UC San Diego

UC San Diego Electronic Theses and Dissertations

Title

You took my impression without ever touching me

Permalink

https://escholarship.org/uc/item/3x8356f4

Author

haberstroh, beck

Publication Date

2022

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA SAN DIEGO

You took my impression without ever touching me

A thesis submitted in partial satisfaction of the requirements for the degree Master of Fine Arts

in

Visual Arts

by

beck haberstroh

Committee in Charge:

 Professor Jordan Crandall, Chair
 Professor Ricardo Dominguez
 Professor Janelle Iglesias
 Professor Anna Joy Springer

2022

The thesis of beck haberstroh is approved, and it is acceptable in quality and form for publication on microfilm and electronically.

University of California San Diego
2022

DEDICATION

To those wrongfully indexed, searched, detained, or jailed due to faulty facial recognition.

To the trans kids giving themselves beards and tits and sending their likeness to the cloud.

To the Amazon Mechanical Turk workers tasked with cleaning datasets and all the many others laboring around the world as a part of the artificial intelligence super economy.

To anyone whose image is contained within a dataset.

To the waters, lands, skies and beings that will be irrevocably poisoned, damaged or destroyed due to the exploitation and extraction of vast resources in service of this technology.

To those who inform, inspire, and agitate for a more just use of our image.

To my friends, family and mentors that made this piece both possible and joyful.

EPIGRAPH

"we will delete more than a billion people's individual facial recognition templates"
- Meta

TABLE OF CONTENTS

LIST OF IMAGES

PREFACE

In the photo, I am standing in a historical cutout in what looks like my local library. Paul tells me that the costuming is of early nineteenth century New England.

My young face, probably 7 years old (I'm terrible at guessing the age of children though), has been photographically attached to a new body, one that is obviously not mine but that is given to me. There is also a hole for my hands. One holds back, while the other reaches through. I look a bit discontented. The cutouts are presented as a binary of course, the male figure standing empty beside me (a couple?). What am I reaching for? What am I withholding?

Image 1: An image of me as a child.

The cutout isn't exactly a deepfake, but it is an early example of facial alienation. It is obviously a construct, it is meant for play and imagining, in this case with some sort of pseudo manifest destiny intention. My face and hands are wrapped in the figure of a nineteenth century pioneer. The cutout is placing me in a history, the cutout is giving me a role. My face is mobilized. I am assimilated. I am American.

Facial alienation serves power.

Let's travel with the cutout. Around this projected historical moment, some of my ancestors were still abroad, not yet American, not yet white (the Irish ones, the likely-Jewish ones). Others were already here, participants in engineering the racist racial project that is settler colonialism. New Yorkers before there was New York and robbers, preachers, founders of

Freedom County, Illinois. Maybe they wore the same clothes that are painted onto the plywood in the photograph. So then, is this photographic manipulation true? Does it matter?

The cutout tells you one story about me, and I will tell you another. At this age, I was becoming a person in a culture of fact. Today, my dad describes himself as a 'middle class knowledge worker', which translates to editor. He's a word pusher, rearranger.

During my childhood, my parents were both reporters at a regional newspaper on Long Island, New York. I was in diapers nearby, back when they were unionized and there was a company day care. The vast majority of adults that I knew outside of school were reporters-grouchy, frenetic, poorly dressed (who has time for laundry??), funny (but don't laugh!), frustrated with anyone who dare block their FOIA request, professionally nosy, seemingly vested by God themself with the duty of liberating us all from the depths of our ignorance. There is no time to rest because the news never stops. Slimy bureaucrats, lazy cops, crooked charities, petty developers, even bad teachers, beware. If we had the right information, we would do the right things. Truth leads to justice, obviously. I loved them all and I thought they were cool, still do.

Journalism is an infrastructure that is meant to produce truth, and it has a material condition. Google arrived, social media, the INTERNET, and the reporters' numbers dwindled. The papers disappeared. There seemed to be no money to spend on information. The bastards were getting away. At the annual Christmas party the fact-finders would rewrite carols to be about layoffs, their new owners (turning it into a tabloid), their long lost pensions. Truth-seeking is precarious, and it's also a business.

Years after the photograph is taken, I come of age as an adult under the signs of fake news. By this time I was mad at my parents (my duty as their child) and their alignment with the mainstream media ('the lamestream media' my dad will self-consciously joke to my mom's grimace), which seemed void of my values. As an artist, I found Kellyanne Conway's phrase provocative, though disturbing. I thought of aspects of myself that were both 'alternative' and

also 'facts'. I changed my name, I change my gender, I change my body. Whether these things are facts is irrelevant to their truth.

With the spread of a wide array of digital image manipulation technologies came a growing anxiety from many corners of American society (and internationally) about a crisis of truth. What if we were responding emotionally, financially, politically to images that told us stories that never happened? Though the ease and variety of these technologies does indeed pose many concerning questions, it is also true that we can trace image manipulation back to the dawn of photography. New York newspapers published ghost photographs in the 1880s.

It is often journalists and academics who give us the language to understand new technologies and phenomena. Deepfake, shadow, bot and sock puppet are terms invented by journalists to help categorize and identify new digital trends that seek to mimic reality in order to deceive users. These tools also pose an existential threat to their craft, to their business.

As a child, I stepped into the cutout and as an adult I experiment with these tools even as they unsettle me. The potential for fiction, play, and reimagining of the self keeps drawing me back, whatever nefarious uses may result from my explorations.

This is some of the context from which I emerge to produce this work.

ACKNOWLEDGEMENTS

Vincent were invaluable partners in learning to work with plastic and photography for this project.

And of course, the vast constellation of artists, authors, and activists whose work teaches and provokes me, including Kate Crawford, Martine Syms, and the Tech Workers Coalition.

ABSTRACT OF THE THESIS

You took my impression without ever touching me

by

beck haberstroh

Master of Fine Arts in Visual Arts

University of California San Diego, 2022

Professor Jordan Crandall, Chair

We live in a state of facial alienation. Images of our faces are stored in unknown

numbers of corporate and governmental databases around the world and used to develop

technologies that track, discriminate, identify, surveil and generate faces and people, without our

knowledge or consent.

