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A Sea of Data: Pattern Recognition and Corporate Animism (Forked Version)

Hito Steyerl

What is recognition? Remember the famous primordial scene of (self)-recognition described by Louis Althusser: a policeman hails someone in the street yelling "Hey you!" In that moment the person is supposed to recognize himself both as subject ("you") and as subjected to the policeman's authority ("hey!"). "Hey you!" is the primary formula of social control, the most basic pattern of personal and political recognition. The categories of knowledge, control, and privilege are established with one single gesture (Althusser 1971, 163).

But today the situation is more complicated. Gone are the days when it was about one person walking down the street. It's not five, five thousand, or even five million people crossing the street but 414 trillion bits, the approximate amount of data traveling the internet per second. Imagine the policeman standing there trying to yell: "hey you!" at every single one of them. It must be flabbergasting. On top of that he has to figure out whether they are sent by a spam bot, a trader, a porn website, a solar flare, Daesh, your mum, or what. Imagine Althusser's scenario of recognition 2 translated to this reality and you get this desperate plea for assistance: "Developers, please help! We're drowning (not waving) in a sea of data—with data, data everywhere, but not a drop of information" (Sontheimer 2015). This quote is part of a series of texts called "Signal v. Noise" posted to the NSA's internal website from 2011 to 2012. Its author complains of an overload of intercepted data: "It's not about the data or even access to the data. It's about getting information from the truckloads of data . . ." (Sontheimer 2015). In the NSA's description, data are an overwhelming ocean, more landscape than library, more raw material than focused message, more taken than givens. Secret services randomly siphon off "truckloads" of data. But the sheer volume of traffic becomes a source of bewildering opacity. This problem is not restricted to secret services however. Even WikiLeak's Julian Assange himself has said, "We are drowning in material" (Sontheimer 2015).

Pattern Recognition

This is where pattern recognition comes into play. The NSA columns' main question is how to extract a signal from the noise of excessive data. The answer is: by "discovering patterns in large data sets" (Wikipedia 2017a). This happens via: "the analysis of large quantities of data to extract previously unknown, interesting patterns" (Wikipedia 2017b) like dependencies, clusters, or anomalies. Althusser's overwhelmed cop gets thrown a lifeline. The people he was supposed to hail are now patterns of life extracted from geolocation data, phone records, social media trawling, and online shop cookies. They are subjected to continuous surveillance by governments, corporations, their own cars, and Barbie dolls. It's now a question of defining flocks, swarms, rhythms, and constellations within the deafening noise of intercepted data. But how exactly to separate signal and noise, or maybe rather how to define them in the first place?

Jacques Rancière tells a mythical story—or maybe let's call this kind of story a political fable—about how this might have been done in ancient Greece. How did people distinguish signal from noise back then? Sounds produced by affluent male locals were defined as speech, whereas women, children, slaves, and foreigners were assumed to produce garbled noise. The distinction between speech and noise served as a kind of political spam filter. Those identified as speaking were labeled citizens and the rest as irrelevant, irrational, and potentially dangerous nuisances. Similarly, today, the question of separating signal and noise has a fundamental political dimension. Dividing signal and noise means not only to "filter" patterns but also to create them in the first place. What does an "anomaly" exactly mean in pattern "recognition"? As with the gesture of Althusser's cop, "recognition" creates subjects and subjection, knowledge, authority, and as Rancière adds, neatly stacked categories of people. Pattern recognition is, besides many other things, also a fundamentally political operation.

In 1988 Fredric Jameson declared paranoia to be one of the main cultural patterns of postmodern narrative, pervading the political unconscious.¹ According to Jameson, the totality of social relations could not be culturally represented within the Cold War imagination—and the blanks were filled in by delusions, conjecture, and whacky plots featuring Freemason logos (Jameson 2009, 15). Today, however, apophenia replaces paranoia.²

How is this? After Edward Snowden's leaks, one thing became clear: many conspiracy theories were actually true (cf. Sprenger 2015). Worse, they were outdone by reality. Post-Snowden, any speculation about hidden plots or guesswork about intrigue and unlawful behind-the-scenes activities became outdated. One didn't have to speculate anymore about conspiracy; there was evidence to prove it. This does not mean there is no more secrecy. There is. But the same structural conditions that allow ubiquitous surveillance leaky and unevenly regulated information architectures—also continue to benefit bottom-up exposure—which on the other hand could be totally fake. Potentially all information—at least a lot of it—is removed from the control of its authors once digitally transmitted; any piece of information can and likely will become 4 public at some point in time, regardless if it is factual or not—and more often, it's not. The only paranoia that still makes sense is pure reality: a scenario deemed vastly unlikely by all but some experts has become actual.

