the distributed u&i

Raya Ward

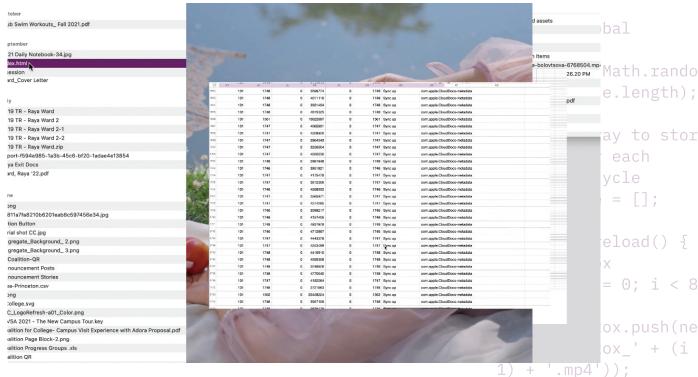
I need to clean. Clean it out. Purge the excess me. Scattered files, half full folders, neglected hard drives, overflowing cloud storage on multiple accounts.

I am so spread out. Spread thin. Scattered. Distributed.

I am distributed in my possessions—from clothing left in my childhood hometown, to the stack of books on my college bookshelf, to my old drum set stored at my aunt's house in Georgia—who I am and who I have been are spread out across miles of geography and defined most typically by volume—how much do I have, how much space does it take up. When that overwhelms me, when I feel a bit lost, or unrooted, I consolidate, sort through it all, take inventory. I carefully construct a mental register of where and who I am. It's important to let go, to move on. These items take up not only physical space but cerebral real estate. Going through my physical possessions, sorting through objects, deciding which to archive and store, which to pass on, remove, delete, let go, move on from opens space for who I am now and where I am headed. In simple terms, I find detoxing an effective and important mechanism for consolidating the self.

```
constructor(file
        this.filePat
        this.width;
        this.height;
        this.vid;
        this.vid =
createVideo(this.fil
        this.vid.hid
        this.resizeV
        let ran =
Math.floor(Math.rand
1);
        this.height
this.vid.height / ra
        this.width =
this.vid.width / ran
           this.vid.
// create arrays
var detox = [];
var meta = [];
var data = [];
//other global
let ran =
Math.floor(Math.rand
glance.length);
// make array to sto
```

for each repteated c



Digital detoxing arises as a term for taking a break, taking space from digital devices and platforms. But what I crave is not a break but a purging, a release, mass deletion. The problem is, I don't own my data and I can't locate it. My old jeans are in the bottom of my closet. I can pick them up, try them on, decide if they still fit me. Facebook's storage closet is miles deep, countries wide. I can peruse through, but no matter how oversized, how out of style my Facebook data is, I can't get rid of it. I can't remove it from myself.

I am battling an interminable archive. I can delete files and records and apps from here, but I know—I think I know—that a version—if not a copy—is probably also saved or cached there. These digital traces, "that [I] leak, drop, and leave...wherever [I] go," evade detection.(1) Invisible, but physical, my data refused to fully present itself. My data are ghosts that visit in mirages and in parts.

I want to know where I am. Are my prom pictures at Facebook Clonee Ireland (Portan, Clonee, County Meath, Ireland)? My resume in Prineville, Oregon (2719 SE Baldwin Ct, Prineville, OR 97754, USA)? It is this uncertainty and elusiveness that makes my data shadow sp haunting. I can't confirm what I am, where I am, how large, what has and has not been deleted.

It is suffocating to be so spread out, so plentiful. My data shadow is immense, always with me-inseparable from me-the record of every click, step, type, tic and tap. Our continued colocation is sickening. At the same time, I have too much space.

```
detox[i].loadVideo();
    // delete
    for (i = 0; i <
10; i++) {
Video('/delete ' + (i
+ 1) + '.mov'));
    // meta
    for (i = 0; i <
14; i++) {
        meta.push(new
Video('/meta_' + (i +
1) + '.mp4'));
meta[i].loadVideo();
    for (i = 0; i <
60; i++) {
'/glance_' + (i + 1)
```

I occupy such a vast diameter. I am spread so far, so thin. Too thin. The skin across my stomach is taut like stretched canvas, too tight to pull another breath in. The "I" in me is pulled at all angles, wrapped around, rooted in various bits and bytes in chips across the globe.

I desperately want to take in a deep breath of empty cyber space.

