Chapter 5: Portraiture in the Age of AFR

The second part of this study continues to engage in a cultural analysis of AFR technology, but it does so by focusing specifically on the work of contemporary artists. Bringing the overall analysis into the present, this part explores the ways in which contemporary artworks engage with the topic of facial recognition, both revealing and reimagining the cultural dynamics behind its technology and forms of representation. I have chosen three artists, Thomas Ruff, Zach Blas and Trevor Paglen, whose works contribute to a critical discourse on facial recognition and whose work I have chosen specifically on the basis of its engagement with the socio-political contexts and implications of facial recognition practices. Their works shed light on the role of art as a source of theoretical reflection, and they engage experimentally with the technology of facial recognition. Each builds on some of the critical work of contemporary cultural studies scholars mentioned in previous sections, providing nuanced visual articulations of these scholars' contributions.

In the context of the present study, the work of these three artists supplements the foregoing analysis of the eigenface algorithm (with one artist, Paglen, directly referencing this method in his work). Each artist presents an artistic rendering of the composite form, an extended analysis of the role of the composite form and its relationship to facial recognition. These artistic articulations of the composite echo Wittgenstein's sentiments with regard to composite images: they reject a reductive reading of the images and instead open up a space for perceptual fluidity. Although all three artists articulate critical perspectives on facial recognition, their approaches to the topic contrast greatly with one another. They each approach

the topic through a variety of mediums, a fact that itself reflects the range of meanings attributable to facial recognition and possible responses to this phenomenon. Together they provide a wide spectrum of views on facial recognition and its use in society today.

Growing numbers of artists are working with facial recognition technologies and engaging, more broadly, with the sociopolitical issues surrounding surveillance. Thanks to imagery that allows for a more nuanced and open-ended approach to a topic, artistic engagements with facial recognition technology are able to articulate some of the more complex issues that arise in this area. As the development of AFR systems continues to be, for the most part, guided by the sorts of contexts in which these systems are used, such as policing, the military and marketing, artists engaging with facial recognition technology appropriate the technology and remove it from these original contexts; in doing so, they not only highlight the technology's political and social implications but also imagine alternatives to the use of AFR processes and production.

Art production, being rooted in the relationships of the visual, is in a unique position to articulate the underlying questions of this analysis, which have to do, again, with the forms of visuality on which AFR systems are based and the transformations in cultural meaning associated with their operation. Although the eigenface method produces an image in the course of its operation, most other AFR methods do not. AFR systems and the other forms of machinic vision used in networked surveillance systems often operate in a clandestine fashion and, as such, result in a kind of aesthetic defined by absence, that is, by a lack of images and visual information. For this reason, the artworks that engage with these technologies produce a visibility where there previously was none. Artists such as James Bridle, Omer Fast and Hito Steyerl and the collaborative group Forensic Architecture have addressed these issues in relation to surveillance technologies more broadly.[1] These artists provide a

1 See James Bridle's "Drone Shadow" series, images of which are available at "Drone," James Bridle website, accessed June 3, 2019, https://jamesbridle.com/works/category:drone; Omer Fast's short film 5,000 Feet is the Best (2011), digital video, http://www.gbagency.fr/en/42/Omer-Fast/#!/5-000-

kind of "counter imagery"; that is, they produce images that counter a lack thereof. Their work is imbued with a form of political and social agency that is enacted through this visibility. Artists who address this lack of visibility in surveillance technologies use various strategies to do so, including playing with the visual syntaxes of documentary images, merging the physical world with imagined worlds constructed through virtual imagery. These artistic engagements with contemporary surveillance technologies provide a crucial component that is missing from the academic cultural analysis of AFR and surveillance technologies. They provide images that both problematize and reimagine the use of these technologies. In addition, many artistic works contrast with scholarly cultural analyses of the technology in that they leave the implications and outcomes of these issues open ended and in flux.

