METRO PICTURES

THE BROOKLYN RAIL

Trevor Paglen
WITH HUNTER BRAITHWAITE

Trevor Paglen shines a light on the shadowy confluence of technological innovation and state misconduct. Whether by photographing secret military installations from afar, or by parsing official documents to identify telling omissions, the aim is to see that which has been purposefully obscured in hopes that visualization leads to consideration. Having grown up on military bases (his father was an Air Force ophthalmologist) before coming of age in the Bay Area punk scene in the '90s, Paglen is now based in Berlin. We met several times this May at the Istanbul International Arts and Culture Festival, where he had just spoken about a new body of work (on view at Metro Pictures from September 10 – October 24).

Portrait of Trevor Paglen. Pencil on paper by Phong Bui.

HUNTER BRAITHWAITE (RAIL): You have both an MFA from the School of the Art Institute of Chicago, and a Ph.D. from Berkeley in geography. How has your education shaped your practice?

TREVOR PAGLEN: My background has always been in art, but there was a point in art school where two things happened that made me think it would be great to do a Ph.D. On one hand, I was getting really frustrated by the limitations of traditional art theory, which is pretty good at helping one think through images, but really can't do much more than that very well. Through works like Rosalyn Deutsche's *Evictions: Art and Spatial Politics,* which was my bible for a while, I got exposed to geography and thought it was a really powerful framework that could deal with images but could go far beyond art theory in terms of thinking about space, economy, society, and the other things I was interested in. The second thing I was getting more and more into is what people would now call a "research-based practice." There was a little tradition of "artist-as-anthropologist" and such, but I thought that if I was going to be involved in research, I wanted that research to be at the highest level possible, on par with the highest scholarship. Going to get a Ph.D. seemed like the obvious thing to do given where my work was headed.
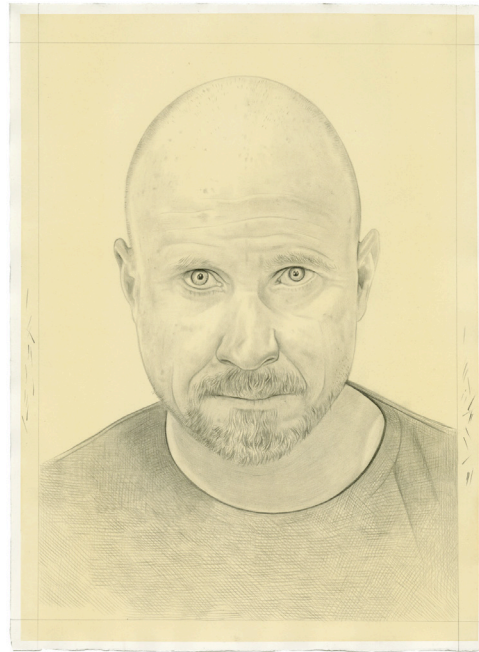
RAIL: In today's talk [at the Istanbul International Arts and Culture Festival] you interspersed images of today's digital landscape with those from art history, including Turner's *Rain, Steam and Speed — The Great Western Railway*, from 1844. How do these two moments of technological innovation compare?

PAGLEN: History rhymes, in a way. We've seen technological intervention and acceleration over the course of my lifetime, but it's nothing like what happened in the 19th century, during which people went from the speed of a horse to that of a railroad, from horse-carried letters to the telegram. The order of magnitude of communications and speed happening over the course of the 19th century in tandem with industrialization is unparalleled in the 20th and 21st centuries so far. You can say all you want about the internet but that was really dramatic.

I think that we see the present moment rhyming with other moments of modernity in many different ways, from technology to art. I was just doing a project with Mike Krieger from Instagram and the artist Adam Harvey, looking at machine vision. We would take different historical images and run them through machine-vision algorithms—basically trying to figure out how a machine sees. We were making images showing us how machines saw images. You'd end up with an algorithm that looked like Cubism. I actually don't think that that's an accident. There are many different histories of seeing embedded in everything that we do.

