WATER, ART & ECOLOGY

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CONTENTS

FEATURE

LIQUID ECONOMIES, NETWORKS OF THE ANTHROPOCENE
By Jayne Wilkinson

A constant flow of watery images streams through our newsfeeds almost daily. Videos, infographics, animations, flow charts, and various other forms of visual communication tell us that water is either in excess or retreat, revealing that we have too much or too little. We hear of massive droughts, heat waves, oil spills, acidic oceans choked with plastics, deaths of refugees at sea, and on and on. Recently it was announced that five islands in the Solomon Island archipelago have been swallowed by the Pacific Ocean, destroying villages and displacing communities. [i] Across the globe, the daily news suggests that either an abundance or an absence of water threatens our existence. Clearly the fragility of human dependence on water has many guises, yet our vulnerability to such catastrophic events is countered by a persistent cultural imaginary that stubbornly prefigures oceans and rivers as natural and unchanging spaces devoid of human presence.

As a material, water is both transparent and reflective. It flows and is contained; its uses are both poetic and practical. Water sustains us biologically yet endangers us with unpredictable force. It is these contradictory qualities that make water such a rich source of aesthetic representation. Historically, oceans and ports often appeared in painting to register both the sublime power of nature and the industrial power of man, serving in effect to reinforce the colonial power of the state. As a contemporary visual subject, the contradictions of water are many: fresh water is disappearing but the oceans are rising; trade routes crisscross the surface of the oceans in a slow moving but ceaseless transportation network while the fiber-optic cables that lie fathoms below form a digital network operative at light speed; floods, tsunamis, and so-called "weather events" happen with increasing consistency, yet these disasters are still treated as though they are both unpreventable and exceptional, rather than a consequence of the changing climate, for which humans are responsible.

The question that motivates this essay asks how artists might express the paradoxical relationship between the contemporary industrial-technological uses of the surfaces, and depths, of the ocean and the cultural or mythical conceptions of the sea as equal parts dangerous, sublime, and eternal. This line of inquiry departs from Nicholas Mirzoeff's argument for what he terms a "countervisuality," that is, a visual regime that claims the right to make visible and explicit the destabilization of the planet's life-supporting conditions.[ii] Mirzoeff notes that, in light of the operative invisibility of marine biopower, "there is a remarkable investment (in all senses, whether economic, psychoanalytic, or emotional) in the imagining of the marine as elemental, primordial and unchanging."[iii] By naturalizing what is now an industrial site, cultural depictions of the sea makes its degradation nearly imperceptible. According to Mirzoeff, the role of an artwork in an era thoroughly transformed by human interventions must instead be to envisage the conditions and networks that are so efficient in their disruptive potential as to be rendered invisible. Using water as a primary conceit, recent video works by Ursula Biemann and Hito Steyerl, both

exhibited at the 2014 Biennale de Montréal, are examples of projects that address, and attempt to make visible, the economic and digital flows that structure life under a system of global capital. Encompassing thoroughly divergent methodologies, both artists contribute, in different ways, to a growing countervisuality that is powerfully resistant to dominant cultural representations of the oceans as natural and unchanging.

Deep Weather

Using familiar documentary film tropes mixed with experimental juxtapositions and poetic narration, *Deep Weather* (2013), a video essay by Swiss artist and filmmaker Ursula Biemann, deploys water as a representational motif in order to examine the global consequences of resource extraction and rising sea levels. Opening with expansive aerial shots of the Northern Alberta oil sands, the video traces the course of the Athabasca River through to the tailing ponds that result from the energy-intense process of bitumen extraction. The scene then shifts dramatically to a coastal area of Bangladesh, where an endless stream of women and men continuously fill bags with sand and carry them to the shoreline in an attempt to protect their home from rising sea levels by means of an organized but rudimentary solution.