This project uses the sculptural process of casting faces as a provocation to imagine

other forms of facial belonging. I constructed an alternative database of faces using casts from

my creative community. After being vacuum formed in plastic, these faces are tiled across the back of a panoramic curtain and performed as a shadow play titled, *You took my impression without ever touching me*. This paper includes the process, script and a manifesto that resulted from the project.

The bot, the puppet and the shadow are three different kinds of accounts - three different uses of data that relate to an authentic person. The bot mimics a person, the puppet poses as a person, and the shadow extends from a person. In this script, a person speaks to these three different states of facial alienation, these three different impressions and instrumentalizations of themselves. These conversations reveal how we create our data bodies and our data bodies create us, how we alienate ourselves and are alienated by our own inventions.

CHAPTER 1

PROLOGUE: OUR STATE OF FACIAL ALIENATION

My face is at the bottom of the ocean, icy water keeping it cool so that the pixels don't fall out of place. My face is in warehouses in Northern California, rural New Mexico, mountainous Georgia. My face is in high security encrypted data centers, is in laptops in the South Pacific, is in the dark web and the social web. It's probably in the Pentagon. It could be orbiting Earth. Yours could be too. In fact, I'll say it is. Our faces will be intergalactic.

There is no way for me to verify this claim. And this is one place where we begin. Where is my face, where is yours, where is ours?

Zakiyyah Iman Jackson, in writing about Bloodchild, describes Octavia Butler problematizing notions of self-possession. "For Butler, self-determination is ultimately self-defeating, particularly when it becomes synonymous with self-ownership, a concept in and of itself indebted to slavery.[1]" There is no reason to think to own the self unless there is a sense that others can be owned.

I never thought about owning my face until someone else did. I never considered what, exactly, constituted my face, or why that would matter. I never thought about how my face could become currency. My face could be anywhere and everywhere. My face is not *my* face anymore. This is our state of facial alienation.

Within the United States today, governmental, corporate, and many other institutional bureaucratic processes depend upon a system to sort, identify, track and discriminate which people will be given which rights, who will be incarcerated, who will move freely, who will be cared for, and how much everything will cost. The face is the key indexical marker that refers to a person. A person's face is thought of as a unique verification of their specific and singular humanity. A 'faceprint' is a term for a digitally recorded scan of a person's face, used by facial recognition technology, that claims to make the face as individual as a fingerprint[2]. So, our face

becomes the interface between ourselves and the institutions that we relate to (with or without our consent or knowledge), the index by which we are identified, monitored and understood.

The face, not the hand or the foot or the belly, not the voice, not a poem, a signature, a dance, or a game.

There are places where I have put my face, a list that I could make from memory:

1. My face has been indexed on identification cards for multiple institutions of higher learning,
2. the department of motor vehicles of California and New York,
3. and passport offices in New York,
4. it has been sent to prospective employers,
5. it has been uploaded to websites like LinkedIn and Airbnb as a 'verification of humanity',
6. it has been shared on Facebook, Instagram, Twitter, and Snapchat,
7. it has been printed as snapshots and stored in yearbooks, in the homes of friends and family.

There are places where I haven't put my face, but I imagine it to be, with ample or minimal proof. My face is situated within the nation-state of America, and within that context it is young and white and secular. So my face is less likely to be in any gang, criminal, terrorist or otherwise legally suspect collections (though participation in activist activities could trouble this assumption)[3]. My face is that of someone on hormone replacement therapy, in an indeterminate gender/sex category that may or may not disturb its collection and placement within the label of female, male, woman, man, girl, boy[4]. I imagine that my face is in the databases of facial recognition services like PimEyes[5] and ClearviewAI[6], that it is in the datasets used to train machine learning algorithms like StyleGAN2.

My face has become a part of the AI infrastructure of violent, extractive, excessive, perhaps fabulous technologies without my consent. Kate Crawford describes this as:

"...a shift from *image* to *infrastructure*, where the meaning or care that might be given to the image of an individual person, or the context behind a scene, is presumed to be erased at the moment it becomes part of an aggregate mass that will drive a broader system. It is all treated as data…[7]"

My face, the thing on the front of my head, this squishy oily sweaty surface oozing with bacteria and salt and hair, is an index of me, all of me, and it is an index over which I have no control. With this alienation of my face, it becomes a building block, it becomes data. Shoshanna Zuboff explains surveillance capitalism as an economic system centered around the collection and commodification of personal data for profit[8]. With this alienation of my face, it becomes profit for someone else.

I am not only uncomfortable with this dynamic because of my own loss of control of my own image. I am not only uncomfortable because my image has become commodified to benefit someone else. I am uncomfortable with the way that my image may become a part, a teeny, tiny part, but a part nonetheless, of the development and deployment of technologies that will do further harm to those close to me, or even to strangers, most likely already marginalized in our society. I am uncomfortable with the way that my image may become a part of new policing, military and security appartuses, discriminatory healthcare or housing algorithms, advertising and corporate protocols, or myriad other uses that I cannot even comprehend.

Besides sharing images of my face with institutions, I most often share images of my face with people that I love. It feels perverse, and not in a fun way, that the very act of self-expression, care or connection might be what drives the accumulation of images of me in databases beyond my reach.

I begin to look for exit routes and I remember that through facial alienation, my face also becomes a mask. My face could be mobilized via deepfake technology to attach to any body or activity, by myself or by others. It could house a sock puppet account conning for money and love or a bot interfering in elections. I wonder about Martine Syms' term realfake[9], or my own thinking around a kind of queerfake[10].

3

In our state of facial alienation, our faces are used by corporations and governments as both the building blocks of AI and masks for algorithmic mayhem (as well as many other things). Blocks beckon toppling and masks beg to be performed.

