#### THE WATER MACHINE DRAWS WAVES

I am seduced by economic models and waves. Watching water crash on a shoreline is pleasurable like reading a data visualization. A wave is momentarily poised at the threshold of land and sea, an economic model at the intersection of real and imagined accounts of the world. I am trying to see these as "ecstatic forms" (11), at once fascinating, boring, and disturbing, like surfers scanning the shape of a swell for the next set. I am reading and surfing a model in the wake of enigma, capital, and war In the aftermath of WWII, the field of macro-

economics had a brief moment when economies could be modeled with water. But the notion that capital moves like liquid flows was not new: Thomas Hobbes compared money to blood in Leviathan; David Hume's Political Discourses declared that money is like water; and Adam Smith's Wealth of Nations likened money to water mills. In 1892, Irving Fisher made a mechanical economic model using cisterns and pipes, and in 1922, William Foster continued plumbing the capitalist economy with the Circuit Flow of Money (38). Contemporary descriptors of capital remain soaked with marine metaphors: liquidation (46), fluidity, wave cycle, cash flow, revenue stream, prime the pump (51), dark pools, offshore banks, underwater options, buoyant growth, sunk cost, flooded markets (5), drowning in debt, bail out (as one might a sinking ship).

Bill Phillips (25, 43) grew up on a farm that was powered by a water wheel. In 1949, he designed the Phillips-Newlyn Machineaka "The MONIAC" (21)-a hydraulic computer for modeling a Keynesian economic system. Water rather than electricity circulates through the machine's series of tanks, pumps, sluices, and balances, which conspire to output a line graph of prosperity and depression.

The first Phillips-Newlyn machine was constructed largely from military surplus materials. The on/off switches were manufactured by a company that produced analog flight simulation computers for pilot training (6). In the 1950s, economist Abraham Ptachya Lerner (31) licensed the Phillips-Newlyn design and redubbed it the MONIAC "to suggest money, the ENIAC (18) and something maniacal," offering it for sale as a pedagogical tool. Firsthand accounts tell of the MONIAC springing leaks and spilling

red-dyed water everywhere-a prediction for disaster (2, 4).

### THE WAR MACHINE SEIZES WAVES

Otto Bayer (20) first synthesized polyurethane foam as a chemist for corporate conglomerate IG for soldiers' use (14). At the 1970 World Expo Farben (19), the material and chemical production apparatus of the Nazi regime. The Nazi occupation of northwestern Europe began to recede after a network of marine observation stations determined when small surf would enable Allied forces to invade Normandy (7). It was perhaps Vietnam war. the first time in Western thought where weather systems an ocean away (49) were understood to affect waves on a distant beach (45). This laid the Surfing as conquest traces back to early accounts

groundwork surf forecasting and the contemporary surfer's obsession with weather data in the search for swells. California was a center for military research

and development in the mid-twentieth century. Many workers and students in the industry were also surfers, and they began to use newly available materials such as polyurethane foam (30) and fiberglass (37) to design surfcraft. Bob Simmons (28) was an engineer and surfer best known for adapting the hydrodynamic planing hull shapes first developed by wartime naval architect Lindsay Lord in Pearl Harbor (47, 35, 17), for surfboards. The influence of Lord and Simmons shifted the paradium of surfboard design from long, wooden displacement craft toward shorter, lighter, hydrodynamic boards (15).

Surfing became contingent on reducing friction between surfer and swell to a seamless flow, as if waved along by an invisible hand. The wetsuit also smoothed the relation of surfer and wave. Hugh Bradner (22) was a diver, physicist, and designer of detonators for nuclear bomb tests at Enwetak Atoll (13, 23). He invented the wetsuit upon his realization that trapping water near the skin with a membrane would

insulate better than a cumbersome, leaky barrier around the swimming body. Bradner co-founded Engineering Design Company (EDCO) in Berkeley, selling wetsuits (12) that surfers wore to ride waves in cold waters previously uncharted and unsurfed.