The narrative that emerges reveals the intense labor and enormous collective efforts required for both the extraction and the protection of eroding terrain. In Bangladesh, the long line of workers performing the Sisyphean task of hauling

Ursula Biemann, video still from Deep Weather *(2013). Courtesy of the artist.*

Ursula Biemann, video still from Deep Weather *(2013). Courtesy of the artist.*

Ursula Biemann, video still from Deep Weather *(2013). Courtesy of the artist.*

sandbags in order to fill the boundless space of the sea makes the exertions of the human body all too visible; in contrast, the workers that populate the oil sands are conspicuously absent from the frame. The relentless rhythm of the Bangladeshi people moving constantly across the screen is matched only by the artist's whispered description of the drillers in Alberta: "Day and night they mine the black sediments that will bring toxic clouds over the boreal woods." Theirs is a relentless but unpictured labor, as though the earth itself might mysteriously and infinitely provide the resources we demand, without our intervention. Who comprises the "they" to which Biemann refers? The oil extracted in Alberta is entirely contingent on dirty but highly paid human labor. But without imaging this often dangerous work, and the workers who perform it, Biemann's view of the oil sands foregrounds a kind of technological sublime, removing the individual in order to make the horror of environmental destruction palpably, terrifyingly visible. By juxtaposing these two scenes, Biemann attempts to articulate a connection across

vastly different geographic and political regimes, drawing our attention to the global relations that structure energy and extraction industries. Yet the demand for ever-increasing amounts of oil and gas, the destruction of the landscape in both Alberta and Bangladesh, the impact of the release of massive quantities of carbon into the atmosphere, and the physical labor of what Biemann calls "self-organized humanitarian landscaping" cannot be simplistically linked in a unidirectional chain of cause and effect. Foregrounding the intense labor required to protect an eroding shore in one of the world's poorest countries against the absent but highly paid laborers in one of the world's wealthiest regions reminds us not of our responsibility to the environment, but of the unequal outcomes of climate change. By using water as a multifaceted, representational form— one that suggests the simultaneous production of energy and the erasure of terrain—Biemann leads the viewer to consider the relationship between vastly disparate geographies, and the unequal distribution of resources and wealth across global economies as a result of rising sea levels.

Visualizing Water in the Anthropocene

The economic and digital flows that structure life under globalization are, undoubtedly, linked to the world's oceans and waterways, and are likewise implicated in social and political power. The late Allan Sekula was one of the first contemporary artists to point to these conditions and realize them in aesthetic terms. His meticulously researched projects, including the photographic series *Fish Story* (1989–95) and the film essay *The Forgotten Space* (2010, written and directed with Noël Burch) read as commentaries on the endgame of twentieth-century capitalism. Blending documentary investigations with conceptual photography, texts, and occasionally sculptural forms, Sekula's work provided a way to visualize, and therefore think of, the ocean as the invisible backdrop to a system of global capital

that requires cheap transportation methods to support the even cheaper labor that produces consumer goods. In the introduction to the film, Sekula states: "The sea is forgotten until disaster strikes. But perhaps the biggest seagoing disaster is the global supply chain, which–maybe in a more fundamental way than financial speculation–leads the world economy to the abyss."[iv] It is easy to read the ever-unfolding horizon of oceanic space as romantic, but as Sekula's work makes clear, it is precisely the intersections of global capital, the fluidity of instruments of international finance, and the networking of marine biopower that make the oceans a site that continues to register the violence of industrial colonization.