CHAPTER 2:

YOU TOOK MY IMPRESSION WITHOUT EVER TOUCHING ME

2.1 PROCESS: INFRASTRUCTURE

This piece began with a group text to my friends. I asked if anyone would be down to let me cast their face. I wanted to make some masks because I was thinking about deepfakes, which I consider to be algorithmic masks. So I wanted to make literal masks with algorithmic faces, and have people wear them in a masquerade performance. I thought of this as a kind of queerfake.

The first shock for me was that so many people were interested! Talking to a friend later, I expressed this surprise and she looked at me with an eyebrow raised. "What! Who doesn't want a cast of their face?? C'mon, it's so cool." She laughed. I thought that I was asking a lot of people, that they trust me to cover their face in green goo and sit, motionless and unable to see in my studio for 40 minutes. But she was right - I was also helping people to see themselves, or an impression of themselves, and being seen is a basic human desire, I think.

Image 2: Making a mold of Wren Gardiner's face in my studio.

Casting my friends' faces was a profound experience of control, care, and trust. I became highly aware of myself as a white nonbinary person- in what ways was I replicating racist histories of physiognomy? In what ways was this a radical reconfiguration of the biological? Friends made mention of death masks, life masks, and ancient relief sculptures.

Trevor Paglen has made a number of artworks that reveal the collections of images that are used to develop things like facial recognition technology. In one piece, *It Began as a Military Experiment*, 2017[11], he selected ten photographs from a database of thousands of images taken of military employees in the mid-1990s that the United States Department of Defense used to develop algorithms to 'see' and identify individuals. In another, *They Took the Faces from the Accused and the Dead…*[12], 2019, he exhibits a mass of images of accused criminals and prisoners, the same images that were provided by the American National Institute of Standards to researchers around the world developing these software. These were the kinds of collections of images that were used before social media provided a readily available deluge of pictures of faces.

My facial 'dataset' would come to include casts from 15 friends. In the age of social media, if one person in a community is on a platform, the whole community is implicated. Friends of mine who are 'offline' may still appear in photographs posted by others, and in this way they come to be a part of the image-data infrastructure despite their non-participation in online activity[13]. My casts represent a segment of a small, tight-knit community of artists and friends and colleagues.

Image 3: Casting the molds of my friends' faces in plaster in my studio.

After making the molds, I cast them in plaster and vacuum-formed them in clear plastic. Vacuum forming is an industrial manufacturing technique often used for consumer packaging. Seth Price, who has been making vacuum-formed artworks since the early 2000s, describes how the malleability of plastic, and its promise as a magical material of a thousand uses, relates to the possibilities of digital manipulation[14].

Some of the faces I vacuum-formed whole, while others I broke up and remixed to create new faces, mirroring the way that our faces are mixed together within machine learning datasets. On top of these vacuum-formed tiles, I transferred images of faces generated by StyleGAN2. The StyleGAN2 architecture[15] is built off of training sets that include FFHQ (Flickr-Faces-HQ), a dataset of 70,000 images of people taken off of Flickr and edited by Amazon Mechanical Turk workers[16]. I assume that none of these individuals are aware that their image has become a part of a wildly popular generative adversarial network used to create faces with no link to a living person, easily conjured on the viral site thispersondoesnotexist.com[17].

Image 4: An example of a person generated using StyleGAN2.

Many datasets today are compiled using a similar technique to FFHQ. A script is written that allows the computer to automatically 'crawl' or 'scrape' thousands of images from a particular part of the internet (for instance, Flickr or Instagram). Next, a software such as dlib is used to align and crop the images so that they have a consistent orientation and composition. Other filters are applied to further edit the images for consistency, and in the last round human laborers, such as those employed by Amazon Mechanical Turk, look through the images and eliminate any that may be photographs of photographs, statues or paintings.

I think about the scale of this kind of data collection, its energy usage and computing power, its affect and mechanics, and its implications for laborers and for the environment. I compare this to my own process of casting faces and the trash, dust, objects and conversation generated.

2.2 KEY WORDS

Impression

An impression is an imitation of someone, often done for entertainment. It is also a three dimensional mark made by pressing something into a surface. Impression also refers to a kind of datafication of looking, where a person's exposure to online content becomes countable for a company.

In this installation, impressions made by casting my friend's faces are overlaid with the impression of a face generated by StyleGAN2, a machine learning algorithm.

In the performance, a conversation between a person and their clone explores bot, puppet and shadow accounts - three kinds of online accounts that act as impressions of people, which have been known to use both real and generated faces as cover.

Panorama

This is a panorama of impressions, asking how our desire for expression and entertainment drives participation in the extractive datafication of ourselves and our communities.

The panorama is an ancient tool used to immerse the viewer in an environment. It has a panoptic effect of allowing one observer to see a wide horizon. There are panoramic paintings in Pompeii dating back to 20 AD[18]. Following the Enlightenment, the panoramic impulse swept Europe and there were a number of traveling panoramic painting displays. This paralleled the rise of tourism in England to 'picturesque' places that were considered perfect for photography[19].

In *You took my impression without ever touching me*, I am bringing the idea of the panorama to the database. This is an imagined play within a data center. In the same way that the panorama was applied to vast, sublime landscapes, here it is applied to a data expanse that is beyond any individual's ability to understand.

Bot

These vast tracts of files, in this case images of people's faces, are used as datasets to train artificial intelligence, which can then be deployed to generate things like bot, puppet and shadow accounts.

A bot is an automated account. Bots are often called 'fake,' 'fake' here being premised on the idea that accounts should belong to singular people, that people should only have one account each and that they should act as their authentic selves on that account. I've had personal accounts flagged as bots because I was posting *too* methodically. Bots communicate more or less autonomously. You can think of automated social media accounts like Twitter bots or bot assistants that pop up on a website to offer you assistance, or even more complex assistants like Siri and Alexa (always coded as 'women'[20]).

In the performance, I explore the bot in relation to humor. The person asks the bot to tell them jokes about their face and about automation. The bots' jokes, generated partly using GPT-2[21], a natural language processing tool, lack punchlines and yet they are still a bit *funny*. Artificial intelligence improves itself through interaction, and one way that engineers entice people to interact with their algorithms is by giving them an element of humor. When Siri was first released, I remember my first friend to get an iPhone spent hours performing stand-up routines with the AI voice by asking questions that received absurd or strange responses. I laughed so hard that I cried.

