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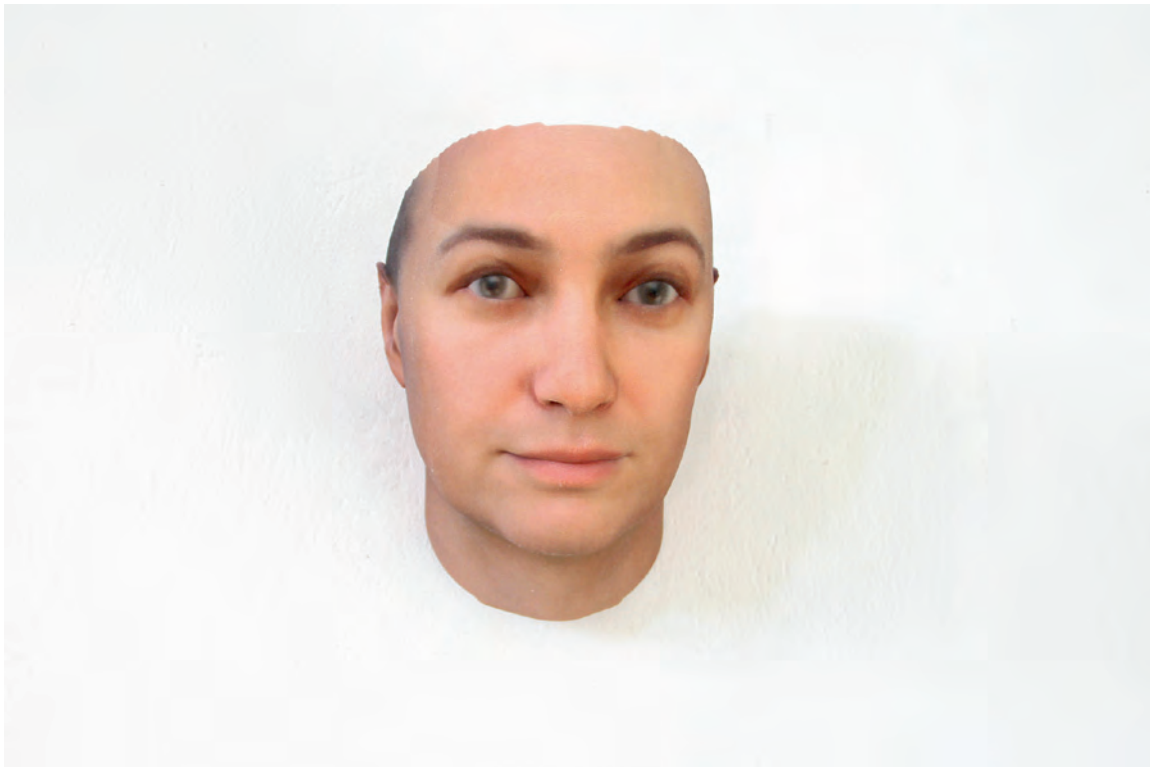
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Élène Tremblay

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STRANGER VISIONS

BY

HEATHER DEWEY-HAGBORG

Heather Dewey-Hagborg, *Sample 4,*
Stranger Visions, 2013.

Reinterpreting Portraiture Through New Forensic and 3D Printing Techniques

In her *Stranger Visions*[1] series, artist Heather Dewey-Hagborg creates heads similar to the death masks of the Middle Ages and the busts of antiquity, but the means she uses and the process behind their making do not imply the same type of gesture or intention. Here, it's no longer a matter of the artist applying her know-how to produce accurate or enhanced representations of society's despots, but of her using genetic material collected in public places to represent strangers. Commenting on the police system and new DNA analysis technologies, Dewey-Hagborg calls attention to this system's disturbing power in the current paradigm of **ubiquitous surveillance** and security.