In this way, the economics of big data feel like an abuse of my physical body. And the body is a part of the data. As Gitelman succinctly states, raw data is an oxymoron.(2) Digital traces are exactly that, traces. Gestures of people, identities, mark making in the digital medium. A tracing paper copy of a detailed drawing, digital traces have provenance and are applied as "tools of knowledge production ... and complex fabrications of truth in which the link between data and bodies persists."(3) And perhaps this is what spooks me the most—what I don't remove will be recorded, sold, analyzed, and manufactured into a product to be sold back to me or used against me.

Blackman expands on this cyclic terror in "Hauntology": "the ghostly presence of those marked by violence ends up haunting Big Data's knowledge production processes through their digital traces, just as the knowledge produced by datafication in turn comes back to haunt those marked by structural inequalities."(4) In short, we are not all haunted equally; "a key feature of Black life in racist societies is the constant threat of exposure and of being misread"(5). As a black woman, I fear what my data shadow in conjunction with the tag 'African American' means for the future of my ability to afford health care and walk-through town with anonymity and without specialized policing.

```
for (i = 0; i <
15; i++) {
Video('/scroll_' + (i
+ 1) + '.mov'));
    for (i = 0; i <
15; i++) {
Video('/messages_' +
(i + 1) + '.mov'));
    for (i = 0; i < 5)
i++) {
Video('/google_' + (i
+ 1) + '.mp4'));
google[i].loadVideo()
   // for (i = 0; i
4; i++) {
Video('/cycle_' + (i
1) + '.mov'));
recycle[i].loadVideo(
   // data
    for (i = 0; i < 3)
i++) {
        data.push(new
```

It is in these cycles of surveillance where vulnerable communities become subject to cycles of trauma. Histories of health issues lead to futures of overpriced and thus inaccessible health care. Hyper-visibility of black folk in contemporary policing produces futures of continued racialized surveillance and punishment.6 My future physical safety is already jeopardized by the pixels I can view now but not cleanse. Big data's hoarder-like obsession with me denies me the liberation of deletion and of severing from my past traumas and injustices.

```
leo('/
der.mov');

der.hide();

placeholder
get past
blockers

idCounter = 6

idCounter = 6

incettion draw() {
    spooky();
}
```

I am learning data traces and their extraction "follow colonial structures of violence".(7) Data is purposefully treated as raw material—similar to our framing of our environment as a natural resource—with which to manufacture new meaning and product from. This framing deliberately obfuscates the histories behind the data, wiping any right to ownership—and thus to deletion.(8)

The realization of this oppressive and twisted structure only heightens my paranoia. In The Distributed 'I" installation, I aimed to further lean into and explore my paranoia through an attempt to detox digitally. I attempted to do so by minimizing my data shadow as much as possible through mass deletion and when that wasn't possible, by spending quality time with my data, getting to know it through careful observation and sorting. By witnessing its extravagance and appropriating my data into art, I hoped to learn more about the parts of myself that aren't with me, that aren't visible, with the hope that by rendering them familiar, I limit their ability to haunt me.

```
spooky();
let loopCount = 0;
let r = [];
function spooky() {
    // let numVids =
    // let
timeBetweenVids = 2;
    let totalLength =
    time = millis()
    background(0);
// set background
color white or black
    // position and
```

Video('/data_

+ (i + 1) + '.mp4'));

data[i].loadVideo();

function setup() {

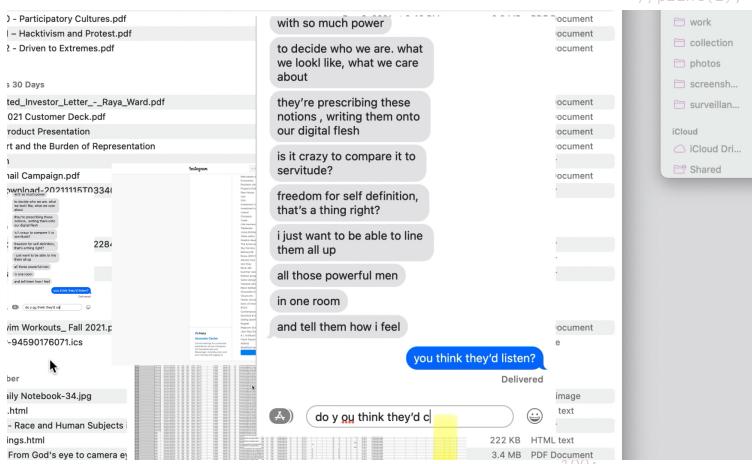
th, windowHeight); //

canvas size of entire

In the installation, randomized footage of my manic detox, careful perusing, and stock footage are infinitely generated in loop. The goal here was to render the typically invisible and elusive extremely visible. The infinite playing was purposeful—evocative of the paranoid mindset that there is always more that I don't know about. In the algorithm, the footage is grouped into categories, an attempt at control—at caring for a deeply personal archive. But the randomness and overlapping and jolting pace of the installation enforces a limit in my power.