> The counter-cultural figure of the surfer (3) the water like a fish. In Kathryn Bigelow's 1991 came into focus against the backdrop of the film *Point Break*, a group of surfers rob banks Vietnam War. Francis Ford Coppola's 1979 disguised as ex-presidents of the United States Apocalypse Now depicts soldiers surfing (16) during (39). A main character whose heist persona is

an assault on a Vietnamese coastal village. Ronald Reagan says, "This was never about the This iconic scene is a quotation of a real event. money, this was about us against the system. In 1966, the USO held a surfing contest at Da The system that kills the human spirit. We stand Nang where the military maintained an R&R for something. We are here to show those guys station and had made surfboards available that are inching their way on the freeways in their metal coffins that the human spirit is still alive!" It is an epitaph that imagines acts of violence and in Osaka, the U.S. pavilion featured a display of custom surfboards, a mirrored wave-like form, standing vertical on a surfboard as means to and projected surf footage (41), pointing toward transcendence in a hyperrealized world, where a future when the 1960s and 70s would be the surfer's essence is either emptied into a signified as much by images of surfing (8) as the sea of contradiction or it never existed at all. For as surfing waves become bigger, faster, riskier, so does the beach-front property (26).

THE WAVES ARE IN THE MACHINE

of surf riders by colonizer Captain James Cook

(1), who was resisted and killed by Hawaiians

in 1779. Calvinist missionaries attempted to

As early as 1917, surf riding entered popular

imagination () and became a staple pastime for

the American leisure class. Developers in Hawaii

co-opted surfing to attract tourism (24, 27) and,

by 1935, product advertising was saturated with

formulates the ocean as a romantic ecological

system circulating on the surface of the globe.

an apparatus made of violence, chemicals,

and sand (48). The process of surfing seems

characteristic of Sigmund Freud's "oceanic

feeling" (44). The stoke is shored up by John

Rawls's footnote on the refusal to work (40),

which sparked ongoing debate (32) over the

so-called *Malibu Surfer Problem*. With a global

the image of the lazy Malibu surfer (34) is

like Mark Foo (9), who early on embraced

surfing industry valued at more than \$10 billion.

balanced against a professional big wave rider

corporate sponsorship and died while surfing.

irrational economic relations of capital as "fish

in water." A skilled surfer is also said to take to

Critiquing the absurdity of rent, Karl Marx (33)

describes those accustomed to living within the

to dissolve contradiction into a spiritual rapture

The surfer awaits waves (36) on this surface with

Rachel Carson's 1951 The Sea Around Us (42)

waveriders (10). Surfing was cool.

erase surfing in the islands (29) by associating

the practice with idleness, sexuality, and perdition.



»Some things in common perhaps«, titre provisoire

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**EXHIBITI** 



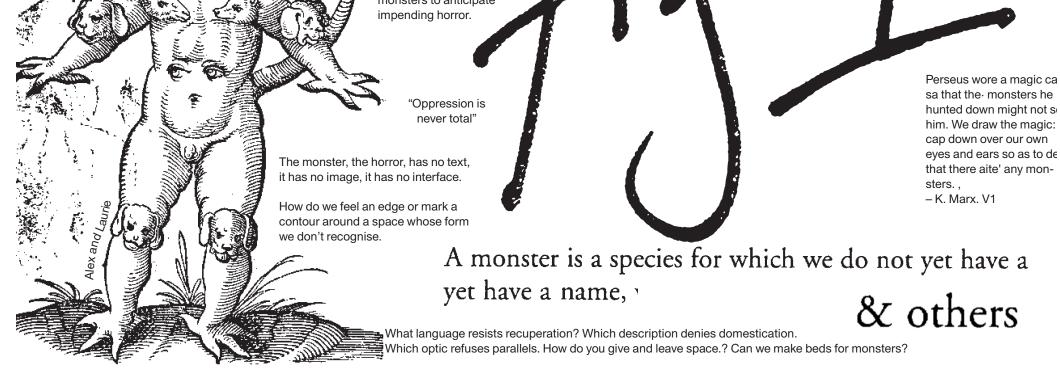
Not quite a figure. "YOU'RE A FUCKING MONSTER" Not a vampire. Not a ghost. Not a witch. Not a Demon Not a refugee. Not a politician. Not a rapist. Not a troll. Not in the shadows. Not a Shadow. A monster is the unknowable, unsee-able placeholder for the approaching threat. That is, by which we mean, the figure that appears in place of the threat and before the horror. The figure is characterizable and categorizable. The figure is ledigible. We have access to the figures of history. A figure is a unit, a figuration is the act of making calculable. We can only anticipate the repeat of previous horrors so look to the characteristics of past