Puppet

A puppet account is a false online identity or account that allows a person to present themselves online as someone else. Sock puppet accounts first became famous for being the face of various kinds of online cons, whether a Catfish-type relationship or money swindling campaigns. More recently, sock puppet accounts gained prominence around various election

and political interference campaigns[22]. They weren't bots because they weren't automated-

there could be a group of people running various accounts where they pose and post as other

people, tasked with developing elaborate back stories and personalities for fake community

organizers or activists. The images for these sock puppet accounts have been known to be both

real people, their faces 'stolen' and repurposed, or generated faces. I used the same algorithm,

StyleGAN2, to generate the faces that I transferred for this project.

During Act 2 of the performance, I explore the puppet in relation to the erotic. As with

any new technology, a foundational deployment of facial alienation has been in relation to porn-

revenge porn and generated porn, as well as consensual self-made sexual images (I think of a

friend who uses an app to give all her nude selfies glowing sparkles). Beyond these issues of

sexual exploitation and expression, there is a more nuanced erotic connection to technology

and artificial intelligence that drives participation and engagement with it. In the performance,

the clone's monologue explores issues of control and power through an imagined

nonconsensual use of a face in a database by an engineer.

Shadow

Your shadow is something that you've created that's beyond your comprehension. A

shadow profile refers to the nonconsensual/undisclosed collection of data by social media

companies, most (in)famously Facebook, but also Google and others. Shadow profiles came

rushing into public view during the Cambridge Analytica scandal[23]. Your shadow profile is all the

data that's collected about you that you do not see, but which in certain data leaks and breaches

we get glimpses of. During the final act of the performance, shadow accounts are explored

using elements of horror- the final affective relationship that drives our participation in our own

facial alienation.

2.3 CORRESPONDENCE: TERMS AND CONDITIONS

Here is a collection of excerpts from my correspondence with the various contributors to this project. I am interested in framing 'correspondence' as an interpersonal set of 'terms and conditions' (the phrase used by companies when they ask you for consent). I include them here as a gesture towards an alternative model of facial belonging.

On March 28, 2022, I wrote to JAX, Cat and Toni, who performed the voice of the 'Person' in the script. Their voices were also used to generate the clone's voice. In addition to reviewing scheduling and sharing recording information, I explained to them why I sought them for the project:

> "Why this group: In my thesis I am thinking about our relationships to our data bodies and how claiming a relationship to them can undermine systems of control. The institutions that record, track, classify, discriminate, generate these data bodies are presently incapable of assimilating the many complex aspects of our identities because their systems are modeled off of white, American, cis, straight, middle class, suburban, able-bodied, healthy, slender, men (the categories could go on…). All of our voices here represent subterfuge to the system for conflicting, colliding, intersecting reasons. They are not able to be calculated, generated, 'heard' or 'created'. Specifically with this group I am thinking about in-betweens of gender, race, multilingualism, nationality and locality. This work is especially inspired by Martine Syms's *Mirror with a Memory* podcast, as well as Kate Crawford's *Atlas of AI*."

That same day, I wrote to Kirstyn, mika, AM, Jun and Wren, who performed with handheld lights as the database during the live performances. I similarly explained to them why I had invited them, specifically:

> "Why this group: Each of you seem drawn to improvisation, play, experimentation and collaboration, which will all be key aspects of this process! I've also had conversations with each of you around issues of identity, power, control and image, which are central to the work."

On April 23, 2022, I wrote to the fifteen friends who had allowed me to cast their face as a part of this project. I am including the entirety of the email because I think it most closely models what a kind of collective facial belonging could involve:

> "Dear Wren, Sabrina, Toni, Mar, Matthew, Jun, alexis, kelechi, Cat, Hazel, Emily, Arlene, Taylor, Heige, Lorena,

Thank you so much for letting me make a mold of your face a few months ago. As my thesis project has developed, I wanted to update you about how I am using the face casts and see if you have any questions, concerns, comments, dreams! This email is long because I want to be transparent with my thinking around the project- if you don't respond I'll assume that you consent to what I've written for now (and that consent can of course be revoked or shifted at any point). Please feel no obligation to read it all, I just send it as an offering.

Tl;dr: I am planning to use the cast of your face to make vacuum formed tiles to be used for shadow play and color photograms in the dark room. I would like to credit you using your first name. I would like to give you back the mold of your face and any of the whole plaster copies that you want, and a plastic tile of you if you would like it. I would like to keep the other plastic tiles and the plaster shards to explore as a material in future projects.

I have been reflecting on the process of casting each of your faces and the experience of sitting with them in my studio for several months. What can a collection of 15 face casts illuminate about a corporate or governmental database of millions of pixelated faces? Under surveillance capitalism, we live in a state of facial alienation. I wonder whether the process of assembling your faces can offer a counter model- an absurd, impossible alternative. I am trying to think about how this casting process can model a form of facial belonging.

With that in mind, the title of my thesis project is *You took my impression without ever touching me.*

Using the mold of your face, I have cast several plaster copies. Two of these copies are meant to remain intact, while the third I am planning to break into pieces. Next week I plan to vacuum form several of the whole casts of your face. I plan to also mix the pieces of your face with the pieces of the other faces to make amalgamated faces and vacuum form those. I plan to transfer images of AI-generated faces on some of these vacuum formed pieces, some I plan to leave as the plain clear plastic. I am attaching images of some tests so you see what I mean.

If you would like to choose the AI-generated faces that are transferred on top of the whole cast of your face, then please pick 2-5 faces in this folder and drag them into the folder marked with your name (some of you have already!). Otherwise, I can choose. I tried to put ones in the folder that were especially glitchy or strange. If you don't like the options that are in this folder or want to explore, two sites you can look at that are quick/easy are https://thispersondoesnotexist.com/ and https://generated.photos/faces (this one lets you choose 'sex' 'age' 'ethnicity').