At the intersection of artistic intervention and AFR technology is an ability to make visible what may be latent in the technology. As well as an operation of recognition, AFR systems involve an operation of representation. The relationship between these two is unsettled. As I explained in the previous chapter on eigenface, the algorithms used in AFR systems require facial models that are constructed on the basis of training data. These virtual models function as a source of face knowledge for an AFR system. These systems rely on representational mechanisms that structure the knowledge acquisition of the algorithm. These representational mechanisms are related to a discourse to do with the representation of faces in the art historical genre of portraiture. Art curators have noticed this relationship. Curator Cornelia Kemp argues that the facial representations found in AFR processes are particularly connected to a cultural history of photographic portraiture. She explains,

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Feet-is-the-Best/site_video_listes/88; Hito Steyerl's video *How Not to Be Seen: A Fucking Didactic Educational .MOV file* (2013), digital video, https://www.artforum.com/video/hito-steyerl-how-not-to-be-seen-a-fucking-didactic-educational-mov-file-2013-51651; and Forensic Architecture's video Drone Strike in Mir Ali (2013), digital video, https://forensic-architecture.org/investigation/drone-strike-in-mir-ali.

> researchers of facial identification have produced a veritable arsenal of alienated photographs using superimposition, collage, reduction, and abstraction in an effort to divulge the secrets of human face perception. The astonishing findings […] lead back to the metamorphoses of the portrait in art.[2]

Researchers and developers reference methods of art historical practices of portraiture. In addition, artists reference scientific practices of representing the body. Curator Louise Wolthers describes a strategy, connected to photographic portraiture, adopted by contemporary artists engaging with AFR technology when she states:

> The reduction of the unruly, material body to an unambiguous representation is a practice in which analogue photography has played a major role, and in which new digital – and camera-less – technologies perpetuate. Works by artists […] emphasize this by rematerializing or disrupting this form of representation.[3]

Artistic engagements with AFR technology continue a metamorphoses of forms of portraiture practice in the digital age, while also examining how these shifting representations of the face relate to contemporary notions of identity.

Phantom Portraits

Before I enter into an analysis of specific artistic engagements with AFR, I would first like to discuss more broadly the genre of portraiture and its relationship to notions of representation and recogni-

2 Cornelia Kemp, "The Other Face," *The Other Face: Metamorphoses of the Photographic Portrait*, ed. Cornelia Kemp and Susanne Witzgall (Munich: Prestel Verlag, 2002), 13. [8–13]

3 Louise Wolthers, "Introduction: Watching Europe and Beyond – Surveillance, Art and Photography in the New Millennium," in *Watched! Surveillance, Art and Photography*, eds. Louise Wolthers, Dragana Vujanovic, Niclas Östlind, (Köln: Walther König, 2016), 18.

tion. Portraiture as a genre in art history involves a representative depiction of a person and focuses on the face as the central theme. Historically, the subject was often a person with an important social status, and the depiction captured an expression of the subject's character, societal context and internal emotional life. With the advent of photography and the introduction of mechanical reproduction processes, other genres of portrait, other than the artistic portrait, were born, including the identification portrait produced within the context of institutional bureaucracy and policing. Instead of depicting the character of a subject, the identification portrait focuses on the measurable features of a subject's face. Portraiture in the age of machinic vision has made possible still further categories of the genre. Automated facial recognition creates new ways of reading the face, exploiting perspectives that, because of their scale, are inaccessible to human recognition. These potential new forms of portraiture, that is, new forms of facial representation, can be understood as responses to the technology, to the act of recognition, or as produced by the technology itself.

For example, the artists Adam Broomberg and Oliver Chanarin have termed one such new form of portraiture the "non-collaborative portrait": that is, the production of a facial image of a subject who is "neither consensual nor necessarily aware of the camera."4 Broomberg and Chanarin explain that this term originated from discussions with engineers who used the phrase to describe the challenges they faced in designing AFR technology. This term brings to the fore issues of privacy, surveillance and consent in relation to the everyday visibility of the face as a potential site of trespass. Broomberg and Chanarin use this term as the title of a series of portraits they produced using a facial recognition system that creates a kind of three-dimensional mapping of faces. In this series of portraits, the subject's gaze is directed off into the distance. They state: "there is never a moment in the capturing of the 'image' when human contact is registered; the subject's gaze, or any connection between photographer and sitter that we would ordinarily