RAIL: You said Turner's painting was a photorealistic record of a society in rapid flux, a world where the human body can barely keep up. I'm interested in how the body relates to your methodology—be it trudging through the desert to take these photographs, or your back hurting after hours and hours of research.

PAGLEN: The world, as it is, is always much messier than the way it is represented in documents or research. If you're interested in something, go look at it, in real life. Spend a lot of time looking at it because you'll see things that you could never learn otherwise. For example, we were looking at CIA front companies that were involved in the rendition programs. These companies owned airplanes the CIA used to kidnap people around the world and bring them to secret prisons. One was registered to an office in Reno, Nevada. I was working with a journalist, A.C. Thompson. We thought, "OK, well we have to go look at this office." On the one hand, why would you go look at an office? Who cares? But, once we got there we realized that the office of this law firm where this front company is set up is right in the same suite as the lobbying company of this guy named Paul Laxalt, who is former senator from Nevada, former governor of Nevada, and is now a political lobbyist. OK, that can't be a coincidence. That's the kind of thing that I mean. You go to a place and you see something that you otherwise wouldn't even have thought to look for.

RAIL: Another way to reveal something hidden is to whittle away publicly available information until you get to a silhouette—perhaps of bodies being transported to black sites.

PAGLEN: You can learn a lot by trying to find absences. An absence is an outline of the thing that you can't see. I have a piece called *Seventeen Letters from the Deep State* (2011) that I really like. It's a collection of letters from the State Department that were brought on CIA rendition flights. The letters instruct local customs agents and other people that the airplane and its crew shouldn't be searched or interfered with; the plane is doing official work for the U.S. Government. But all the letters are signed by someone named "Terry Hogan" and Terry Hogan doesn't exist. What's more, all the signatures are different. I like the piece because it's an allegory for that present-absence.

RAIL: Speaking of things you can't see, your photography is often concerned with the limits of vision—a blurry image of a distant secret military installation, or a drone that registers as a speck of dust. With your new series of photographs, taken at NSA chokepoints around the world, there's often no visual information whatsoever about what is happening. Could you talk about why you're drawn to visual shortcomings?

PAGLEN: The new photographs are of "landing sites" where groups of NSA/GCHQ (Government Communications Headquarters) tapped underwater cables come onshore. The rules of the photographs are that the tapped cables have to be "in the frame," but they're invisible in the photographs because they're underwater and/or buried under the beach sand. It's a variation on an aesthetic tactic I use a lot, which is to take a fairly ordinary landscape and explain that there's something extraordinary going on in the photograph, even though there's no obvious evidence of it in the image.

Most of the images I've done before look like a pretty standard thing—the night sky, or a sunset, or something—but there's a little glitch. If you look at the print closely, there's a drone or a satellite. With the beach ones there's literally nothing. There's no secret thing that you're going to find in the
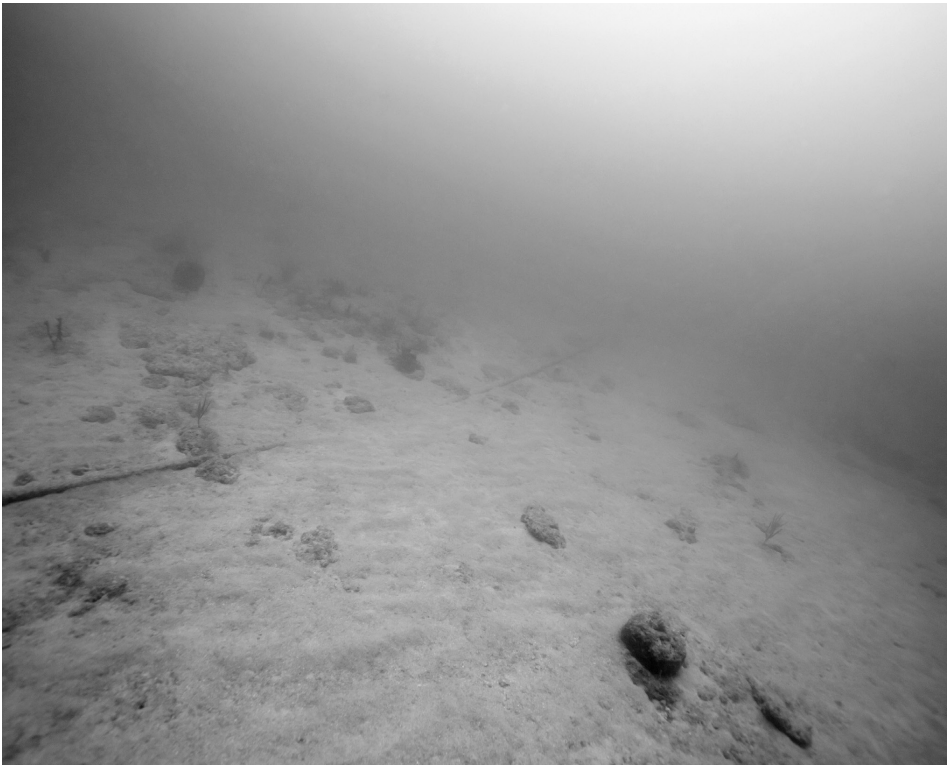
Trevor Paglen, *Mid-Atlantic Crossing (MAC), NSA/CGHQ-Tapped Undersea Cable, Atlantic Ocean*, 2015. C-print. 48 × 60 in. Courtesy the artist and Metro Pictures, New York.