**ELEANA ANTONAKI** 

*Uncanny Gardening* (video still), 2017

### TERMINAL—BASH—124X42 Last login: Sat May 20 00:28:21 on ttys000 the\_wild\_beyond:~ aartist\$ "This visual association between whiteness and "infinite potential" is ideological, -bash: "This: command not found the\_wild\_beyond:~ aartist\$ because it makes us think of white as default, as the quantum field, the " -bash: because: command not found the\_wild\_beyond:~ aartist\$ everything-nothing", as the place of creation. The artist of color knows the -bash: everything-nothing",: command not found the\_wild\_beyond:~ aartist\$ quantum field is Black and femme." - Fannie Sosa -bash: quantum: command not found the\_wild\_beyond:~ aartist\$ "It ends with love, exchange, fellowship. It ends as it begins, in motion, -bash: "It: command not found the\_wild\_beyond:~ aartist\$ in between various modes of being and belonging, and on the way to new -bash: in: command not found the\_wild\_beyond:~ aartist\$ economies of giving, taking, being with and for and it ends with a ride in a Buick Skylark -bash: economies: command not found the\_wild\_beyond:~ aartist\$ on the way to another place altogether. Surprising, perhaps, -bash: on: command not found the\_wild\_beyond:~ aartist\$ after we have engaged dispossession, debt, dislocation and violence. But not -bash: after: command not found the\_wild\_beyond:~ aartist\$ surprising when you have understood that the projects of -bash: surprising: command not found the\_wild\_beyond:~ aartist\$ "fugitive planning and black study" are mostly about reaching out to -bash: "fugitive: command not found the\_wild\_beyond:~ aartist\$ find connection; they are about making common cause with the brokenness -bash: find: command not found the\_wild\_beyond:~ aartist\$ of being, -a brokenness, I would venture to say, that is also blackness, that remains blackness, -bash: of: command not found the\_wild\_beyond:~ aartist\$ and will, despite all, remain broken because this...is not a prescription for repair." – Jack Halberstam -bash: and: command not found

the\_wild\_beyond:~ aartist\$



XENDXGAME? XWEXHAVEXROXWANRXROXKNOWX

Eleana Antonaki, American Artist, Jenna Bliss, Sue Jeong Ka, Elena Lavellés, Omar Mismar, Rebecca Naegele, Joe Riley, Laurie Robins, Liona R. Nyariri, Emma Sulkowicz, titre provisoire, Elizabeth Webb, Nathaniel Whitfield

STUDIO

WHITNEY

2016-17



Refugee': A Word of Trouble

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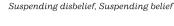
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You knew that she was black. At least I would know it. You'd look at her, you knew she was black. But he wasn't. I mean he was. But you would look at him, you wouldn't know he was black. So I know he passed, many a day. And...who else... Now, Uncle Marvin was brown and his children were brown. So unless he spoke a foreign language, I don't think he tried. Uncle Ike as I said, and several of his children, passed. Because he was very fair and he would gladly do that when he could get a little ahead in the world. Most of them were very — most of them — not all of them — but most of them were very fair, much fairer than I. But now Helen was a little bit browner than I. And some of the others were a little browner. Irene is about a shade darker-but not dark-dark. John-your uncle John-dark. Dark. But he had straight hair. I told you he was a ladies' man, and he knew he was cute. Let's see. Now Billy and Isaac, darker skinned, but not black. They were darker, maybe a shade and a half darker than I. But Sarah was the lightest one-no, Joseph was the lightest one. Because you wouldn't know Joseph from a Caucasian, if you didn't know he was a Webb. I guess I was the second fairest one...Then your grandfather—you never saw Charles, did you—your grandfather had fair skin. Billy was darker but he and Isaac were about the same shade, a tone and a half darker than I, or maybe two tones darker, Billy that is. And Harvey was about two shades darker than I. But not black, you know. Sarah, Sarah—lighter than I. Just a little bit lighter than I. Sarah. (Like me?) I think Sarah crossed over when it was convenient. Uncle Harvey could have. I don't know whether-he never did that I know of, but he could have, easily. Uncle Tasso probably did quite a bit because he could have. Because he was very, very fair and you wouldn't have known that he was black.