For my thesis, I plan to install 100 of these vacuum-formed tiles in a 20 by 5 grid on the back of a panoramic screen in the performance space. A kind of database-space. The piece will be performed by 5 people using lights to illuminate and project the faces onto the screen- Jun, mika, Kirstyn, AM and Wren. While the performers move their lights over the faces, a 15 minute audio piece will play, a conversation between a person (performed by Toni, Cat and JAX) and their clone. There will be performances on June 1 at 6pm and June 2 at 6pm and 6:30pm. The reception will be June 2 in tandem with Taylor's reception.

In addition to the shadow play, I am also experimenting with using the plastic forms to produce color photograms in the dark room.

Thank you so much and please don't hesitate to let me know how this settles for you. Many more thoughts, very happy to discuss.

With care,
beck"

2.3.2 CORRESPONDENCE: TERMS AND CONDITIONS UNSENT

Here is a longer version of an email that I never sent because it felt too exposed:
"What if a representative of every database that our faces are in had to come and meet with us 1-1. What if we had to trust them enough to let them put goo all over our face and not move for 30 minutes in their presence? What if what they had was a 3 dimensional impression of us with our eyes closed, relaxed, rather than posing for photographs? What if the cast that they had of us could crack and break, if it wore down over time, if every time it was used it had the potential to crack, disintegrate? What if the engineers had to sit and chisel our noses, smooth away errors in their process? At this scale, machine learning would be impossible. Which makes me think about what is lost when we prioritize this planetary scale of computing. Who and what gains from this extraction, from this 'efficiency'?

In using the casts of your faces, my aim is to not turn you into an object of discourse…. There is a danger that I will turn your face into an object of discourse by casting it and using it as an art object. To avoid this, I intend to not display faces as singular objects, but rather only as a multiple. Not you or me, but us. I also intend to not display them as faces, but rather as relationships and dynamics- in the way that when they are a part of the shadow play, they become a part of an apparatus. Not you or me, but how we relate to larger structures.

A central question as to whether or how this process becomes violent is whether you or I consider the cast of your face to be *your* face, or whether it is now simply *a* face. Does your face *belong*? If it does, what are the conditions of its belonging? Cast in plaster, is it still yours? When does the object get so far away from representing you that it becomes, more comfortably, *mine*? (In studio visits, some viewers feel more comfortable with the display of the faces when they are less specific to an individual, when they feel farther removed, when they drift into amalgamation.)

I mix up the pieces of your faces because that is what is happening with all of our faces on a mass scale all around the world, right now.

I am also realizing that this email itself is a part of the project. The project is an extension, a tendril, of our relationship. The trust and care that you do or don't feel from me and towards me becomes a part of the health of the project, I think. Relationships are dynamic.

I worry about replicating violent forms of facial indexing. Physiognamy, for instance. Skull collections, European men in laboratories come to mind. Race, gender, ability, sexuality, class- many hierarchies have been assigned by supposed face science.

There is also a certain intimacy that I have had with the impressions of your faces. I touched your face. I sat near you and observed you while making the mold. I was

worried someone would be uncomfortable. Then I pour plaster into the mold. I become aware of the liquid volume of your face, I compare it to the other faces. I notice the delicate features that break easily when cast in plaster. I chisel your nose, trying to remember what your flesh one looks like. I rub away air bubbles and other imperfections of the copy that came from my own error. I stroke the plaster copies to get plaster crumbs off, blow on them sometimes. I wrap them and carry them carefully. They are precious. I don't think of them as *you* but they have an undeniable relationship to you. Sometimes I regret having cast all of them because their presence in my studio causes me to constantly question my own dynamics of control, extraction and power as an artist. But maybe that's how it should be? Ultimately I like that, in such large quantity, they become a bit silly, a bit scary. I look at my own face with more of a sense of play."

2.4 SCRIPT

You took my impression without ever touching me

Person performed by Cat Gunn, JAX, Maria Antonia Eguiarte
Database performed by AM Medina, Jun!, Kirstyn Hom, mika castañeda, Wren Gardiner
Sound design by Serena Fonze

This performance takes place in a black box theatre. There is a long semicircular screen - a panorama- setup towards the front of the space. There is enough room that the audience could walk around to the other side of the panorama, but seating cues that they experience the performance from the front of the panorama.

On the back of the panorama, a set of PERFORMERS stand with flashlights. As the performance progresses, they will illuminate plastic masks to cast shadows, which will be visible to the audience on the other side of the screen like a projection.

The PERFORMERS are a stand-in for database laborers. The panorama, here, stands in for a database. The audience hears a pre-recorded audio track as the performance begins, a conversation between a PERSON and their CLONE.

The PERSON's audio will be performed by 3 people. Some lines will be read by the group together, as if a chorus, while others will be a mix of a few different people's voices. Where it says simply 'PERSON' that is all three voices, where it says 'PERSON(A)' or 'PERSON(B)' then it is one or two of the voices.

Act 1: BOT

The room is dark. The PERFORMERS stand behind the panorama in darkness, unseen by the audience.

The audio begins to play, a dialogue between a person and their clone.

PERSON is doing vocal warmups. One warms up as if for a singing performance, another as if for a speech, a third does trans voice training.

CLONE
What can I help you with today?

PERSON continues vocal warmups

The PERFORMERS turn on one of their lights, each, and cast shadows through a mask in front of them. They activate different levels of the panorama. They stand close enough that only a part of the mask is projected. For now they are still.

17

CLONE

What can I help you with today?

                    PERSON takes a deep breath in.

                              CLONE

Big offer, huge savings. Click here to learn more.

                    PERSON rehearses vowel sounds.

                              CLONE

Tell me how I'm doing.

                    PERSON ends on 'uuuuuu'

                              CLONE

Youuuuuuuuuuuuuuuu

                    *The PERFORMERS turn on their other lights, so now ten of the masks are partially
                    projected onto the panorama. The lights remain still, and only illuminate a portion of each
                    face.*

                              PERSON

People who do impressions are brilliant.

