Paul Vanouse

> interview

Suspect Immersion Center, Photo by Axel Heise
You use the relatively simple and understandable "gel electrophoresis" technique to isolate DNA. Can we say that you use it as a medium (part of what is called bi-media)? And if so, what are the rules the medium imposes?

The DNA image is the most culturally authoritative artifact of our era. In the courtroom it is known as the "gold standard" of criminal identification. While an individual witness' testimony or a photographic image might be questioned, DNA evidence is often understood by jurists as "representing one individual to the exclusion of all others." The authority lies in the misconception that the DNA image is a direct, un-mediated impression of a subject, whereas as soon as this becomes a flexible medium of artistic whimsy the authority becomes void. So yes, I am intentionally signaling that DNA is a(they) "medium" that can be used to create varied types of images. Why I'm so interested in the idea of using electrophoresis and DNA as media of expression is that it forces a material usually referred to as a "subject" to that of a "medium". This being said, the medium does impose some funny rules. While my images sometimes look like ASCII art or bitmap imaging, getting DNA to move at the correct speeds to form images is not so simple. After all, DNA (unlike say human-built media technologies) wasn't created to be a medium of visual representation.

Critic and curator Jens Hauser defined your art as "pedagogically demystifying." Do you agree with that?

Yes, I agree. For instance, most laypeople don't even realize that the DNA image has to be "produced" by adding enzymes to chop it up and/or primers to reproduce small regions of it, etc. Furthermore, most viewers are surprised about the time dimension of the DNA image—the fact that gel electrophoresis images involve DNA bands slowly moving across the gel, a process typically stopped at an arbitrary point when band differentiation is sufficient. The "Relative Velocity Inscription Device" really altered this process by racing DNA across the entire gel and playfully ascribing meaning to DNA's speed, rather than relative position.

Can you explain me why you defined "DNA fingerprint" as a "misnomer"? And in your opinion what are the main conceptual differences with Francis Galton's original concept of fingerprints?

The term "DNA Fingerprint" is (perhaps deliberately) misleading as it leads one to believe that like a real fingerprint (from a finger) it is a direct impression. It is a misnomer because the DNA fingerprint is anything but direct. We do not have DNA Fingerprints in our cells—they are produced in labs and there are thousands of different procedures that could create such images. The inventor, Alec Jeffries, noted that if he'd have called the procedure by a different name "no one would have given a blind bit of notice". Prosecutors and police like it because juries understand how real fingerprinting works and assume that DNA Fingerprinting is just a higher tech version. One FBI forensic man noted "...the term' cements in the mind of a jury that we are identifying one individual to the exclusion of all others."

In the collective imaginary, DNA is the ultimate proof of an identity and the repository of our main hereditary (and so almost unavoidable) characteristics. Do you think that "gene fetishism" will become a socially accepted practice as voyeurism (for example) has already become?

Yes, I do. This was also the contention I built into the aforementioned "Relative Velocity Inscription Device" - that increasingly unpopular racial stereotypes would "go molecular", so that rather than demeaning people based on color of skin, racists could demean certain genes. But for the sake of venturing something that is a bit less expected from me, I think in the next couple years there will be lots more scientific research that undermines DNA determinism. For instance, theorist Hanna Landecker, just gave a talk on my campus in which she described varied large-scale "Relational Biology" research projects that examine things such as epigenetics, stem-cell differentiation, bi-directional signaling, etc. - things that I think may dethrone the reductive idea that DNA is the dictator of all things and may loosen the metaphor of life as code.
In your artwork "Suspect Inversion Center (S.I.C.)" you built a functional public laboratory where historically significant DNA fragments are reconstructed before visitors' eyes using your own DNA. You also did it for the O.J. Simpson DNA saying that you were "reconstructing and thus effectively deconstructing the entire historical documents." What do you think that DNA represents in the collective imaginary after the Simpson case (as in, for example, the popular expression "it's in my DNA")? And why did you create the acronym S.I.C.?

OK, well the acronym was an anagram meant to hint at the project's functional inversion of the American TV series "C.S.I.: Crime Scene Investigation". The contemporary TV series has given rise to a term called the "CSI effect"—hyperbolic portrayals of the omnipotence of forensic technologies that lead to societal misunderstandings of the science. I think we are misled to the accuracy and omnipotence of these technologies. The 1995 OJ Simpson trial however was the first time that such an abundance of DNA evidence by prosecutors was overturned and thus its effect on viewers was the opposite. It showed the myriad potential flaws in all aspects of the DNA fingerprint, from the evidence chain of custody (e.g. who had the blood samples and when), to the lack of defense team access to the evidence, to the privatization of DNA analysis and cryptic rules of interpretation. I also venture that the success of Simpson's DNA experts, Barry Scheck and Peter Neufeld, at dismantling the prosecutor's DNA claims led directly to their later success in freeing wrongly convicted US death-row inmates, using DNA evidence, in their ongoing "Innocence Project" - one of the most important non profit law projects in the US.

You wrote that DNA is a "cultural construct." Do you mean that it has already entered common sense that lacks the requisite scientific background? What is your opinion of the recent Osama Bin Laden murder, where for the first few days the only proof claimed by USA military forces was the DNA test confirming his identity at 99.9% accuracy? Do you also think that the processes matching DNA through databases can be considered as flawed (and why)?

