



BGC Teen Voices: Spotlight on Contemporary Designers

**Phoebe Cohen
Hyphen-Labs**

HYPHEN-LABS BY PHOEBE COHEN

Hyphen-Labs is an international collective of artists and scientists striving to produce relevant and inclusive technology. Its members are multi-disciplinary, with backgrounds in architecture, digital art, and neuroscience, each contributing to a broad range of projects utilizing fashion, cosmetics, and technology. Many of their projects are tailor-made for black women, such as the Octavia Electrodes: small electrodes that are directly woven into braided hair extensions. While marketing towards a



Octavia Electrodes from the Hyphen-Labs NSAF project

marginalized demographic is certainly a bold move, especially considering that investors are often white men, Hyphen-Labs intends to broaden the world of virtual reality (VR) and wearable technology. As collaborator Ashley Baccus-Clark states, “instead of having to modify products to fit our experiences or not being able to use them, [we came] at this from the perspective of a product designer, and really design with our needs and our narratives at the center,” referring to her consideration of black women as an audience of VR products.¹ By designing objects that directly oppose the pre-existing technology made by and for white consumers, this collective hopes to expand the audience of modern consumer technology. Even though big tech companies are doubtful about the potential return on investment in these unconventional and seemingly limited products, Hyphen-Labs is exploring alternative sources of funding and encouraging other companies and designers to do the same. They insist that the world of wearable technology and VR cannot remain exclusive, and they hope to be at the forefront of that change.

One notable project from Hyphen-Labs is the facial recognition-scrambling scarf, a piece of wearable

technology that scrambles facial recognition systems when placed over the user. According to their website, it is “a new kind of camouflage that aims to reduce the confidence score of facial detection and recognition by providing false faces that distract computer vision algorithms.”² Essentially, the scarf protects the



HyperFace from the Hyphen-Labs NSAF project

identity of its users, which can be useful in protests and demonstrations as well as in other potentially dangerous situations. This scarf is the perfect example of an artistic and technologically sound piece that helps the people ignored by larger corporations.

Perhaps their most famous piece is NeuroSpeculative AfroFeminism (NSAF), “an award winning three-part digital narrative that sits at the intersection of product design, virtual reality, and neuroscience.”³ Premiering at the Sundance Film Festival, this project allows the viewer to enter a futuristic barbershop, or “neurocosmetology lab,” in the body of a black girl getting a new hairstyle. According to neuroscientist and co-creator Baccus-Clark, “we’re giving you an



NSAF Experience Unit from Hyphen-Labs

unadulterated view of what it's like to go into the beauty salon, into this beauty ritual. I don't really like the word empathy, but it can give you a sense of just paying respect to a culture.”⁴

Many of the projects produced by Hyphen-Labs are grounded in a politics of care. That is to say that they are intended to protect their users in some form. For instance, the artist Michelle Cortese worked on a pair of earrings with audio and video recording capabilities designed to record police misconduct or other altercations. Additionally, Hyphen-Labs focuses on spreading environmental awareness and creating renewable sources of energy, such as moss voltaics. This project embraces an emerging technology called biophotovoltaics (BPV), which uses photosynthesis to generate electricity. “When the moss photosynthesises it releases some of these organic compounds into the soil which contains symbiotic bacteria. The bacteria break down the compounds, which they need to survive, liberating by-products that include electrons.”⁵ Moss voltaics are easy to create at home, using only a plant, an anode, cathode, and cathodic catalyst, and allow energy production to be derived from natural processes, an invaluable concept in an era of environmental crisis.

The fashion industry alone “makes up 10% of humanity’s carbon emissions, dries up water sources, and pollutes rivers and streams.”⁶ Additionally, 83% of all tech executives are white, and women are less represented in tech today than in 1990.⁷ Hyphen-Labs is actively working to take on the exclusivity and environmental waste of the fashion and technology industries. Their products have received overwhelmingly positive feedback both within their communities and online, and they have been described as a breath of fresh air for those who have been persistently ignored in the world of wearable technology and VR.⁸ It is therefore important to support their efforts, especially as larger tech companies fail to pursue similar projects. Hyphen-Labs represents a much-needed revolution in art and technology, which can only take hold when we as a society realize the value of grassroots organizations.

SOURCES

- 1 <https://docubase.mit.edu/lab/interviews/by-htm/>
- 2 <https://ahprojects.com/hyperface/>
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ABOUT

Phoebe Cohen is a student at Hunter College and alumna of the Bard Graduate Center Lab for Teen Thinkers. She is considering majoring in art history and minoring in chemistry, looking to pursue a career in art conservation or teaching. Her interests include mining, coastal foraging, linguistics, and visual effects.