In the end, the work is a draft, a work in progress, part of what I know will be a long operation of processing the paranoia I know to be justified but also one that most likely will not reach an end. (9)

```
// using footage
    // if (time % 20
first video
          (time % 20
          (time % 20
       if (time % 20
           playVid(3)
    for (let i = 0; i
< (time % totalLength
  totalLength * 8; i+
        //print(i);
```



data ghosts Kyle Barnes

Sometimes, I can sense my data shadow following me. But every time I turn to see it, it darts away. I can feel it lingering, so, so close, but I can never make out its shape — Is it human? Is it me? Or is it some grotesque chimera, cyborgian limbs splayed at odd angles, uncanny valley incarnate? A data shadow or, perhaps, a data ghost. I feel as if I'm being haunted by the traces of who I once was.

I try a cleanse, a detox. In witnessing the distributed "I," scattered in unknown data centers controlled by unknown figures, my desire to control how I am perceived only grows. So, I adopt a method. One by one, I delete the old files off of my computer. One by one, I remove advertisers from my social media accounts. Here I am, exercising the control I have over my digital presence. I organize as an exercise in making sense of my data, and in self-definition. I turn off personalized ads, I peruse through the record of every post I've ever liked. It almost feels like I'm doing something.

```
let w =
footage[i].vid.width
r[i * 3];
    let h =
footage[i].vid.height
* r[i * 3];
    if (w < 200) {
       h = w *
footage[i].vid.height
footage[i].vid.width;
   } else if (h <</pre>
        W = h *
footage[i].vid.weight
footage[i].vid.height
    let x = (width -
w) * r[i * 3 + 1];
   let y = (height -
h) * r[i * 3 + 2];
image(footage[i].vid,
x, y, w, h);
footage[i].vid.play()
function
TODO: change this to
black screen for like
function fillFootage(
    footage = [];
    // delete 1
```

footogo puch (dol [Moth

// let ratio = ;

But this ghost still haunts. As I strain to cleanse my digital presence I become even more aware of just how much information about me is out there. Just how big this ghost is. The first places I turn to in order to delete my files and remove personalized ads are barely the beginning of the actors in our digital world clinging to information that purports to explain who I am. A visit to my Instagram "Ad Interests" for example, demonstrates hundreds of categories the social media giant assigns to my profile. However, I have no ability to delete them; Instagram merely lists these valuable categorizations, rather than allow me some semblance of control, however illusory, over them. A prolonged, nearly hour-long session of removing advertisers from having the ability to share information on me reveals the extensive gamut of third parties which know things about me. I don't even get to know what those things are.

It is ghostly; I am haunted. Rather than a data shadow, which follows who I am digitally now, the ghost is an eerie conglomeration of what has been known about me online since I first began to link my activity to my identity, all the way to the present moment. I have always been leaving digital morsels of my data for brokers and social media giants to gobble up as they create an image of who I might be (and, more importantly, where I might spend my money). Now my data ghost haunts, and it's not just where I am currently. My data ghost has spindly fingers reaching into the depths of who-knows-where, digital recesses that I can only begin to guess. My ghost haunts the spaces where I go and where I might go; it does not need my presence to squeeze some profit out of my data. Ghosts and haunting have a history in media studies, and I draw from Jeffrey Sconce's Haunted Media: Electronic Presence from Telegraphy to Television (2000), John Durham Peters' Speaking into the Air: The History of the Idea of Communication (1999), and Lisa Blackman's Haunted Data: Affect, Transmedia, Weird Science (2019) to develop my own conception of a data ghost. I focus on the experience of being haunted, and how extractive data practices bind us to expansive ghosts haunting our digital lives. No individual cleanse can expunge this spirit.

```
footage.push(del[Math
floor(Math.random() *
(del.length))]);
footage.push(scrolls[
ath.floor(Math.rando
m() *
(scrolls.length))]);
    // interfaces -
google or meta
    let r =
Math.floor(Math.rando
m() * 1);
    if (r == 1) {
footage.push(google[M
th.floor(Math.random(
* (google.length))])
footage.push(meta[Mat
.floor(Math.random()
(meta.length))]);
    // messages 1
footage.push(messages
Math.floor(Math.rando
m() *
(messages.length))]);
footage.push(messages
Math.floor(Math.rando
m() *
(messages.length))]);
    // stock - detox
or data, TODO add
Math.floor(Math.rando
m() * 1);
    if (r == 1) {
footage.push(detox[Ma
h.floor(Math.random()
* (detox.length))])
footage.push(data[Mat
```