4 Adam Broomberg and Oliver Chanarin, "The Bone Cannot Lie," in Adam Broomberg and Oliver Chanarin, *Spirit is a Bone* (London: Mack, 2015), 207.

rely on in looking at a portrait, is a complete fiction in this space."[5] In appropriating this term to provide a conceptual framework for their artistic research, Broomberg and Chanarin underline a central aspect of the visuality of AFR technology as it contrasts with the more stable understanding of the genre of portraiture: that is, the absence of a visual reciprocity.[6]

Algorithmic artifacts such as the eigenface image analyzed in the previous part of this study present yet another new kind of "portraiture" in the age of AFR. Unlike Broomberg and Chanarin's "non-collaborative portrait," the eigenface method is dependent on the forward-facing pose and neutral expression of its subject, and the consent of the subject is obtained. Present in the eigenface image is a history of representations of the face in photographic identification portraiture. What is different, and apparent, in the eigenface portrait is the presence of the perspective of the machine. In 2003, the artist and filmmaker Harun Farocki used the term "phantom images" in an essay of the same title. The phrase had been used, he says, to describe cinematic shots from the 1920s, taken from a perspective "that a human cannot normally occupy."[7] Farocki gives the example of a movie camera attached underneath a train, giving the viewer an ability to experience a vantage point that a human could not physically occupy. The phantom perspective can be described not only as lying outside the limits of human physicality but also as beyond the scale of human visual sense. With Farocki's concept of phantom images in mind, I propose that another category of portraiture has emerged in the age of AFR technology: the "phantom portrait." The phantom portrait is the result of the biometric reading of faces, perceived from the perspective of a disem-

5 Ibid.

6 This lack of visual reciprocity may been seen in earlier artistic photographic portraiture, for example in Helen Levitt's historical subway photography. See Helen Levitt, *Manhattan Transit: The Subway Photographs of Helen Levitt* (Köln: Walther König, 2017). Yet, Levitt's photographs depicted an emotive character of her subjects. For Broomberg and Chanarin, this lack of visual reciprocity is a defining element within the contexts of facial recognition and surveillance.

7 Farocki, "Phantom Images," 13.

bodied, machinic eye. Although it is characterized by a non-human perspective, the phantom portrait depicts the human form of the face and presents the visualization of a mathematical abstraction. As part of a reexamination of the genre of portraiture in relation to automated facial recognition, the notion of the phantom portrait raises questions of representation and of the relationship between this technology and notions of identity.

The phantom portrait can be understood as a "counter image," specific in its response to AFR technology, providing visualization of the contexts and implications of its use that would otherwise be non–existent in regards to the output of its actual processes. It makes visible what is latent in AFR technology: ambiguous forms of facial representation that fall within the cracks of its operation, taking into account the "unruly materiality" of the body and disrupting the standardized procedures of facial recognition. Artists such as Bang Geul Han, Heather Dewey-Hagborg and Kristoffer Ørum continue to reformulate the genre of portraiture through the use of varied technological recognition techniques other than AFR, such as facial expression recognition systems, DNA phenotypes and facial tracking systems, respectively.[8] The artists I will discuss in the following section, Ruff, Blas and Paglen, reference the perspective of the machine that reads faces, a perspective specific to facial recognition practices. One of these artists, Ruff, does not directly reference AFR technology, but his explorations of identification portraiture are pertinent to a wider analysis of notions of recognition and representation. His work also bridges the historical discourse of representation in photography with forms of representation by the technology of AFR systems. These artists produce forms of portraiture that disrupt traditional representations of the face and, as a result, articulate various connected issues concerning the politics of representation that are inherent to the contexts in which facial recognition systems are applied.

8 See Bang Geul Han, *Referential Gaze* (2015), inkjet prints; Heather Dewey-Hagborg, *Stranger Visions* (2012–2013), sculpture; and Kristoffer Ørum, *Ambivalent Physiognomy* (University of Copenhagen, May 22, 2017), performance.