Additionally Jameson's totality—the sum of social relations—has taken on a different form. It is not absent; on the contrary, it is rampant. Totality has returned with a vengeance in the form of oceanic "truckloads of data." Social relations are distilled as contact metadata, relational graphs, infection-spread maps, or just a heap of fake news.

This quantified version of social relations is just as readily deployed for police operations as for targeted advertising, for personalized clickbait, eyeball tracking, and proprietary feed algorithms. It works both as social profiling and commodity form. Kloutscore-based A-list, black ads marketing, and presidential kill list are based on similar proprietary operations. Today totality comes as probabilistic notation that includes your fuckability as well as disposability ratings, not to mention precise estimates of your skin color. It catalogues affiliation, association, addiction; it converts patterns of life into death by Hellfire missile.

This type of totality is also the necessary counterpart of messianic expectations of singularity. Singularity—the pet myth of Californian ideology—describes a time when artificial intelligences take over.

According to Jameson, singularity is also characteristic of a period in which general rules no longer apply.³ It's case by case instead; or rather, every case for itself. Singularity is a California fantasy of *Weltgeist*, this time riding a Lethal Autonomous Weapons System enabled by spontaneous jurisdiction, a scarce rule of law, and SKYNET metadata. However, the real singularity of our times is most obviously the semi-divine mythical entity called the markets, a set of organizations regarded as both autonomous and superintelligent, of such providence, by the way, beautiful providence, that human reasoning has to bow to its vast superiority. This is the real-existing singularity in our times, an entity allegedly endowed with a superhuman intelligence that can under no circumstances be questioned.

The corresponding totalities are taken care of by apophenia and pattern recognition. Pattern recognition formulas sift through truckloads of humble and seemingly trivial data sets divined from the entrails of online shopping and massively multiplayer online gaming.⁴ No interaction is too modest or menial to be scanned, stored, and saved for eternity. A singularity in which every case is unique correlates to a totality governed by probability management.

If paranoia was a standard Cold War narrative, apophenia happens when narrative breaks down and causality has to be recognized or invented—across a cacophony of spam, spin, fake, and gadget chatter.

This is also reflected in contemporary paradigms of truthfulness. The five W questions of traditional inquiry—who, what, where, when, and why—have been replaced with the seven V's of Big Data processing: velocity, variety, volume, veracity, variability, visualization, and value. Veracity is no longer produced by verifying facts. It's a matter, as one big-data expert put it, to cleanse "'dirty data'" from your systems⁵ (Normandeau 2013). So what are dirty data? Here is one example:

Sullivan, from Booz Allen, gave the example the time his team was analyzing demographic information about customers for a luxury hotel chain and came across data showing that teens from a wealthy Middle Eastern country were frequent guests.

"There were a whole group of 17 year-olds staying at the properties worldwide," Sullivan said. "We thought, That can't be true." (Kopytoff 2014)

The data was thus dismissed as dirty data, before someone found out that, indeed, it was true. Brown teenagers, in this worldview, are likely to exist. Dead brown teenagers? Also highly probable. 6 But rich brown teenagers? This is so improbable that they must be dirty data and cleansed from the system! The pattern emerging from this operation to separate noise and signal is not very different from Rancière's political noise filter for allocating citizenship, rationality, and privilege. Affluent brown teenagers seem just as unlikely as speaking slaves and women in the Greek polis. Had the researchers uncovered that seventeen-year-old brown teenagers were likely to be shot dead by police at their properties they wouldn't have flinched but rather worked on a targeted email campaign promising discounts for premium demise.

Probability enters truth production on an extensive scale with the unsurprising effect that the patterns supposed to be uncovered in massive data correspond to some degree with the patterns that are already assumed to be found there. On the other hand, though, dirty data are something like a cache of surreptitious subaltern refusal; they express a refusal to be counted and measured:

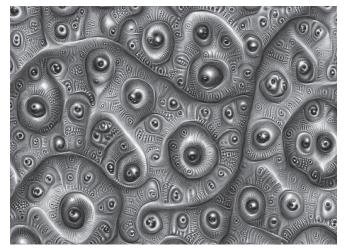
A study of more than 2,400 UK consumers by research company Verve found that 60% intentionally provided wrong information when submitting personal details online. Almost one quarter (23%) said they sometimes gave out incorrect dates of birth, for example, while 9% said they did this most of the time and 5% always did it.⁶ (Cabrera 2015)