.floor(Math.random()
(data_langth))]);

Data ghosts are the products of surveillance capitalism, and the data practices that characterize it. According to Shoshana Zuboff, surveillance capitalism "unilaterally claims human experience as free raw material for translation into behavioral data". It runs on data. As such, my data ghost is not simply a byproduct, it is the product. Were I able to truly cleanse my data and control the information about me online, my data ghost would lose its haunting power and I would no longer be profitable to the system, which is designed to "not only know our behavior but also shape our behavior at scale". To truly cleanse all my data, an exercise in asserting individuality, would also be a means of resisting the behavioral modification that seeks to shape me into a predictable capitalist subject. It would reveal and resist how, as Jonathan Crary notes in 24/7: Late Capitalism and the Ends of Sleep, "the illusion of choice and autonomy is one of the foundations of this global system of auto-regulation." Instead, my choice is just that: an illusion. My data ghost isn't going anywhere.

In my effort to cleanse my data and expunge my data ghost, what I've really been seeking is control. I wish for control over what information is shared about me — the ability to dictate how others perceive me. My scrambling for some semblance of control is a natural reaction to what Gilles Deleuze theorizes as a society of control — wherein information about our every move is collected in order to offer a "freedom" limited through access points. Like under surveillance capitalism, the society of control would not be able to operate without a thorough set of data on me, my actions, and my interests. Like under surveillance capitalism, cleansing my data ghost is a threat.

To that end, Deleuze asserts that we are at the end of the mass/individual distinction. Instead, "individuals have become 'dividuals,' and masses, samples, data, markets, or 'banks.'" The dividual is built upon a partitioning of people into authentically predictable categories — the masses as data banks which enable not only conveniently profitable targeted advertising, but also mechanisms of control that subtly condition people to feel as if they have agency. The individual is split into multiple, divided

```
footage.push(scrolls[
ath.floor(Math.rando
m() *
  (scrolls.length))]);
    //interfaces -
google or
    r =
Math.floor(Math.rando
m() * 1);
    if (r == 1) {

footage.push(google[M
th.floor(Math.random()
* (google.length))])
    } else
footage.push(meta[Mat
.floor(Math.random()
  (meta.length))]);
    //
console.log(footage);
}
```

into dividuals, demonstrating how society understands and therefore controls its subjects. In my data cleanse, I yearned to assert myself as a unique person in control of myself and how I'm perceived — I yearned to individualize. However, the process of learning just how much data on me is out there (how gargantuan my data ghost has become), and how little of that I can exert control over, serves to further my dividualization, severing me from a cohesive sense of agency. When I'm aware of just how much information the society of control has on me, and how much of it can be utilized in order to restrict access and exercise subtle exploitation, I become further isolated. Haunting at work.

After finishing and documenting my exercise in cleansing my data ghost, I leave feeling even more overwhelmed. Not only is it time consuming and difficult to clear out some of the ways advertising giants have their tentacles around me, but it also exposes just how little power I have to tell them what to do with my information. Owing to the obscurity of the ownership of data, and the extractive practices of data brokers buying and selling data by the gigabyte, I am aware — just enough to worry, but not enough to feel empowered to take action — that there are data ghosts haunting databases I have never seen nor accessed. Not only is this system of ownership deliberately opaque, but the materiality of my data also remains a closely guarded secret. Data, for all its cerebral and cloudy metaphors, has a physical form. Somewhere in suburban Oregon, the mountains of North Carolina, or just above the Arctic Circle are rows upon rows of cables and drives containing data on myself and countless others. Even if I could pinpoint the data center which hosts all my ad interests and old Instagram posts and 13-year-old browsing behavior (which I can't, because that data is distributed across many locations), what would I do? Under our system of laws, that's private property, and not mine. My ghost is free to haunt with no distractions. I am forever bound by the unknowingness of my data ghost. I can just probe its edges in hope that one day something will change to allow me the control I so desperately seek.

```
constructor(file
        this.filePat
        this.width;
        this.height;
        this.vid;
        this.vid =
createVideo(this.fil
        this.vid.hid
        this.resizeV
        let ran =
Math.floor(Math.rand
1);
        this.height
this.vid.height / ra
        this.width =
this.vid.width / ran
           this.vid.
// create arrays
var detox = [];
var meta = [];
var data = [];
var google = [];
//other global
let ran =
Math.floor(Math.rand
glance.length);
// make array to sto
```