Many artists have appropriated the technical capabilities of devices to alter their current uses through critical, dystopian or utopian projects. In so doing, they perform "a gesture that is simply a means,"[2] installing devices that reveal their functions, exaggerate, malfunction or parody themselves, and comment on the social systems to which they belong and from which their methods and components are derived.

In her *Stranger Visions* project, Dewey-Hagborg collects hair strands left by people in public places and submits them to DNA analysis. She thus amasses DNA data of strangers who have passed through these places in order to imagine their 3D portraits. In this project, Dewey-Hagborg engages in a process derived from processes employed in forensics, using appropriate laboratory equipment. In this respect, she acknowledges the influence on her work of many crime television series featuring forensic lab specialists. In fact, such series have created a fanciful idea of forensic work, projecting an idealized and fictive image of this field's technical possibilities. One of these series' recurring images, to which the artist refers, is the 3D facial reconstruction of dead people, based on a cast of their cranial remains. There are similarities between the methods used by portrait artists to draw or sculpt faces and those of police sketch artists assigned to render the faces of criminals or missing persons.

In *Stranger Visions*, the sculptor's hand is replaced by a 3D printer supplied with biometric data derived from analyses of the genetic material collected by the artist. Wearing latex gloves and using plastic bags, Dewey-Hagborg first gathers hair strands, cigarette buts, fingernails and chewing gum fallen in public places. The notion of clues that "point to" real sources—characteristic of photographs—is made lit-eral, since it concerns physical evidence like the kind sought in criminal investigations. The artist painstakingly transports the objects collected to a community laboratory for DNA analysis where she can analyze them herself. This means she must acquire scientific knowledge and respect the laboratory methods and protocols.

Once the DNA data is obtained, she isolates certain regions that correlate with physical traits. Using commercially available kits and custom primers, she identifies, for example, the likely colour of a person's eyes, hair, skin, as well as their weight. As concerns a person's facial structure, however, science cannot yet go this far, although the artist points out that recent research can provide some significant indicators. She has written software enabling her to configure a 3D printer to use physical traits to reconstruct faces out of synthetic material that resembles skin. Thus, at the end of a long process, using data extracted from hair, knowledge in genetics and new tools like 3D printers, the portraits of strangers walking in public places may possibly be reconstructed. As the facial reconstructions are based on broad probabilities associated with clues derived from DNA, the final result belongs more to science fiction and prediction than accurate representation.

The artist employs means that appear excessive and tortuous, yet they nevertheless seem to uphold the steps of an artistic tradition founded on initial curiosity, the gathering, analyzing and processing of material, then a process of extrapolation with the goal of creating a representation. Here, the extrapolation is no longer the work of the eye-hand complex, the imagination or drawing techniques, but ensues from methods of translation and data transfer from one system to another, genetic analysis and 3D printing. The many steps the artist undertakes attest to a practice that valorises the process as much as the results.

Mounted on the wall, these portrait sculptures do not bear the faces of emperors of classical statuary, or of popes whose death masks have been preserved, but of common passersby who are unaware of having been the object of such interest. They are not the faces of criminals or victims either, despite the forensic techniques used to reconstruct them; the only "crime" of the bearers of these faces is to have walked in public spaces. No celebrity appears amongst them. They look like the trophies of a strange hunt, meant to depict not the exoticism of animals killed on safari, but the ordinariness of everyone. Their unlikely reconstruction and appearance in the gallery prompt visitors familiar with the artist's work to ask: Are these accurate representations of real people?

The entire process, carried out unobtrusively, emphasizes the significance of traces in an era when the means of policing and surveillance are increased tenfold by sophisticated techniques, and when anyone's simplest actions can be tracked. These are not the traces we unwittingly leave behind in the Web's digital space during our virtual journeys—which we now know are openly available to an invisible monitoring system that disregards the right to privacy—, but the crude body residue we unsuspectingly shed while we move through physical space.