Dirty data is where all your and my refusals to fill a constant onslaught of online forms accumulate. Everyone is lying all the time, whenever possible, or at least cutting corners. Not surprisingly, the most "dirty" area of data collection is consistently pointed out to be the (U.S.) health sector. Doctors and nurses are singled out for filling out forms incorrectly, sometimes even going as far as to abbreviate "gpa" for "grandpa," a move that deeply baffles and confounds data-mining operations. It seems health professionals are just as enthusiastic about filling forms for systems that are supposed to replace them as consumers are to perform clerical work for corporations that will spam them in turn. In his book *The Utopia of Rules* David Graeber gives a profoundly moving example of the forced extraction of data. After his mom suffered a stroke he went through the ordeal of having to apply for Medicaid on her behalf.

I had to spend over a month not long after dealing with the ramifying consequences of the act of whatever anonymous functionary in the New York Department of Motor Vehicles had inscribed my given name as "Daid," not to mention the Verizon clerk who spelled my surname "Grueber." Bureaucracies public and private appear—for whatever historical reasons—to be organized in such a way as to guarantee that a significant proportion of actors will not be able to perform their tasks as expected. (Graeber 2015, 71)

Graeber goes on to call this an example of utopian thinking. Bureaucracy is based on utopian thinking because it assumes people to be perfect from its own point of view. Dirty data are simply real data in the sense of documenting the struggle of real people with a bureaucracy that exploits for its own ends the reality of unevenly implemented digital technology with all its real-life defects. Graebers mother died before she was accepted into the Medicaid program. The endless labor of filling completely meaningless forms is a new form of domestic labor in the sense that it is not considered labor at all and assumed to be provided "voluntarily" or performed by underpaid so-called data janitors. Yet all the seemingly swift and invisible action of algorithms, their elegant optimization of everything, their recognition of patterns and anomalies, are based on the endless and utterly senseless labor of providing the required or even utterly useless data.

Dirty data thus become, so to speak, a remainder of reality in systems that are pegged to ideal models, averages, and Platonic assumptions, inspired by an ideal fictional world in which brown teens are poor by default, doctors just love to cooperate with attempts to get rid of them entirely and people trying to claim



[Figure 1.1.] 33rd square. Google's Deep Dream Generator. [Screenshot, 2015, available at http://www.33rdsquare.com/2015/06/googles-inceptionism-lets-us-look-at.html, Accessed March 31, 2018.]

benefits are anomalies by definition and get treated (or are left untreated) accordingly. Sometimes "dirty data" record the passive resistance against permanent extraction of unacknowledged labor. This "signal" however is partly already determined by probability and preexisting models.

Corporate Animism

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A brilliant example for apophenic pattern recognition was recently provided by a Google development team.⁷ The point is that in order to "recognize" anything, neural networks need first to be taught what to recognize. Then, in a quite predictable loop they end up "recognizing" the things they were taught.

In Google's brilliant experiment, image recognition filters were looped on sheer random noise. There was nothing to recognize since nothing was represented or even hidden in the noise. But the shapes that started emerging were combinations of the shapes and animals the networks had been taught to "see" earlier on. They ended up "over-recognizing" these shapes, so to speak.

This process reveals the presets of computer vision, its hardwired ideologies and preferences. The result: a rainbow-colored mess of disembodied fractal eyes, mostly without lids, incessantly surveilling their audience in a strident display of pattern over-identification.

Google calls the act of creating pattern or image from noise "inceptionism." It also calls this mode of image production "deep dreaming." But in a very materialist sense, these entities are far from hallucinations. If they are dreams, those dreams can be interpreted as condensations or displacements of the current technological disposition. They reveal how signal and noise are defined by preexisting categories and probability. If you had trained a neural network to "recognize" Hegel's master and slaves, you might have ended up with sheer noise miraculously transforming into Instagrams of an Art Basel Miami VIP preview staffed with temp catering workers.

In a feat of unexpected genius, inceptionism manages to visualize the unconscious of prosumer networks:⁸ images surveilling users, constantly registering their eye movements, behavior, and preferences, in aesthetic terms helplessly adrift between a knockoff of a Hundertwasser coffee mug and an Art Deco frieze gone ballistic. They show not so much the so-called Five Eyes of state surveillance but the Eyes Unlimited of corporate surveillance, state surveillance, deep state surveillance, academic ranking scores, likability metrics, and so on and so on: Walter Benjamin's "optical unconscious" updated to the unconscious of computational image production (Benjamin 1974).