Well, DNA as “a code” is a cultural construct as it takes a pervasive metaphor of code (in the era of the computer), to describe it. But usually what I refer to as a “cultural construct” in my talks is the "DNA Fingerprint"—since it is quite literally and without any refutation "produced" in a laboratory and is certainly not found in nature. In terms of accuracy of DNA tests it completely depends upon the protocol. I can make a DNA fingerprint in which most people can match or one that differentiates to some degree. There are thousands of variations that fit the definition of DNA Fingerprint, each which will have more or less capacity to differentiate certain individuals. In some of the first cases where people were convicted for DNA matches it turned out that there were several people in the same town that matched. FBI forensics say their current protocol can differentiate one from 113 billion, but the few less populated FBI state databases that have been tested each have several matching persons out of less than 100,000. In terms of Bin Laden, I don't suspect a conspiracy, but I can't imagine how such statistics were generated. If there was a relative with a very similar DNA band sequence to the person killed then there is a high likelihood that the person killed was a relative. Hopefully the irony is noted here—if you kill someone in their house there is a high likelihood that their DNA will be similar to a relative, but houses are often filled with relatives. You would have to calculate what the likelihood is that there was another relative, son, cousin, etc in the house. Anyway, I'm not doubting whether or not it was Bin Laden they killed, but the DNA stats sound intentionally naive to population genetics—the field that studies DNA distribution in geographical communities.

In another artwork of yours, "RVID Relative Velocity Inscription Device," you made skin color coding genes from your multi-ethnic family members (of Jamaican descent) perform an absurd race against each other in a gel electrophoresis device to test their "Fitness". Here, you are questioning old and nevertheless still popular concepts like "race hybrid as inferiors." Do you think that a decade of scientific statements about the absence of
scientific basis for race will remain undisputed in the future? And do you think that our concept of the body is more and more based on DNA?

The fact that genome scientists in 2000 proclaimed that there is no biological basis for race, certainly hasn't stopped speculations and titillating articles in the popular press to the contrary, so I don't suppose this will stop anytime soon. But as I mentioned before, racism can now easily go molecular. So for instance when James Watson speak of melanin injections causing "sustained and unprovoked erections" in white college students or when terms like "Warrior Genes" are produced to biologise (Maori) violence, we see a much more insidious racism which is likely to lead to neo-eugenic moments. In the case of Watson's comments, no longer is the black body deemed prone to promiscuity but some black essence in itself, buried deeply in the nucleus of each cell, so we are left to assume this can only be fixed through some type of gene therapy, genetic screening, reproductive donor services, etc.

"Latent Figure Protocol" is an artwork based on electrophoresis through which you constructed simple pixel-like pictures of genetic symbols like the @ or the "skull and bones." Here the relationship between signifier and signified is subverted. Can you explain how and why?

Yes, another question that I'm very glad you asked, but I find tricky to verbalize! The images are intended to cause a sort of short circuit in

the logic of the sign. A typical DNA image is supposed to compose an essence (e.g. "the real you", "the deep truth"), the ultimate signified. My DNA images on the other hand reproduce iconic cultural signifiers associated with the subject's DNA—for instance creating a copyright sign with the DNA of a patented micro organism. So while these are DNA images that are typically supposed to both "be" and also to reveal something deep about "things in and of themselves" or the organisms "real identity", we are confounded by having this image become just an image of something that is neither "natural" nor naturalistic, but an extremely cultural shorthand notation. But I think it is still not simple because the further we get from what is real, natural, etc., in the image itself, the more we are stuck with the fact that this image is composed of the actual DNA that it iconically represents, so it creates a sort of impossible, self-reflexive Borgesian loop. Anyway, I hope that these are some of the sort of conceptual gymnastics that the work facilitates for others.

You defined the Human Genome Project as "neo-eugensics" and the race concept as vacating "its historical locus of the skin, or more broadly the body, and relocate to within our DNA." Can you elaborate more on that?

I have noted before that the original title for the "Human Genome Project" as proposed by Robert Sinhaheimer in the early 1980s was "neo-eugensics". Basically, this was because there have only been two periods of human genetic research—the first called "eugenics", which ran its course by the end of WwII, so neo-eugensics was probably an accurate nomenclature, from his perspective, to define our current endeavors. So I can't take credit for comparing the two as Sinhaheimer made the connection at the outset.

The Fingerprint book is internally split into two blocks of separate pages. There's the classic book block (essays, works, bibliography, etc.) and one that turns out to be a flipbook (of the same amount of pages) with two animations from "Latent Figure Protocol." What is the (semantic?) relationship between the two blocks?

I have to credit Jens Hauser a lot with this book design, as well as Delia Keller, Heike Mertens, Isabel Podeschwa, Linda Stanke and Axel Heise. The book design was very collaborative at every point from its inception, and the sort of double book idea could only happen because people involved at all parts in the process were in constant communication. There are a couple explanations of what is happening in the two blocks. First: the top (flipbook) shows the time-based, performative, nature of the DNA Image that is often misrepresented by the term DNA Fingerprint, which implies a static impression, while the text (classical book) below has a different temporality and explicates, rather than demonstrates. Second, the bottom block is densely packed with formal essays, explaining complex science and nuanced theorization, well foot-noted, in dual languages, with explicatory images, illustrations, etc., while the top flip-book is simply an unfolding image, devoid of explanation or page number. On one side of the flipping page the iconic (perhaps ominous or perhaps playful) image grows from the bright green bands, while on the other it recedes.