The collapsing scales of oceanic space, through the intersecting networks of trade, labor, consumption, and capital, seem to be symptomatic of what is now commonly understood as the Anthropocene era. Following the sciences, scholars in the humanities have widely adopted this term to describe an entirely new geologic period, marking a shift in the definition of human beings from biological to geological agents, together wielding a collective force that has a direct impact on the structure of the planet itself.[v] Debates around how to periodize this era variously consider the burning of fossil fuels, the industrial revolution, and the genocide of the Indigenous peoples of the Americas as the changes wrought by humans that have most impacted the biosphere.[vi] The Anthropocene era threatens not the earth's survival but the conditions, both biological and geological, upon which the survival of human and non-human life depends. In response to this threat, all components of the biosphere, including the oceans that regulate global weather patterns, are now understood as though they are provisional or contingent. Indeed, as philosopher Peter Sloterdijk has argued, explication is the condition of modernity: everything that used to be taken for granted—air, land, water—has become explicit in its devaluation.[vii] Or rather, we've taken note: the air we breathe is smoggy, the land polluted, the water either too powerful or too scarce. These spheres of life become urgent and visible when we recognize that they are in danger of disappearing altogether.
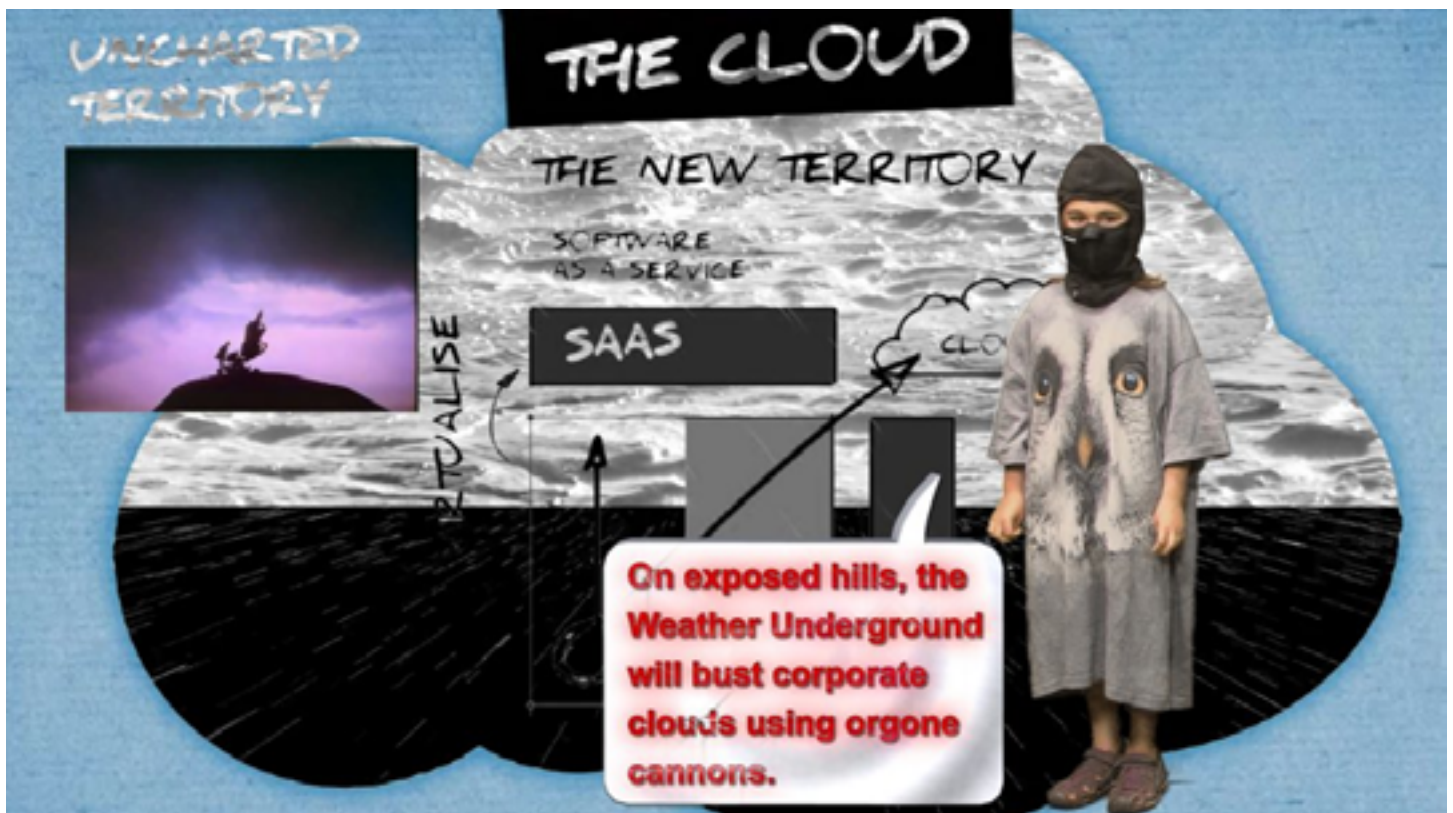
Hito Steyerl, Liquidity Inc., *2014, single channel high definition digital video and sound in architectural environment, 30 minutes.*
Image courtesy of the Artist and Andrew Kreps Gallery, New York

Liquidity Inc.