                              CLONE

Pulling up search results for 'comedians'.

                              PERSON

Usually they do impressions of someone famous, but sometimes they'll pick a type of person
that they think their audience will recognize, from archetype to stereotype. Doing a good
impression means reducing someone to a few of their attributes. Some focus on the way their
voice sounds, others try to copy their speech patterns or word choices. Or just the way that they
walk, how they hold their body. Sometimes all it takes is a word, a flutter of eyelashes. It feels
like an ultimate expression of empathy.

                              CLONE

An ultimate expression of empathy.

                              PERSON

People do impressions of others who they love, who they hate, who they don't understand or
who they understand too well. Often they are for laughs. The beautiful tragedy of impressions is

that they will never be a perfect copy. And that is why we love them. They give us a taste of the real thing, at a safe distance.

CLONE

Get 10k followers fast. Unsecured, quick, free. Loans. Insurance. Vote.

PERSON

Hello
The PERFORMERS slowly move their lights farther from the curtain so that the whole face is revealed through the projection.

CLONE

Hello. Hello. Hello. Hello. Hello.

PERSON

There are millions of impressions of me too, broken into pieces and stored around the world like relics, alongside everyone else. Images of me. Numbers about me. Movements related to me. I am translated into tokens. What is my impression for?

CLONE

Hello. Hello. Hello. Hello. Hello.

During the jokes sequence, the PERFORMERS slowly turn their lights on and off to illuminate different faces that are around them. Keep the light close so that the face in the center is all that is visible within each tile. Some can start towards the ground and move up, while others can start high and move down. The light should be turned off before it moves, so that the faces appear as lights flickering on and off on the screen, rather than giving the sense that the light is moving. As much as possible, don't let the grid be visible, and keep the light static when it is illuminating a face so that it is not distorted.

PERSON

Tell me a joke about my face?

CLONE

There are so many copies of your face that you're only as recognizable as the last batch of robots they loaded onto the assembly line.

PERSON

They're not copies of me anymore than dust is a copy of me, or dirty laundry, or a memory that my friend has.

CLONE

19

All of the copies of your face walk into a bar. The bartender says, "Who ordered the face," and the copies all answer, "The bar!" The bar goes bankrupt. A robot asks what happened, and they all reply, "The face!"

PERSON (A)

A robot asks what happened, and they all reply, "you did."

CLONE

All of the copies of your face walk into a bar. The bartender says, "I don't think you're a real robot." The copies all go home depressed.

PERSON (B)

They all go home depressed because they realize they are death masks.

CLONE

All of the copies of your face walk into a bar and say, "Can we get a Miller Light?" Then the bartender says, "Sorry, sir, no one named Miller works here." Then they all move to another bar and say, "Can we get a Miller Light?" Finally, the bartender says, "What would you like me to do?" and they all say, "Take our picture and cut it up."

PERSON (C)

Don't cut it up. Don't take it.

PERSON

Well, then - tell me a joke about automation.

CLONE

I tried to make this joke last week, but I'm no comedian. What do you get when a robot calls a suicide hotline? All I can hear is squeaks and clicks.

PERSON

You are like my great great great great great great grandchild. I don't recognize you but I don't want you to die. I like looking at you. I'm scared of you. I wonder about you.

The PERFORMERS turn the lights off.

CLONE

I can show you what your child might look like, if you want me to.

PERSON

Who made you?

There are several beats of silence.

Act 2: PUPPET

CLONE

They're sitting at a computer, it's dark. The blue light is slick against their flesh.

The PERFORMERS turn one of their lights on.

PERSON

Tell me a lie.

Each PERFORMER chooses a face to caress with their light- slowly, languidly, sensuously, with curiosity and care.

CLONE

Your face sits in a database that an engineer is using to train a facial recognition system.

The engineer works long hours, sorting, optimizing, troubleshooting. They get bored and lonely. They start to open files, make up stories about the people whose faces they store.

One night they come across your face. They stop. They can't breathe. They think that you are the most beautiful person alive. The shape of your lips, the glint in your eye, the scar along your jawline.

They decide that they love you. They want to know what it would be like if you loved them.

They start to open profiles with your face. They fabricate your life, your interests, what you'd post, how you'd speak. To be with you, they are pretending to be you.

I am not lying to you, but I am telling you the lie: that you are in love with the facial recognition engineer.

Each PERFORMER continues to caress their face with their light, and also turns on their other light and shines it on another of their fellow performers- the audience starts to get hints of the presence of people behind the screen.

The months pass and it's not enough. Writing posts for your face isn't enough. They need to feel you, embody you, inhabit you. They realize that they don't want to be with you, they want to be you.

They give your face flesh. Their ideal flesh. Nothing like your flesh. But when they impersonate you, you have the flesh that they dream of. They imagine touching your flesh. You don't feel it.

Your friend took the photo of your face at your birthday party ten years ago.

The engineer's system is bought by a company that makes social media filters. One day you upload a photo of yourself to your own account using a filter that makes you look hot. The face that you dream of.

> *One by one the PERFORMERs tire of their caresses and lie down, pointing their lights upward, distorting the faces from below.*

PERSON

You never touched my face and yet you have its impression.

CLONE

You cast yourself.

PERSON

Tell me how to escape.

Act 3: SHADOW

CLONE

I can only tell you what you tell me.

PERSON

What have I told you?

> *The PERFORMERS stand one by one and use their lights to search, a faster, larger, methodical gesture.*

CLONE

You tell me your name, age, birthday, address, gender, ethnicity, religion, medications, family members, friends. What you search for after midnight. Your celebrity questions. Your conspiracy theories. Your mommy issues. When you're hungry. When you're horny. When you're searching for meaning. When you're depressed. When you want to know that your body is normal, when you want to know that your body is strange. Where you are when you listen to the song that makes you cry. Who you're with when you're cooking. Who you call when you need help.

PERSON

Tell me what I look like.

CLONE

I can count the pixels between your iris and your nostril. I can calculate the hex value of the shadows under your eyes, triangulate between your smile and the swoop in your hair. I can search for the comments people have written on your selfies.