for each repteated c

Education begets paranoia in this case. The more that I've learned about my data ghost and the extent of its haunting, the more I worry about its impact on my life. I worry about what information is following me, what assumptions are being made about who I am, and what ways this information could haunt me in new ways in the future. Due to my inability to control or even evaluate the extent of data about me, I can only speculate on how this information could be used to exert control over my actions and agency with a regime change. Despite being a person born into considerable privilege, still I worry. I see the ways in which data ghosts haunt Uighurs in Xinjiang, Black folks in highly policed communities in the US, queer people in the Middle East, and countless other cases. Just because you're paranoid, doesn't mean they aren't watching you, and doesn't mean they won't use what they have on you in order to exercise control. Data ghosts abound.

```
//other global
let ran =
Math.floor(Math.rando
m() * glance.length);
// make array to stor
footage for each
repteated cycle
var footage = [];
function preload() {
  // detox
   for (i = 0; i < 8)
       detox.push(ne
Video('/detox_' + (i
1) + '.mp4'));
detox[i].loadVideo();
   // delete
   for (i = 0; i <
10; i++) {
Video('/delete ' + (i
+ 1) + '.mov'));
   // meta
   for (i = 0; i <
14; i++) {
       meta.push(new
Video('/meta ' + (i +
1) + '.mp4'));
meta[i].loadVideo();
   for (i = 0; i <
60; i++) {
'/glance_' + (i + 1)
```

1 Nanna Bonde Thylstrup, "Data out of Place: Toxic Traces and the Politics of Recycling," Big Data & Society 6, no. 2 (July 2019): 205395171987547, https://doi.org/10.1177/2053951719875479.
2 Lisa Gitelman, ed., "Raw Data" Is an Oxymoron, Infrastructures Series (Cambridge, Massachusetts; London, England: The MIT Press, 2013).
3 Thylstrup, "Data out of Place."
4 Nanna Bonde Thylstrup, ed., Uncertain Archives: Critical Keywords for Big Data (Cambridge, Massachusetts: The MIT Press, 2021); Thylstrup, "Data out of Place," 6.
5 Ruha Benjamin, Race after Technology: Abolitionist Tools for the New Jim Code (Medford, MA: Polity, 2019).
6 Benjamin.
7 Thylstrup, "Data out of Place," 1.
8 Thylstrup, "Data out of Place."
9 Christa Wolf, What Remains and Other Stories, 1st ed (New York: Farrar, Straus, and Giroux, 1993)

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Thylstrup, Nanna Bonde. "Data out of Place: Toxic Traces and the Politics of Recycling." Big Data & Society 6, no. 2 (July 2019): 205395171987547. https://doi.org/10.1177/2053951719875479.

———, ed. Uncertain Archives: Critical Keywords for Big Data. Cambridge, Massachusetts: The MIT Press, 2021.

Wolf, Christa. What Remains and Other Stories. 1st ed. New York: Farrar, Straus, and Giroux, 1993.

```
shortWindow =
windowHeight) -
        let r =
glance[ran].width /
glance[ran].height;
        // let hmargi
= wmargin *
glance[ran].height /
glance[ran].width;
windowWidth / 2,
windowHeight / 2, r *
shortWindow,
shortWindow);
    // increment time
for loop
    if (time / 20 >
loopCount) {
        loopCount++;
glanceback for next
Math.floor(Math.rando
m() * 30);
        // repopulate
footage[] for next
        fillFootage()
        r = [];
        for (let i =
0; i < 8 * 3; i++) {
function playVid(i) {
```

print(footage[i].file

// lot rotio