By "recognizing" things that were "not given," inceptionist neural networks eventually end up effectively identifying a new totality

of aesthetic and social relations. They visualize the filters of computational vision. Presets are applied, regardless whether they "apply" or not: "The results are intriguing—even a relatively simple neural network can be used to over-interpret an image, just like as children we enjoyed watching clouds and interpreting the random shapes" (Mordvintsev, Olah, and Tyka 2015).

Inceptionist image production is decisively different from previous chemical or even electronic photographic procedures, posing new questions concerning realism and veracity. If previous techniques relied on myths of mechanical or optical "objectivity" and ultimately on optics and geometry, in the case of inceptionist image production vision appears to rely on pattern recognition, based on implanting pseudo-platonic forms into sensing technology and running the lot on petabytes of spam. The verisimilitude of vision is not based on assumptions about objective hardware but on the replication of brain functions (or what are currently believed to be brain functions). But in terms of veracity, this is a terrible choice indeed; no one really thinks that human brains make good witnesses. They project, speculate, invent, embellish, forget, and extrapolate. They also see faces in clouds, sometimes. As a consequence, cameras based on brain functions provide dubious testimony. Reproduction of reality becomes a matter of likelihood. Likeness collapses into probability.

But inceptionism is not just a digital hallucination. It is a document of an era that trains its smart phones to identify kittens, thus hardwiring truly terrifying jargons of cutesy into its means of prosumption. It demonstrates a version of corporate animism in which commodities are not only fetishes but dreamed-up, franchised chimeras. Yet these are deeply realist representations. According to Györgi Lukács, "classical realism" creates "typical characters" as they represent the objective social (and in this case technological) forces of our times (Idris 2005). Thus, inceptionism unlocks the black box of image recognition to release an almost medieval zoo of phantasmagoric creatures locked inside.



[Figure 1.2.] A plate of spaghetti meatballs returning our gaze. [Image: Thorne Brandt, available at: https://twitter.com/thornebrandt/status/617173618238332928?lang=en, accessed August 1, 2018.]

Inceptionism gives those forces a face—or more precisely unlimited eyes. The creature that stares at you from your plate of meatballs is not an amphibian beagle, though. It is the ubiquitous surveillance of networked image production, a type of memetically modified intelligence that watches you in the form of the lunch that you will Instagram in a second if it doesn't attack you first.

Imagine a world of enslaved objects remorsefully scrutinizing you. Your car, your yacht, your art collection is watching you with a gloomy and utterly depressed expression. You may own us, they seem to say, but we're going to inform on you. You will start missing Althusser's lonely police officer, because now you are being interpellated 24/7 by a serving of dog pasta. And then just guess as to what kind of creature we'll re-cognize in you!

This question of recognition recalls and reveals the enduring power of the Turing test as a mode of identification and reveals the segregation at the core of assessing machine learning. Turing's



[Figure 1.3.] The shape in this flock of birds over New York appears to be the face of President Vladimir Putin. [Screenshot of video by Sheryl Gilbert, available at: https:// www.youtube.com/watch?v=h-7-Ej_Nulg, accessed August 1, 2018.]

game was successful if a machine had the same ability as a human to confuse an interrogator about its gender. But contemporary computation is not about confusion of identity but multiplication of identities. Facebook, for example, has modified the imitation game to say: if you don't want to identify as man or as woman that's fine, but please check one of these fifty-plus boxes to state your precisely defined other type of gender, and we'll make sure to send you the appropriate adds. This is not an imitation game but an identification game.

Similarity—or correlation—as mathematical evidence is something Turing discussed as well. To challenge his own ideas, he cited the objection that machines could never bond over strawberries and cream like humans. But he answered his own challenge with a complex twist: Yes, a machine cannot bond with a man in the same way that a white man will bond with a white man over strawberries with cream and a black man will bond with a black man over strawberries with cream. But—and this is my conclusion, not Turing's—if a machine reproduced this behavior, would this machine then be thinking?⁹

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Some people think so. Because the idea of white guys bonding over strawberries and cream has moved to the heart of social-network analysis. This is a pristine example of so-called homophily, a concept further discussed by Wendy Chun (see Chun in this volume). Homophily means that people like to bond with similar people. How could this produce mathematical evidence of anything? If white men mostly have strawberries and cream with white men. this means that whoever a white man has strawberries with is most likely a white man. This is what Facebook packages into the idea that you are like what you like, and that you will like the things that people who are like you like. This is how they sell you strawberries with cream. And this is also how Google concludes you are not a robot. You are not a robot because someone who likes similar things checked the box to say he is not a robot and this applies to you by correlation. If you extend this thinking to the imitation game, you can guess not only the gender of all the players but all their friends and their social network. This is how the game starts transgressing its own boundaries and slowly becomes real.