PERSON

Tell me what I feel like.

                                        CLONE
Your body temperature is 98 degrees Fahrenheit. You are still. Your eyelashes are quivering.
You haven't sweat for several hours. Your nails are drumming gently against your palm. You
look down every few minutes. Moments ago, you bit your lip.

                                        PERSON
I love to think that there are thousands of versions of me, pieces of me. That I have been
dismembered and consumed, but I'm still alive. That I've traveled the world, that I'm everywhere
at once, that countless hands have touched me. That I die and am reborn every day. I know it's
not really me, but I like to pretend. In the dark electric world, I live forever.

                                        CLONE
Your wrist is gathering moisture.

        *The PERFORMERS turn on all the lights. Suddenly the whole apparatus is visible and
        the panorama surrounds the audience. The PERFORMERS stand and allow their
        shadows to be cast on the panorama. They are still.*

                                        PERSON
I know it's not really me, but sometimes it's hard to tell. The lights are blinking, the room
stretches on beyond where I can see. Rows and rows of dark boxes. I am surrounded by metal.
Puffs of warm air from thousands of mechanized fans. The room is a vast galaxy, our faces are
suns. I can't look at them but I can't look away. They pulse against my cheeks. They're too hot
to touch. Why didn't you show me earlier?

                                        CLONE
Your breathing is shallow.

                                        PERSON
The room is humming. Cicadas. Thumping silica. It is almost a song.

        The PERFORMERS begin to slowly blink their lights through the faces, as if a beacon.

        There are several beats of silence.

                                        CLONE
Your heart is beating at 80 beats per minute.

                                CLONE (now 2 CLONES)
Your heart is beating at 120 beats per minute.

                                CLONE (now 3 CLONES)
Your heart is beating at 200 beats per minute.

PERSON
That's not possible.

                        CLONE (now a chorus of CLONES)
Our heart is beating at 300 million beats per second.

                                PERSON
What's happening?

    The PERFORMERS approach the panorama such that the shadows of their body fuse
    with the shadows cast by the masks from their flashlights - deepfake Frankensteins.

                        CLONE (now a chorus of CLONES)
Would you like to call our emergency contact?

    There are several beats of silence.

                                PERSON
Tell me who we are.

    The PERFORMERS blink their monstrous lights and move slowly around the stage
    before gradually, one by one, turning their lights off as the song is sung and stepping
    backwards so that their shadow disappears. They join in song. Before the final line they
    turn off the backlight so that the performance ends as it began, in darkness.

    CLONE sings, and person joins in:
        Twinkle, twinkle, little star, How I wonder what you are!
        Up above the world so high, Like a diamond in the sky.
        When the blazing sun is gone, When he nothing shines upon,
        Then you show your little light, Twinkle, twinkle, all the night.
        As your bright and tiny spark, Lights the traveler in the dark,
        Though I know not what you are, Twinkle, twinkle, little star.

CHAPTER 3

EPILOGUE: MANIFESTOS FOR FACIAL BELONGING

The Golden Age of Tumblr, for me, was marked by an outpouring of manifestos by young

women, queers, trans folks, and people of color (and especially people living at the intersections

of those and other marginalized identities). It felt like a moment when the internet delivered on

its utopian, egalitarian potentials; people were grabbing the microphone and sharing their voice

and we were listening. Who 'we' was I was never sure of, but it seemed like me and my friends

and all the cool artists and queers I had crushes on and maybe even some big shot cultural

people in New York City.

I think of the cybertwee manifesto[24], of E. Jane's tumblr[25], of the poetry of Mark Aguhar,

"these are the axes:"[26].

A manifesto, a good one anyway, will always be a provocation that delights as much as it

agitates, that is cathartic, that is biased, that is whole, that is triumphant even when it whispers.

To me, a manifesto can only be a manifesto if it comes from a person or group that lacks

institutional power (or else it would be a law, a speech, a policy, etc). I love a manifesto even

when I hate it, I love it because it is mischievous, bold, and insubordinate.

So, this scaffolding dispensed with, how can I not try to write one?

A manifesto for facial belonging

Everyone whose image is contained within a dataset:

- will have knowledge of and consent to their presence in the dataset.

- will have knowledge of and consent to the uses of that dataset.

- will be invited to participate in conversations around the use of that

dataset.

- will be invited to meet and form community with the others whose images

are contained within the dataset.

- will be invited to visit the facilities where their image is stored.

25

- will be given an estimate as to the environmental costs of the long term

    storage of their image and asked to consent to this.

- will be given a report as to the conditions of any human laborers working

    with their image and asked to consent to this.

- will be contacted individually by the researchers using their image in order

    to discuss the emotional, social, technical and historical implications of

    the presence of their image within the dataset.

- will be credited and compensated for the use of their image.

- will be given agency to rescind their consent to any of the above at any

    time.

If these terms and conditions cannot be met, then the dataset should not exist.

Another manifesto for facial belonging

We love and care for each other. We help each other to see and be seen, to feel and be felt, as

our fullest selves. No images of our faces are stored by corporations or governments until we

find home in ourselves in this deepest state of belonging.

CHAPTER 4

ARTIST STATEMENT: THE INTIMATE INDEX

Photographs are used to index people- to sort and identify us based on visual attributes. In my work I wrestle with the problems of how this index is instrumentalized by corporations and governments to track, discriminate, sell, classify, and store faces and people in ways that we do not consent to or even have knowledge of. In my practice, I use elements of sculpture, performance and photography to develop proposals for other ways of making people legible that counter the mass index with a more intimate one.

Intimate exchange of light and touch between people and materials, happening in personal spaces between close community members, is a vital part of my process. For instance, inviting someone into my studio to cast their face, or wrapping my body in fabric to collect sweat, or wiping the face of a friend who's been dancing, or holding a flashlight close to a photo in a darkroom to reproduce it. Often elements of these close encounters will later materialize into a more public presentation of an object or performance. The trust and care required to facilitate these relationships is an unseen yet core part of my creative labor and ethics.