image. No, this is a photograph of the fact that you can't see the stuff that's in this photograph.

RAIL: The military so often butchers language, but there are these instances of strange beauty. For instance, a group of satellites is called a constellation.

PAGLEN: The idea of having new, secret "constellations" in the night sky is some kind of allegory for sure. A spy satellite in the night sky is one of the most beautiful things you'll ever see. That doesn't mean it's good. I actually try to have that come across in the work. Going and seeing drones in the sky is horrifying but at dawn it can be beautiful. How is that these death machines can be a part of this gorgeous tableau? I think a lot of us are secret Platonists. We want good things to look good and bad things to look bad, but the world is more complicated than that.

RAIL: The sublime comes up in discussions of your work—something that is so beautiful, but is…

PAGLEN: It's also terrifying. I always thought of the sublime as that which reminds you—that makes you confront—the limits of your own senses. There's an aspect of fear and beauty mixed together. The Alps were sublime because they would kill you, no problem.

RAIL: Have these trips out to the desert, or photographing underwater, come close to killing you? Are they physically difficult?

PAGLEN: Not in the major sense. I think if you spend a lot of time driving around the desert by yourself you're inevitably going to find yourself in some hairy situations. It's more the commitment to doing it than any kind of physical obstacle. I mean, we have 4 x 4s. For a lot of the images, I will go somewhere Timothy O'Sullivan took a photo and photograph from that site. It's amazing to think what people in the 19th century went through. It's like, "man, I'm in a 4 x 4 with a cooler and this sucks." Those guys were out in the desert with covered wagons.

RAIL: O'Sullivan was a surveyor, wasn't he?

PAGLEN: Yeah, he was paid by the Department of War. Those survey photographs are a really interesting reference point. We see a lot of those images now as art photographs, but they were commissioned by the Department of War. When you go to the National Archives and look at the survey documents, it says "Department of War: Reconnaissance of the American West." In a very real way the Muybridges and the O'Sullivans were to the 19th century what reconnaissance satellites are to the 20th and 21st centuries.

RAIL: Is that what you mean by "embedded histories of seeing?"

PAGLEN: There are many different histories of photography that converge in those figures. There's a history of photography from Muybridge photographing Yosemite through the motion studies that then goes to Edgerton doing the stroboscopic photography of the bullets going through objects. And then Edgerton gets a contract to photograph nuclear tests because the Atomic Energy Commission wants to see nuclear explosions unfolding over many thousands of seconds, and then it turns out that the triggers in the cameras are more accurate than the triggers in the nuclear detonators themselves, and so they basically just adopt the trigger from the camera and incorporate it into the weapon's design. The camera literally becomes a part of the nuclear weapon.