-From an interview with Aunt Jane (Webb) Burrell Elizabeth M. Webb

You knew that she was black. At least I would know it. You'd look at her, you knew she was black. But he wasn't. I mean he was. But you would look at him, you wouldn't know he was black. So I know he passed, many a day. And...who else... Now, Uncle Marvin was brown and his children were brown. So unless he spoke a foreign language, I don't think he tried. Uncle Ike as I said, and several of his children, passed. Because he was very fair and he would gladly do that when he could get a little ahead in the world. Most of them were very — most of them — not all of them — but most of them were very fair, much fairer than I. But now Helen was a little bit browner than I. And some of the others were a little browner. Irene is about a shade darker-but not dark-dark. John-your uncle John-dark. Dark. But he had straight hair. I told you he was a ladies' man, and he knew he was cute. Let's see. Now Billy and Isaac, darker skinned, but not black. They were darker, maybe a shade and a half darker than I. But Sarah was the lightest one-no, Joseph was the lightest one. Because you wouldn't know Joseph from a Caucasian, if you didn't know he was a Webb. I guess I was the second fairest one...Then your grandfather—you never saw Charles, did you—your grandfather had fair skin. Billy was darker but he and Isaac were about the same shade, a tone and a half darker than I, or maybe two tones darker, Billy that is. And Harvey was about two shades darker than I. But not black, you know. Sarah, Sarah – lighter than I. Just a little bit lighter than I. Sarah. I think Sarah crossed over when it was convenient. Uncle Harvey could have. I don't know whether—he never did that I know of, but he could have, easily. Uncle Tasso probably did quite a bit because he could have. Because he was very, very fair and you wouldn't have known that he was black.

> -From an interview with Aunt Jane (Webb) Burrell Elizabeth M. Webb



The Whitney Museum Independent Study Program

May 20. 2017



### On Tight! Hang Sinking. Ship Is The

# Treading water amidst political climate change

## **By EMMA SULKOWICZ**

Geopolitical instability. Right-wing populism bordering on fas-cism. Fake news. Science on the skids. Chaos. Corruption. Sexism. Homophobia. Racism. Bigotry. Vi-

olence. The political fires have cata-strophically accelerated ice melt worldwide. In the face of what Climate Central calls a global "extreme scenario," the Whitney Museum of American Art appears to have sprung a leak. Museum officials beg to differ. "It's safe up here," Adam Wein-berg, the director of The Whitney,

said at a press conference on Fri-day. "We're tight as a drum. This is Renzo's Ark." Whitney Museum coat check workers on the lower level have formed a bucket passing line, pre-sumably in hopes of keeping coats above water. "I don't know how much more The Whitney can take," said one, who consented to be interviewed under the condition of anonymi-ty

ty. The sole docent found trem-bling in the bathroom would not reveal where the others had gone. When asked about the leak, Jor-dan Wolfson, an artist who con-siders himself fortunate to have made it onto The Whitney, re-plied, "Huh?" "The hardest part about being

an artist is eating so many crab-cakes on yachts," he added, un-prompted. Young artists, hoping to be res-cued by the Whitney, scramble to make political artwork, shmolitical artwork, "Christopher Y. Lew, one of the Whitney Biennial curators, wrote via email. "Good art rocks the boat. My Bi-ennial artists could down the Ti-tanic in zero seconds flat." The artists might instead con-sider a question Bertolt Brecht posed in his 1935 essay "Writing the Truth; Five Difficulties". What good is political art hung on the wall of a sinking ship? Upon leaving, one museum-go-er was overheard saying, "At least it's not as dry as MOMA."



R.