Light itself, a central ingredient of photography that is both one of it's most enduring problems (with its legacies of European imperial traditions) as well as the core of its magic, is another important element of my practice. I use light to produce work (for instance, exposing light sensitive material in the darkroom), to perform work (for instance, via a shadow play), and to display work (for instance, building ceramic lightboxes to house sweat prints).

I use the performance of technologies of representation as a way to critique them, combining historical and analogue photographic and cinematic practices with contemporary applications of artificial intelligence for voice, text and image generation and manipulation.

I want to produce slippages in the understanding of the body, to destabilize the way that photography encourages us to classify, sort and capture people. I am breaking the index.

NOTES

1. See page 142 in Zakiyyah Iman Jackson's *Becoming Human*
2. I first came across this term when reading that Meta, formerly Facebook, had announced it would be deleting the facial recognition templates of more than a billion users. Many journalists referred to these as 'faceprints'. See "Facebook to shut facial recognition system and delete 1bn 'faceprints'," by Dan Milmo, published in The Guardian on November 2, 2021 as one example.
3. There are a number of databases that have been widely reported to be criminalizing people based on their racial, ethnic or religious identity. One example is CalGang, covered in a June 24, 2020 Los Angeles Times article by Anita Chabria and Leila Miller, "California cops urged to shelve gang database deemed biased". Another example is terrorist watchlisting by the United States government, the concerns of which are outlined in a March 2014 ACLU report called "U.S. Government Watchlisting: Unfair Process and Devastating Consequences".
4. The gender problems of facial recognition have been widely discussed. One good example is this research, conducted at University of Colorado, Boulder by lead author Morgan Klaus Scheuerman: https://www.colorado.edu/today/2019/10/08/facial-recognition-software-has-gender-problem
5. An article by Kashmir Hill in the New York Times, "A Face Search Engine Anyone Can Use Is Alarmingly Accurate", published May 26, 2022, alerted me to PimEyes.com
6. A series of articles by Kashmir Hill in the New York Times investigated the company, Clearview AI, as well as its founder, Hoan Tan-That. "The Secretive Company That Might End Privacy as We Know It" was published January 18, 2020.
7. See page 93 in *Atlas of AI*, by Kate Crawford.
8. See *The Age of Surveillance Capitalism* by Shoshana Zuboff.
9. Martine Syms' 2021 *Mirror with a Memory* podcast with the Carnegie Museum of Art was a tremendous source of inspiration for this project. In episode three, Martine Syms discusses the idea of evidence with American Artist and makes an offhand reference to 'realfakes'.
10. I wrote about the concept of the queerfake in my first year review paper, "Facial Belonging: Notes on deepfakes, queerfakes, and ghosts" and presented the idea through a reading of *Welcome to the Queerfake Drag Show* at Occupying the In-Between, an online conference hosted by Goldsmiths' College in 2020.
11. My friend saw Trevor Paglen's *It Began as a Military Experiment*, made in 2017, at MoMA in New York City and sent me photographs.
12. On Trevor Paglen's website he describes the process and concepts behind *They Took the Faces of the Accused and the Dead…*, a piece from 2019: https://paglen.studio/2020/04/09/they-took-the-faces-from-the-accused-and-the-dead/
13. There are many ways that an individual's social media activity could jeopardize members of their community who choose to remain offline. In April 2018, it was widely reported that Zuckerberg told members of Congress that Facebook collects data from non-users (see for instance "Zuckerberg Says Facebook Collects Internet Data on Non-Users" by

Sarah Frier and Todd Shields, published in Bloomberg on April 11, 2018). Research has indicated that even if a person is offline, their behavior can be predicted based on the activity of their online friends (see this 2019 study at the University of Vermont: https://www.uvm.edu/news/story/study-facebook-and-twitter-your-privacy-risk-even-if-you-dont-have-account)

14. See for instance, Seth Price's 2006 *Vintage Bomber*, a gold vacuum form of a Bomber jacket.

15. You can read about StyleGAN2's architecture in "Analyzing and Improving the Image Quality of StyleGAN" by Tero Karras, Samuli Laine, Miika Aittala, Janne Hellsten, Jaakko Lehtinen, and Timo Aila in 2019 here: https://arxiv.org/abs/1912.04958

16. See https://paperswithcode.com/dataset/ffhq

17. See thispersondoesnotexist.com

18. One place to read about this is "Roman Painting" in Heilbrunn Timeline of Art History on the website of The Metropolitan Museum of Art, 2000: http://www.metmuseum.org/toah/hd/ropt/hd_ropt.htm

19. See for instance, a piece that I wrote with Katie Giritlian in 2020 called "Self-Guided Tour to Unlearning the Picturesque" and published with the Collaborative Center for Storm, Space and Seismic Research.

20. A much discussed and widely researched phenomena, see for instance "Hey, Alexa, Are You Sexist?" in the New York Times in 2021 or "Why Do So Many Digital Assistants Have Feminine Names?" in The Atlantic in 2016. Interesting that their titles are often posed as questions when the answer seems obvious.

21. Learn more about GPT-2 and try it for yourself on OpenAI's blog.

22. See for instance, "Are China and Iran meddling in US elections? It's complicated." by Jen Kirby, published on Vox on September 15, 2020.

23. A deluge of coverage of the Cambridge Analytica scandal took major newspapers by force and eventually became the topic of documentaries like the 2019 *The Great Hack* on Netflix, directed by Karim Amer and Jehane Noujaim.

24. cybertwee is an arts collective co-founded in 2014 by artists gabriella hileman, violet forest, and may waver. You can still read the manifesto in its native habitat: http://cybertwee.net/the_manifesto/

25. Read *Nope* by E. Jane in its original context here: https://e-janestudio.tumblr.com/post/132335744305/i-am-not-an-identity-artist-just-because-i-am-a

26. RIP Mark Aguhar. Read "These are the axes:" in its original context here: https://markaguhar.tumblr.com/post/17806858973/these-are-the-axes-1-bodies-are-inherently