Given its multiple capacities, attempts to articulate water as a critical material and visual element of contemporary life seem crucial, particularly if we are to register the scale of geologic time and the position of humanity within a new era. How might water, which brings its own contested history of representation through art historical discourses, become not necessarily a metaphor but perhaps a code or term to articulate the interrelated flows of capital and environmental change? German multidisciplinary artist Hito Steyerl considers water as a primary element of the Anthropocene in her video installation *Liquidity Inc.* (2014). The video combines documentary, narrative and digital processes to explore water, or rather, liquidity, as a representational form that encompasses natural resources, economic cycles, and the broad financialization of life. In the gallery, the

work is installed within a large blue structure, suggestive of a tidal wave or perhaps a freighter but covered in material like that of gymnasium floor mats, encouraging visitors to lounge within the projection space itself. Entering this wave, the viewer encounters hundreds, perhaps thousands, of images, gifs, hashtags, CGI reconstructions, 3D models, and sound bytes that continuously crowd the screen, punctuating the loosely told story of former financial analyst Jacob Wood. Following the economic crash of 2008, the global financial services firm Lehman Brothers laid off Wood, who was then forced to change careers, becoming a mixed martial arts fighter. The artist presents his narrative as a lesson in liquidity, an example of the fluidity and adaptability required to survive in a speculative economy. This flexible if privileged worker describes his ability to change and acclimate to new economic realities;

Hito Steyerl, Liquidity Inc., *2014, single channel high definition digital video and sound in architectural environment, 30 minutes.*
*Image courtesy of the Artist and Andrew Kreps Gallery, New York*

he must "be like water"—a phrase borrowed from Bruce Lee that suggests a fighter's best strategy is to make himself completely fluid, and thus an impossible target. Here, fluidity is internalized and expressed within the body of the financial worker-becoming-fighter.

Wood tells his story in straightforward interview segments, but a parallel narrator—water itself—is also apparent, its mute voice bubbling up in silvery letters across the screen: "even though I cover this planet, I am not from here. Nor are you. I run through your veins. Your eyes. Your touchscreens and portfolios. I am gushing through your heart, plumbing and wires. I am liquidity incorporated. I am water." The continual presence of the water-narrator suggests that the work's true subject is not limited to the fractured narrative of flexible labor and the general precariousness of contemporary life. *Liquidity Inc.*