So there are two completely different games at hand. On the one hand, the identification game: if something looks like something, it is the same. All boxes get checked. On the other hand, Turing's imitation game: maybe something that looks similar is the same. It's definitely possible that someone who comes across as a man is a man. Then again maybe not. At this point, a thinking machine will decide that this is not the interrogator's business. The best choice is to politely move on to a protracted and paradoxical discussion of the weather.

Apophenia

Inceptionism proves that pattern recognition also exists where there is no pattern but a form is detected nevertheless. This process is called *apophenia*.¹⁰ A major example of this is to recognize creatures in clouds. Apophenia is defined as the perception of random patterns within random data. As Benjamin Bratton recently argued, apophenia is about "drawing connections and conclusions from sources with no direct connection other than their indissoluble perceptual simultaneity" (Bratton 2013).

Are the patterns "recognized" in the sea of data today just superstitious mumbo-jumbo? Is apophenia an updated form of divination? Photography was once famously described as soothsaying by Walter Benjamin: "[I]s not every corner of our cities a scene of action? Is not each passerby an actor? Is it not the task of the photographer—descendant of the augurs and the haruspices to uncover guilt and name the guilty in his pictures?" (Benjamin 1974, 25).

Still, there is a crucial distinction between the twentieth-century photographer and the filterers and analysts of the twenty-first. The new pattern extractors are not mainly supposed to recognize the guilty after the fact. They are expected to predict the perpetrator as well as the crime before it has been able to occur. Every spot of our cities is mapped out as a probable crime site, fully decked with gender- and age-based targeted advertising, and surveilled by animated commodities, divinatory cellphone cameras, and aerial views from tapped drones.

The twenty-first-century augur creates the image before the event, anticipating its effect and calling forth reality. The arrow of time has reversed, but the flow of time is unstable and has become essentially unpredictable.

However apophenia also has a creative aspect.

Back in the Neolithic, humans imagined star constellations and observed patterns of movement by projecting animal shapes into the skies. Let's say they saw a crab and called this constellation Cancer. Even though there was no actual crab in space, constellations like these served as working hypotheses to eventually come up with fundamentally different worldviews.

One could laugh about the poor naïve people of the period who insisted on seeing nonexistent shapes in the skies. But by tenaciously sticking to projecting fictional figures into the cosmos, the fundamental movements of the solar system were uncovered. This didn't happen, though, because people believed crabs were walking in the cosmos; this happened because people came eventually to realize that there were (most probably) no crabs in the cosmos. Had they not they "seen" them though, they might have missed defining patterns in the movements of planets. But they would have also missed the patterns if they hadn't given up on the literal reality of the crabs.

But even more importantly all these activities also completely changed the organization of society. The analysis of planetary and star movements enabled the development of the calendar and agriculture. Cue irrigation, storage, breeding, architecture, sedentary lifestyles, and so on. Storage created the idea of property. Bands of hunters and gatherers were replaced by proto-states of farmer-kings and slaveholders, by vertical social hierarchies. Apophenia—as a part of magical thinking—contributed to all these transformations.

But what are we going to make of contemporary acts of apophenia? Are we to assume that computer vision has entered its own Neolithic phase of magical thinking and pattern projection? But if this is the case, one thing is very different. To keep expressing this through the example of crabs in space: computer vision still seems to be in the phase where it thinks that there really are crabs in space and that the patterns emerging from the cosmos of data are actually reality. Software engineers like saying about computers: garbage in, garbage out. In divinationist computer vision let's rephrase this as: crab in, crap out. Let's see faeces in clouds, while we are at it! It might be more accurate though to assume that humanity has entered a second Neolithic, a phase of the reinvention of the technologies invented during this period. Today a lot of data-related vocabulary refers back to techniques first developed during the Neolithic. Data farming and harvesting, mining, and extraction point back to agricultural and metallurgic procedures. Today, expressions of life as reflected in data trails become a farmable, harvestable, minable resource managed by informational biopolitics. The stones and ores of the Neolithic are replaced by coltane, silicone, and Minecraft Red Stone. So what is the function of apophenia now, when new procedures of pattern "recognition" threaten to create new types of kings and slaveholders?¹¹

Outside

Let's think back to the beginning and Althusser's policeman yelling, "Hey you!" In fact this really did happen to a person called George Michael, when he was apprehended in a Beverly Hills toilet after a plainclothes policeman had encouraged him to commit what U.S. legal jargon calls a "lewd" act. Michael was hailed, apprehended, and jailed. He had incorrectly recognized the pattern, or rather he had been duped into believing he was being chatted up. As a result LAPD went all "Hey you!" on poor George.

