVER
PROJECT



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CONTEMPORARY ARTISTS AND
HOLOGRAPHY
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in the early
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reversible our
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who fight ag
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PST Art & Science Collide Exhibition

The Getty: Holography
Exhibition

Deana Lawson

Black Gold (“Earth turns to gold
in the hands of the wise” Rumi)

Looking at the idea of sustainability,
Lawson uses the technology of
holographic art to embed a ghostly
figure into the photograph of a street
vendor.

This use of technology shapes a
compassionate perspective on what
Being means for this community.
Finding a balance between Poiesis and
Enframing. Both perceiving and
exploiting reality.





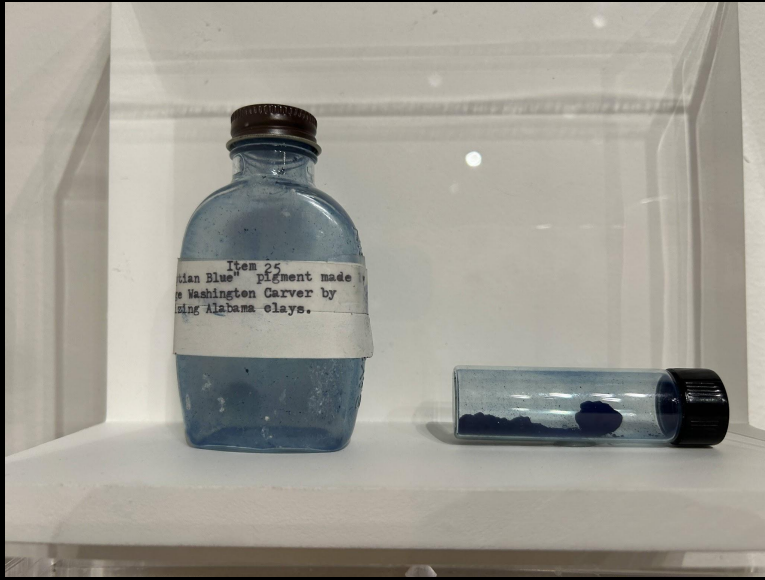
Deana Lawson

Torus, 2021

Boombox, 2020







Naming the color Egyptian blue relates to the ancient processes our ancestors used to make color, acknowledging both losing and finding tradition, bringing us back to the idea that technological innovation can foster limitations.

While the beauty and endurance of the color becomes a metaphor for the resilience of African American culture through centuries of oppression. Telling a story that is both scientific and narrative.

“This blue pigment is the result of some chemical gymnastics... Artists delight in it because of its reach. Egyptologists have manifested special interest in it because they believe it represents the rediscovery of a lost process of making colors employed by the ancient Egyptians... Such a color was found in the the tomb of King Tut when it was opened a few years ago, and it was still just as bright and fresh as if it had been newly applied. The centuries have take nothing of its beauty.”

-George Washington Carver



Once Upon a Garden, 2022 Linda Dounia Rebeiz

This is a machine generated AI video trained on now-extinct African botanical specimens. This artist uses technology to critique the Western-centric biases of Large Language Models and data-centric softwares such as DALL-E.

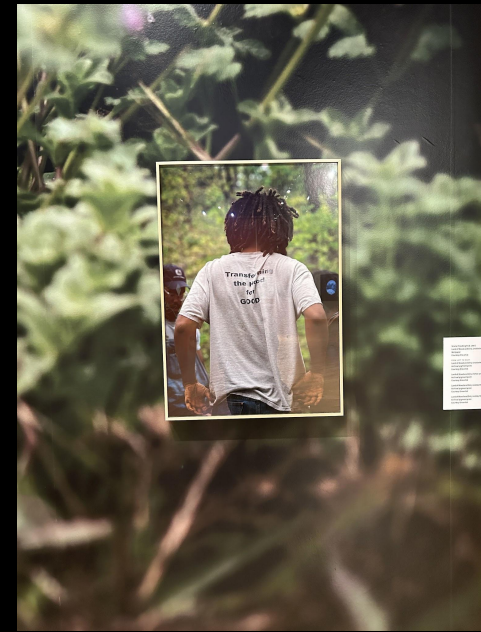
She is using AI to bring to life extinct flowers from her native African region, Sahel. Creating conversation about the erasure of culture, colonization, and the effects of ones environment.

By insisting historical African botanical data be included in future AI research, the artist is successfully using the intersection or art, science and technology to ensure African American history is integrated into our future

Sheila Pree Bright

Land of Blood and Dirt
Series

CAAM: George W. Carver Exhibit



Bright documents the current back-to-the-land practices in various Black farming communities in Georgia. This work highlights the systematic discrimination of the Department of Agriculture, resulting in Black farmers losing 90% of their land from 1910 to 1997.

This work is at the epicenter of art and science.

By celebrating the botanical achievements of Black farmers, Bright is able to make dramatic images that evoke compassion and humility while bringing attention to the systematic oppression and environmental obstacles.

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Conclusion:

The collaboration of art and science reveals a profound capacity to reshape the narrative of Black culture within the future of innovation.

Afrofuturism serves as a beacon, transforming technology from an assortment of mechanical parts, into a vehicle for storytelling that prioritizes humanity.

While, initiatives like AI-driven projects, and digital archives demonstrate how the interplay of science and creativity can reclaim space for Black voices, embedding them deeply into the fabric of the future.

The combination of these two aspects with artist like Deana Lawson and Sheila Pree Bright is the key to bridging the gap between the art and the science of cultural understanding.

This analysis reveals the future of innovation is not solely in the hands of technological advancements, but in how we use those advancements to reflect and amplify the richness of all cultures.