And then there's another history of that lineage of photographers turning into things like the U2 spy planes and then, further beyond that, into things like spy satellites. Spy satellites were what animated the development of CCD [charge-coupled device] chips, and so you see digital spy satellites arriving in the late '70s. Fast-forward a few years and the chip in your iPhone is a little piece of a spy satellite, basically.

RAIL: What about popular films like *Zero Dark Thirty*? How does Hollywood factor into all of this?

PAGLEN: I think most films about war are fascist enterprises, quite simply. Part of that is the medium itself. The medium personalizes and narrativizes very complex histories. A film has to have people

that you can relate to and there has to be some kind of resolution. This is just not how the world works. I think, in many ways, the forms that we use to make sense of the world are not up to the task of actually understanding how the world works. I always wondered why we didn't have a materialist movie about the war on drugs and the neoliberal city, and then *The Wire* came out. "Oh! Because that takes five years to show how that works. You can't do it in an hour." [*Laughter.*]

RAIL: In 2012 you worked with Creative Time to send a disk etched with images into orbit around earth. How does that project differ from Carl Sagan's *The Golden Record*?

PAGLEN: It's a lot more morose than *The Golden Record*, which was Sagan's message intended for extraterrestrials. *The Last Pictures* is not. *The Last Pictures* went into orbit around the Earth forever. It stays here. *The Last Pictures* is a lot of things. Firstly, it's trying to think through a historical moment where human activities have a geologic footprint whose effects vastly exceed our ability to even imagine. On the other hand, it's a collection of images that speak to an anxiety about living in the historical moment where that's happening—a moment where the notion of "progress" has become a kind of suicide note.

Sagan's *Golden Record* was intended to be a kind of salutation. It was a way of saying hello and to smile and to say "we are happy to meet you." *The Last Pictures* is more of a kind of a tombstone. It assumes that at some point, the humans are gone. Because the humans will be gone at some point, whether because we've evolved into something else or we've killed ourselves. Humans, as we understand what a human is, simply will not be around forever. That's just not the way evolution works. It's not the way that life works.

RAIL: Tell me about your show at Metro Pictures opening this month.

PAGLEN: There are a couple different pieces in Metro Pictures. There is a video installation made out of footage I shot for *Citizenfour* that didn't end up in the final cut—about eight months running around the world shooting different NSA installations, and places that are more innocuous where the NSA has a footprint. So that's a video installation—a landscape kind of film with sound design done by Frank Kruse, who also did sound design for *Citizenfour*. An *Autonomy Cube* will be in the show. That's a collaborative project between me and Jacob Appelbaum that turns the gallery into a Tor relay and creates an open WiFi access point that routes all traffic over Tor. Then there's a number of the fiber-optic chokepoints. These are always paired with another image—kind of a collage made up out of maps, Snowden documents, as well as open-sourced documents and other images that I took while researching. They speak to all of the things that are going on in the photograph that you can't see. Finally, I spent a lot of this year learning how to scuba dive so that I could actually dive down to the ocean floor and photograph tapped cables underwater. The underwater cable photographs are pretty abstract as well. In a way, they're related to my photographs of spy satellites in the night sky.

RAIL: Did you run into problems reproducing classified documents from the Snowden archive?

PAGLEN: No, it's perfectly legal. There's no statutory basis for secrecy in the U.S. Secrecy is all done by executive order, so things like the Espionage Act only apply to people who have security clearances. If you don't have a security clearance, the idea is that you can't be prosecuted for leaking secrets because you never signed up to keep secrets in the first place. This is different than the U.K., which has an official Secrets Act famously saying that you can't say what's on the lunch menu at a military base in public.

RAIL: How did you locate these cables? I can't imagine them being advertised. Did you run into any other difficulties photographing these sites?

PAGLEN: The underwater project was a gamble. You had to do a pretty solid six months of work to get to the point where you know whether the project is even possible. I had to learn scuba diving and underwater photo techniques, then develop my own style of underwater photography. On the research side, it's a lot of work learning about the Internet's infrastructures and where they're located. Add to that research on bathymetry to try and locate places where it's most likely to find the particular cables I was looking for—looking for places where a cable would have to emerge from the sand on the ocean floor to go over a reef, for example—and correlating that with maritime maps, environmental impact reports, and telecom-industry charts to try and find the most likely places to look. Once those places are identified, it's about organizing boats, dive crews, search teams, etc.