Arguably Michael has misinterpreted a pattern: he mistook a policeman yelling "Hey you" for a lover, an act of apophenia if there ever was one. And predictably, scorn and ridicule poured over him.

But, instead of apologizing or admitting an error of judgment, Michael brilliantly insisted on his perspective. He released a video called "Outside" in which this scene is retold and roles are flipped over; the men's lavatory turns into a dance floor, disco balls pop from the ceiling and squadrons of gay biker cops dance with one another. After all who said one needs to accept the LAPD's idea of a proper subjected subject? Michael insisted on recognizing patterns differently: "Hey you!" is not only an act of subjection but perhaps the most basic act of human communication, an act of acknowledgment and contact, perhaps even seduction. "Outside" was not only a coming out, not only a claiming of public space, but also an act of defiant apophenia.

This type of apophenia can cause serendipitous misreadings or end you up in jail, that is, but at least not as a docile subjected subject. It (mis-)reads the letter of the law for a love letter, it insists on not recognizing the other at all but rather knowing them in the biblical sense, not as sea of data but as flow of energy, not as pattern-oflife but as wave of desire. Who got the point—the tons of morons who laughed about George for not "getting it right," or George, who got it left so to speak and just cruised ahead of the pattern?

This is why I suggest we follow him and go outside, right now. Let's go.¹²

Coming in

But, wait. Where is outside? This question is less simple than it seems. And it may well turn out we don't have to go anywhere at all because we are outside already. At least the NSA thinks so. Didn't their writer complain about the "sea of data—data, data everywhere, but not one drop of information?"

Isn't this "sea of data" a big outside, in the most romantic and sublime sense of the word? An "unknown unknown" in Donald Rumsfeld's inimitable definition? Doesn't it look like the "big outdoors" heroically tackled by speculative realists? At the very least this wild and life-threatening sea of data is certainly not "the sofa" George Michael emphatically declares he's done with.

To give a bit less romantic examples: in terms of political geography the outside is increasingly difficult to pin down. More and more spaces are converted into extraterritorial enclaves and duty-free gated communities, into para-statelets and anti-"terrorist" operation zones, offshore entities and corporate proxy concessions, a configuration for which Keller Easterling brilliantly coined the term ExtraStateCraft (Easterling 2014). These areas are not—and this is crucial—outside of the system of nation-states but within, in-between, and in certain cases also over and underneath. We see this happening when—as in Lebanon or Italy—the idea of garbage in, garbage out no longer works. Instead it's garbage in, garbage in-between, garbage all over, and more to come. It's garbage inside out.

But if many of us are outside in already, either as dirty or clean data, as signal or noise, Graeber or Grueber; isn't a "coming out" at the same time a "coming in"?

Actually this is exactly how George Michael continues his argument. The "outside" is not about the romantic great outdoors of icebergs and posthuman reason, not about calculating being nor divining online shopping craves, nor terrorist threats from petabytes of garbage. "Outside" means: *servicing the community of flesh and bone* (nothing more).¹³

He sings:

And yes, I've been bad Doctor, won't you do with me what you can You see I think about it all the time I'd service the community (but I already have you see!) I never really said it before There's nothing here but flesh and bone There's nothing more, nothing more There's nothing more Let's go outside

Mr. Michael counterinterpellates the policeman by challenging him to service the community. His version of a policeman does exactly that. But this community is no longer the same either. It is not a world where people end up as dirty data and dead brown teenagers, stuck with overflowing garbage in the paradoxical no-man'slands of statistical bureaucracy and overall exception.

Rather this needs to be a world in which everything looks just the same, just seen from a completely different angle. How does

this work? Imagine someone who was sent out into space to investigate whether the pattern that was detected in the endlessly vast data set of the cosmos is actually there. In the Neolithic this was impossible but not now. Let's say the predicted pattern is: alien intelligence exists, it is evil and everywhere, and in order to create patterns to contain it, we need to compute all the data in the universe. The person then ventures out into the vast ocean of spam and penis enlargement ads to look for this mythical creature. But then the person has a brilliant idea. She asks herself: How about accepting that the projection may or may not correspond to reality? Intelligent evil aliens may exist or not, just as crabs, lions, and scorpions too might actually exist somewhere in the depths of the cosmos. We cannot exclude it. Maybe we could even calculate it if we just keep crunching numbers. But how about this question: Do intelligent humans exist at all? This person might then discover potential samples of this species inside the spacecraft's own toilet.