The return to material sources in an era of digital surveillance, as well as the possibility of reconstructing absent bodies based on DNA, stresses the impossibility of eluding surveillance systems and remaining invisible. Even the most negligible body residue can provide significant clues to our identity. Yet this return also draws attention to the role of the body of the artist-investigator, who goes into the field to physically collect the hair. The artist walking in the public space is no longer in search of interesting faces to draw from observation or capture in a photograph, but looks for minute strands of hair, almost invisible if not paying particular attention, from which she hopes to extract useful data. Dewey-Hagborg must bend down and closely examine places and furniture where she is likely to find such body residue. She wears gloves like police investigators, physically examines the premises and collects evidence. The artist's body, like that of the investigator, is augmented by the forensic laboratory equipment and the analytical capabilities of computers used for DNA sequencing.

Biometric and genetic data are collected by police, customs and medical systems. Since the Bertillonage System based on anthropometry and the first police laboratory for criminal identification were set up by Alphonse Bertillon in 1870, the techniques have been refined and new equipment has been developed. The number of tools available for the purposes of surveillance and control has exponentially increased with the advent of the Digital Revolution. These tools are no longer used only to identify suspects, but also to search through all the information circulating on the Web and to scan all travellers in airports and passersby in public places. Thus, the current surveillance system can catch anyone under its radar, compiling data on one's location, appearance and actions. These tools automatically and

Heather Dewey-Hagborg,
Genspace (*DNA laboratory*), *Stranger
Visions*, 2013.

Heather Dewey-Hagborg, *Hair Collection,
Stranger Visions*, 2013.

Heather Dewey-Hagborg, *Sample 2 – Close Up, Stranger Visions*, 2013.

Heather Dewey-Hagborg, *Sample 6-0, Stranger Visions*, 2013.

continuously collect such an enormous amount of data that it can only be processed in the form called *big data*. Search engines, programmed to identify clues and key words, and to cross-reference geolocation and consumption data, scroll through these massive data sets and create diagrams of activity. In these chains of automated operations, human agents work together with the informational machines that carry out the majority of this immeasurable task. The human agents receive alerts, consider the data and sometimes act as interfaces between the physical bodies of the human masses they encounter and the machines that process the data. They handle and collect the bodies, objects and clues from which data will be extracted.

The instruments of analysis used have the ability to reveal and make present what had previously been undetected and invisible.[3] In the case of investigators, what is revealed at the end of the human-machine process is a suspect or criminal while, in the case of Dewey-Hagborg, it is a possible passerby, whose facial representation belongs more to science fiction than to a real reconstruction. Dewey-Hagborg divertsto the policing objectives of forensics and explores its possibilities to satisfy her initial curiosity and uncover the mysterious identities of strangers based on a simple strand of hair found. While appropriating all the stages of forensics, she explores the limits of what biological surveillance can now accomplish and predicts what it could accomplish in the future—namely, the complete facial reconstruction of individuals based on their DNA.

In contrast to the death masks of the Middle Ages and the busts of antiquity, there is no longer a direct imprint of a body or an observation *in presentia* of an eminent face. The face has never been seen by the artist who tries to reproduce it. It is imagined by her and sought through the technological fantasy of forensic means and the scientific fantasy of the power of genetics. By keeping abreast of new genetic discoveries on facial structures, will Dewey-Hagborg succeed in making accurate portraits of strangers who have left their hair in public places?

Élène Tremblay
Translation: Oana Avasilichioaei

[1] *Stranger Visions* by Heather Dewey-Hagborg (2013) won a special mention at Vida 15.0 in the fall of 2013, and was exhibited at Ars Electronica in September 2013.
[2] Agamben, Giorgio. *Means without End: Notes on Politics*. Trans. Cesare Casarino and Vincenzo Binetti. Minneapolis: The University of Minnesota Press, 2000.
[3] Ihde, Don. *Technics and Praxis*. Boston: D. Reidel Publishing Co., 1979.

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Heather Dewey-Hagborg, *Sample 3 – Close Up, Stranger Visions*, 2013.