RAIL: You recently did a project in Germany called the Eagle-Eye Photo Contest, an amateur photography contest to encourage people to take photographs of NSA and BND [Germany's intelligence agency] sites in Europe.

PAGLEN: I've always thought that part of the work in making the kinds of images I make is to insist on one's right to make these kind of images. I started working at a moment where you could be arrested for photographing the Brooklyn Bridge, so any act of photographing was itself an assertion of one's right to photograph. That is something that I think is really important. With the Eagle-Eye photo contest, it was to animate that, to collectively create a gesture of insistence on one's rights to make images of surveillance bases. Because we do have the right to make those kinds of images, and when you don't exercise rights they have a tendency to go away.

RAIL: One of these chokepoints was in Miami, so the image of an underwater subject is uncomfortably ironic, given what we know about climate change.

PAGLEN: We are creating a world where inequality is getting out of control. Climate change is going to create new classes of refugees and dispossessed people, which we probably can't imagine. There are real challenges to how this society deals with these kinds of problems. If you've built a society that manufactures hammers, you're going to use hammers to deal with these problems. If you build a society that has the potential for being a mass surveillance state, and you have eviscerated the civil sector, what tools are going to be used to adjust these problems in the future? That's what I worry about. I think you end up using the tools of totalitarianism, that's what you have.

RAIL: Yet your *Autonomy Cube* suggests an alternative to mass surveillance. Could you speak about that?

PAGLEN: I have a body of work that I've taken to calling the "impossible objects," which *Autonomy Cube* is a part of. The underlying idea is that the objects, machines, and technologies that play such a huge role in structuring contemporary societies have political, economic, and ethical "scripts" built into them. The "impossible objects" are artworks that try to have different socio-political-ethical scripts built into them. *Autonomy Cube* is a WiFi hotspot and Tor relay designed to make digital surveillance—whether from the likes of the NSA or Google—very difficult. As such, it's an object that is impossible, in the sense that the scripts built into it (i.e. the kinds of infrastructures and behavior it facilitates) are at odds with the dominant political and economic landscape. Other projects along those lines are a satellite I'm building that doesn't do anything—it
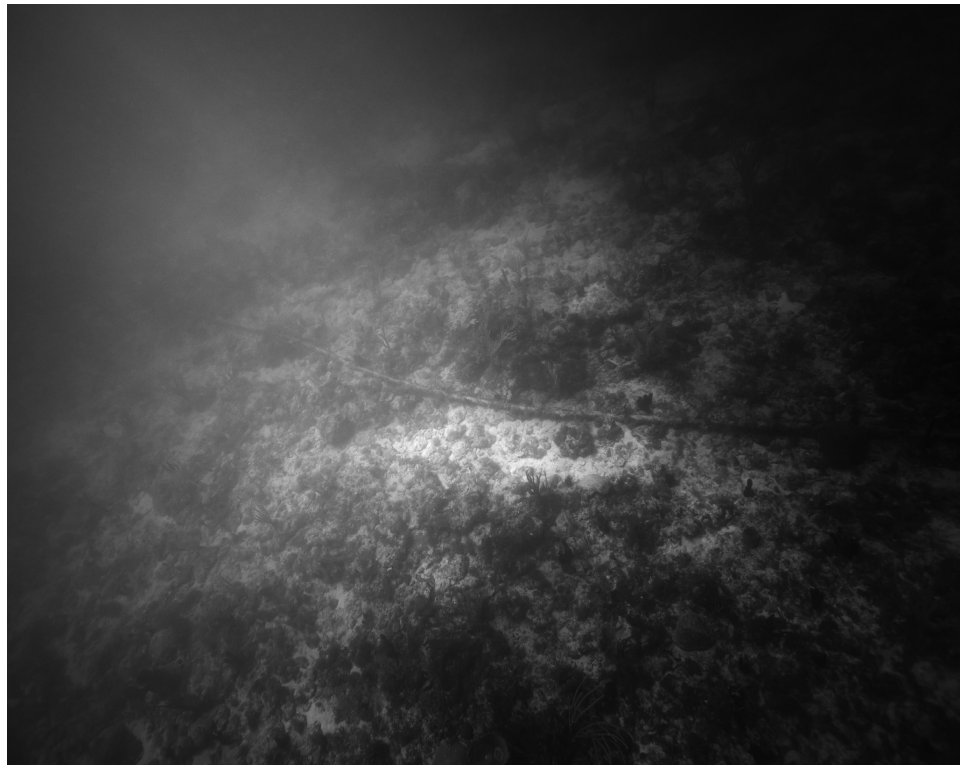
Trevor Paglen, *Columbus III, NSA/GCHQ-Tapped Undersea Cable, Atlantic Ocean*, 2015. C-print. 48 × 60 in. Courtesy the artist and Metro Pictures, New York.