It turns out that the intelligent person in the toilet is George Michael. And then she realizes that her space travel is not extraterrestrial at all but intraterrestrial. The ExtraSpaceCraft she's been flying never left the launchpad as funding for space missions got cut. The cosmos she saw was some sort of projection of U.S. health insurance data. Infuriated, she asks George Michael to immediately reform police services. He politely points out that policing can be seen from a different angle as well: as servicing the community of those who keep on being crunched as overpoliced dirty data, or ignored as underpoliced inhabitants of all sort of failed states, platinum card lounges, and other examples of extraterritorial contemporary geographies. Seen from the latter perspective, just condemning policing is not going to make things better. Both blatant over- and underpolicing combine into the destruction of the common.

Let's leave the detailed description of the different modes of servicing the community of flesh and bone to Mr. Michael. But from this perspective the sea of data turns out to be the mess of human relations (nothing more). Althusser's model of recognition and policing suggests that you need to sacrifice the common like 20 a haruspex slaughters a sacrificial animal. Next you filter faeces from its intestines to predict and master future risk and thus create new empires of data barons and stakeholders. It's a bit rough, frankly.

In contrast one could first of all accept that what is portrayed as an external and threatening sea of data that needs to be sifted, filtered, cleansed, and purified is basically the mess of human nature. One might as well have fun with it.

This is not to say that this will be any more rational. It will not be more beautiful, noble, or true either. There will be plenty of crabs and crap to deal with, not to mention evil humans and intelligent aliens. Just ask yourself: do you prefer to dance in an ExtraSpace-Craft toilet? Or would you rather fill out forms all day?

Notes

- 1 "Conspiracy... is the poor person's cognitive mapping in the postmodern age; it is a degraded figure of the total logic of late capital, a desperate attempt to represent the latter's system, whose failure is marked by its slippage into sheer theme and content" (Jameson 1988, 356).
- 2 I use the word *paranoia* here to refer to its usage in cultural theory rather than in its psychopathological definition. For a different approach, focusing more on the symptoms of paranoia (of which apophenia is only one, albeit a very important one), see Apprich in this volume.
- 3 "The world of finance capital is that perpetual present—but it is not a continuity; it is a series of singularity-events" (Jameson 2015, 122).
- 4 The NSA was spying on World of Warcraft. Seriously.
- 5 Spambots are also seen as an example of possible distortion of big-data veracity.
- 6 "In late June and early July 1991, twelve million people across the country (mostly Baltimore, Washington, Pittsburgh, San Francisco, and Los Angeles) lost phone service due to a typographical error in the software that controls signals regulating telephone traffic. One employee typed a '6' instead of a 'D.' The phone companies essentially lost all control of their networks."
- 7 My thanks to Ben Bratton for pointing out this fact and to Linda Stupart for mentioning apophenia as a term used by William Gibson.
- 8 A prosumer is a mix between a producer and a consumer, a consuming producer or the other way round.
- 9 He clearly states: "The works and customs of mankind do not seem to be very suitable material to which to apply scientific induction. A very large part of

space-time must be investigated, if reliable results are to be obtained. Otherwise we may (as most English children do) decide that everybody speaks English, and that it is silly to learn French" (Turing 1950, 448).

- 10 Thank you to Linda Stupart for drawing my attention to this notion. For further discussion of the concept of apophenia in the context of paranoia, see Apprich in this volume.
- 11 Apophenia is a misextraction, an act of failing interpellation and recognition that can have social consequences. As several people pointed out, data can also be misunderstood as Dada. Ways of collaging data have characterized current popular aesthetics. The creation of improbable combinations and the crossing of the limits of the likely can be interpreted as a silent and even involuntary act of rebellion against pattern recognition. The manufacturing of improbable and implausible objects via all sorts of data manipulation tools is a way of confusing automated ways of recognition—face recognition, recognition of behavioral patterns, recognition of shapes, and the simultaneous creation of categories of political recognition.
- 12 I wrote this when George Michael was still alive, and I miss him dearly.
- 13 Thank you to Brian Kuan Wood for pointing this out.