has no military, commercial, or scientific value. Of course, that's also impossible to do…

RAIL: I lived in China for a couple years. I don't know if I was imagining it, because the Internet was quite spotty, but if you typed "Tiananmen" or "Tibet" it seemed to always go out, so that's definitely not a myth.

PAGLEN: It's not a myth, and there's a system. They're looking for what they call "selectors," which can be a keyword, an IP address, a password, or something that gets flagged. They have systems in place for certain kind of selectors where you automatically get a malware served onto your computer. For example, it's very easy to imagine—I'm sure China has something like that—if you say the words "Tiananmen Square" in Google chat or whatever, then your computer would automatically be served a virus that would log your keystrokes. And that sounds like science fiction but that's a real capability, which is insane.

RAIL: Was that developed in China?

PAGLEN: I don't know about the Chinese context because we don't have a Chinese Snowden, but we know the NSA has that capability. It's part of something called Turbine, which is a subset of a larger infrastructure called Turbulence.

RAIL: People often defend the NSA's gathering of data by saying that they don't have enough manpower to go through it.

PAGLEN: There's a kind of time travel that you have to do when you're thinking about this material. Yes, it's true that there are not enough people in the world to read every person's email, but you don't have to read every single person's email because you can write a computer program that will read every single person's email and pull out the stuff that's interesting, and then analyze that with a different algorithm that can make profiles automatically.

The other thing to keep in mind is that this information is being stored, indefinitely. We have to consider that in thirty years they will be able to analyze all that they collected today. That is a crucial

threshold that we've crossed in the society—the ability to store large amounts of data indefinitely. This is something that cryptographers are worried about.

I was just at a friend's house and a very famous cryptographer was there, a guy named Dan Bernstein. He was talking about the need for post-quantum cryptography, to develop cryptographic protocols that could withstand an attack from a quantum computer. This kind of computer has been hypothesized and could very easily crack contemporary cryptographic protocols. I asked why he was worried about post-quantum cryptography when nobody even knows whether it's even possible to build a quantum computer. His answer was, "Well, because we need post-quantum cryptography now to protect ourselves from the future, protect our private information from an attack thirty years in the future." We have to start thinking about time in that way, which we're not really accustomed to.

RAIL: Does this system of weaponized mass surveillance contain a switch that could simply be turned off?

PAGLEN: Don't build it in the first place. Any kind of technology has politics built into it. Technologies are not neutral. They have social relations embedded within them. If you're going to have nuclear weapons, you need to have a hierarchical society that can organize the building of nuclear weapons. There is a kind of authoritarianism that the creation of something like a nuclear weapon requires, and that the creation of that weapon can then reproduce. That's what I mean by this dialectical relationship between social relations and technologies. So in the case of internet infrastructure, I think that's clearly illustrated by the difference between the Tor project on one hand and Google or the normal Internet on the other. Tor is set up in such a way that the infrastructure itself is collectively created. The ethical values built into a system like Tor are different than those in a system like the Internet that we normally use. There's a different ethics of DIY punk rock infrastructures than the Clear Channels of the world. ⊕