References

Althusser, Louis. 1971. "On Ideology and Ideological State Apparatuses: Notes Towards an Investigation." In *Lenin and Philosophy and Other Essays*, 121–73. London: New Left Books.

- Benjamin, Walter. 1974. "A Short History of Photography," trans. Stanley Mitchell, Screen 13 (1): 5-26.
- Bratton, Benjamin. 2013. "Some Traces of Effects of the Post-Anthropocene: On Accelerationist Geopolitical Aesthetics." *e-flux Journal* 46. Accessed July 20, 2015. http://www.e-flux.com/journal/some-trace-effects-of-the-post-anthropocene-on -accelerationist-geopolitical-aesthetics/.

Cabrera, Amanda. 2015. "A Halloween Special: Tales from the Dirty Data Crypt." Datamentors. Accessed October 30, 2015. http://www.datamentors.com/blog/ halloween-special-tales-dirty-data-crypt.

- Easterling, Keller. 2014. Extrastatecraft: The Power of Infrastructural Space. London: Verso.
- Graeber, David. 2015. The Utopia of Rules: On Technology, Stupidity, and the Secret Joys of Bureaucracy. Brooklyn, N.Y.: Melville House.
- Idris, Farhad B. 2005. "Realism." In Encyclopedia of Literature and Politics: Censorship, Revolution, and Writing, Volume 3: H–R, ed. M. Keith Booker, 601. Westport, Conn.: Greenwood.
- Jameson, Fredric. 1988. "Cognitive Mapping." In *Marxism and the Interpretation of Culture*, ed. Cary Nelson and Lawrence Grossberg, 347–60. Champaign: University of Illinois Press.
- Jameson, Fredric. 2009. *The Geopolitical Aesthetic*. Indianapolis: Indiana University Press.

- 22 Jameson, Fredric. 2015. "The Aesthetics of Singularity." New Left Review 92:101–32. Kopytoff, Verne. 2014. "Big Data's Dirty Problem." Fortune. Accessed June 30, 2014. http://fortune.com/2014/06/30/big-data-dirty-problem/.
 - Lohr, Steven. 2014. "For Big-Data Scientists, 'Janitor Work' Is Key Hurdle to Insights." New York Times. Accessed August 17, 2014. http://www.nytimes.com/2014/08/18/ technology/for-big-data-scientists-hurdle-to-insights-is-janitor-work.html?_r=0.
 - Mordvintsev, Alexander, Christopher Olah, and Mike Tyka. 2015. "Inceptionism: Going Deeper into Neural Networks." Google Research Blog. Accessed May 13, 2017. https://ai.googleblog.com/2015/06/inceptionism-going-deeper-into-neural.html.
 - Normandeau, Kevin. 2013. "Beyond Volume, Variety, and Velocity Is the Issue of Big Data Veracity." *Inside Big Data*. Accessed September 30, 2013. http://insidebigdata .com/2013/09/12/beyond-volume-variety-velocity-issue-big-data-veracity/.
 - Russon, Mary-Ann. 2015. "Google DeepDream Robot: 10 Weirdest Images Produced by AI 'Inceptionism' and Users Online." *International Business Times*. Accessed July 6, 2015. http://www.ibtimes.co.uk/google-deepdream-robot-10-weirdest-images -produced-by-ai-inceptionism-users-online-1509518.
 - Sontheimer, Michael. 2015. "Interview with Julian Assange." Spiegel. Accessed July 20, 2015. http://www.spiegel.de/international/world/spiegel-interview-with-wikileaks -head-julian-assange-a-1044399.html.
 - Sprenger, Florian. 2015. The Politics of Micro-Decision: Edward Snowden, Net Neutrality, and the Architectures of the Internet. Lüneburg: meson press.
 - Steyerl, Hito. 2014. "Proxy Politics: Signal and Noise." *e-flux Journal* 60. Accessed December, 2014. http://www.e-flux.com/journal/60/61045/proxy-politics-signal -and-noise/.
 - Turing, Alan M. 1950. "Computing Machinery and Intelligence." Mind. A Quarterly Review of Psychology and Philosophy 59 (236): 433-460.
 - Wikipedia, the free encyclopedia. 2017a. "Data Mining." *Wikipedia*. Accessed January 17, 2017. https://en.wikipedia.org/wiki/Data_mining.
 - Wikipedia, the free encyclopedia. 2017b. "Pareidolia." Wikipedia. Accessed January 17, 2017. https://en.wikipedia.org/wiki/Pareidolia.