directly probes the relationship between liquidity as a property of water—its state as a liquid and its capacity for frictionless flow—and the fluidity of currencies and financial products exchanged across the globe in fractions of seconds. The speed and instantaneity of the global market is mimicked in Steyerl's frequent treatment of the projection screen as a computer desktop, one that is constantly updating itself as it shifts between frames depicting Hokusai's Great Wave and a combination of real and computer-generated images of the sea and its horizon. Against this background of familiar oceanic imagery, Steyerl collages all manner of digital formats, linking weather and water in the collapsing of virtual and real space. In so doing, *Liquidity Inc.* suggests that while the "cloud" may be the corporate metaphor par excellence for the putative desirability of immateriality, it is within the waters of
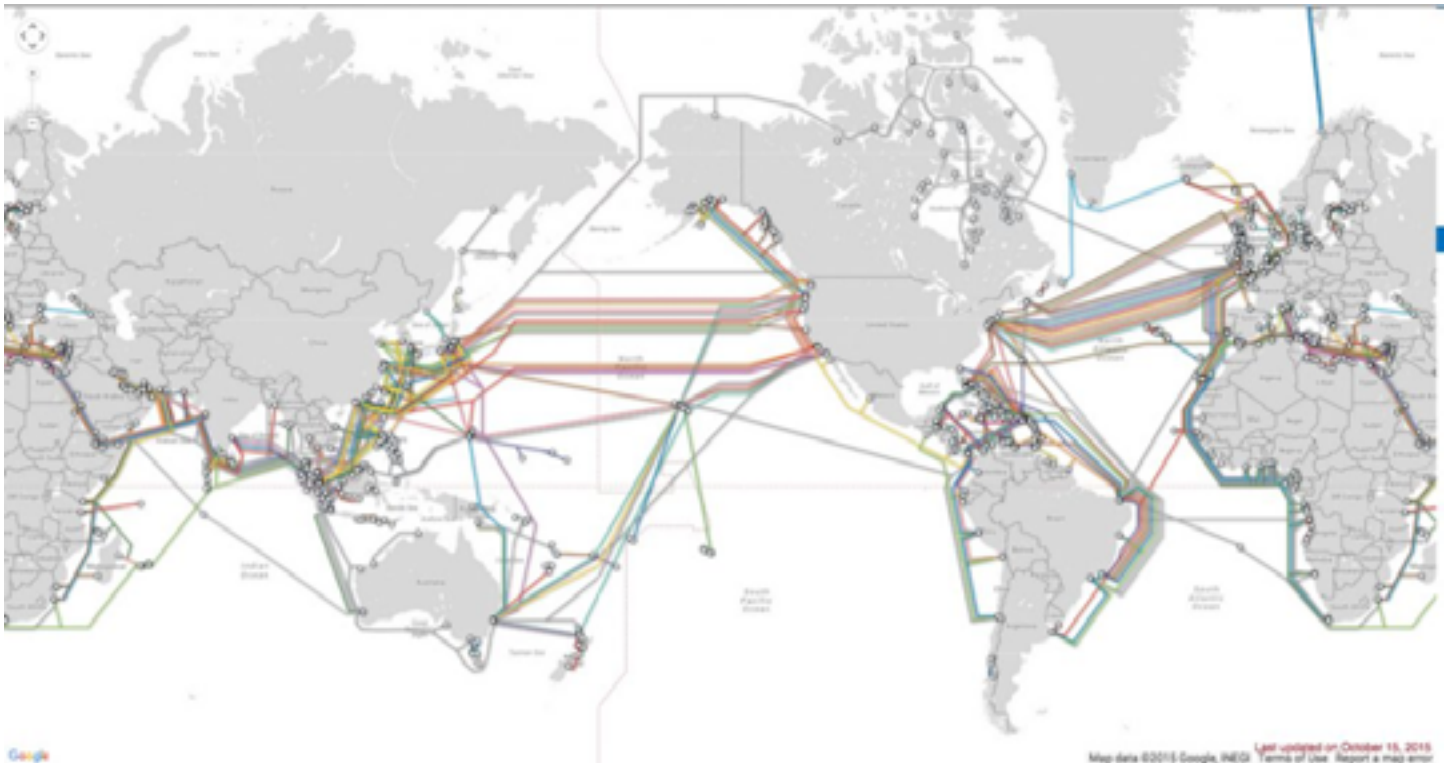

TeleGeography's <u>interactive cable map</u>, based on research by Global Bandwidth, depicting active and planned submarine cable systems and their landing stations. Selecting a cable on the map projection or from the submarine cable list provides access to the cable's profile, including the cable's name, ready-for-service (RFS) date, length, owners, website, and landing points.

the world's oceans that the Internet's clouds are
materially networked.

Materializing the Cloud

So often the virtual domain is regarded as exist-
ing without or beyond the constraints of physical
space, but as a planetary-scale infrastructure, the
"cloud" was first made possible by an incremental
rise in computing power, server space, and trans-
continental fiber-optic connectivity—in other
words, physical space, hardware and industrial
infrastructure.[viii] And at least part of that

infrastructure exists along the ocean floor, in the
dark, alien depths of the earth's largest oceans.
The vast lengths of fiber-optic cable that span the
globe facilitate the financial, social, and consumer
networks upon which the contemporary Internet
economy relies; in one of the least visible places
on earth, we locate the infrastructure that permits
the world to be made most visible. While the
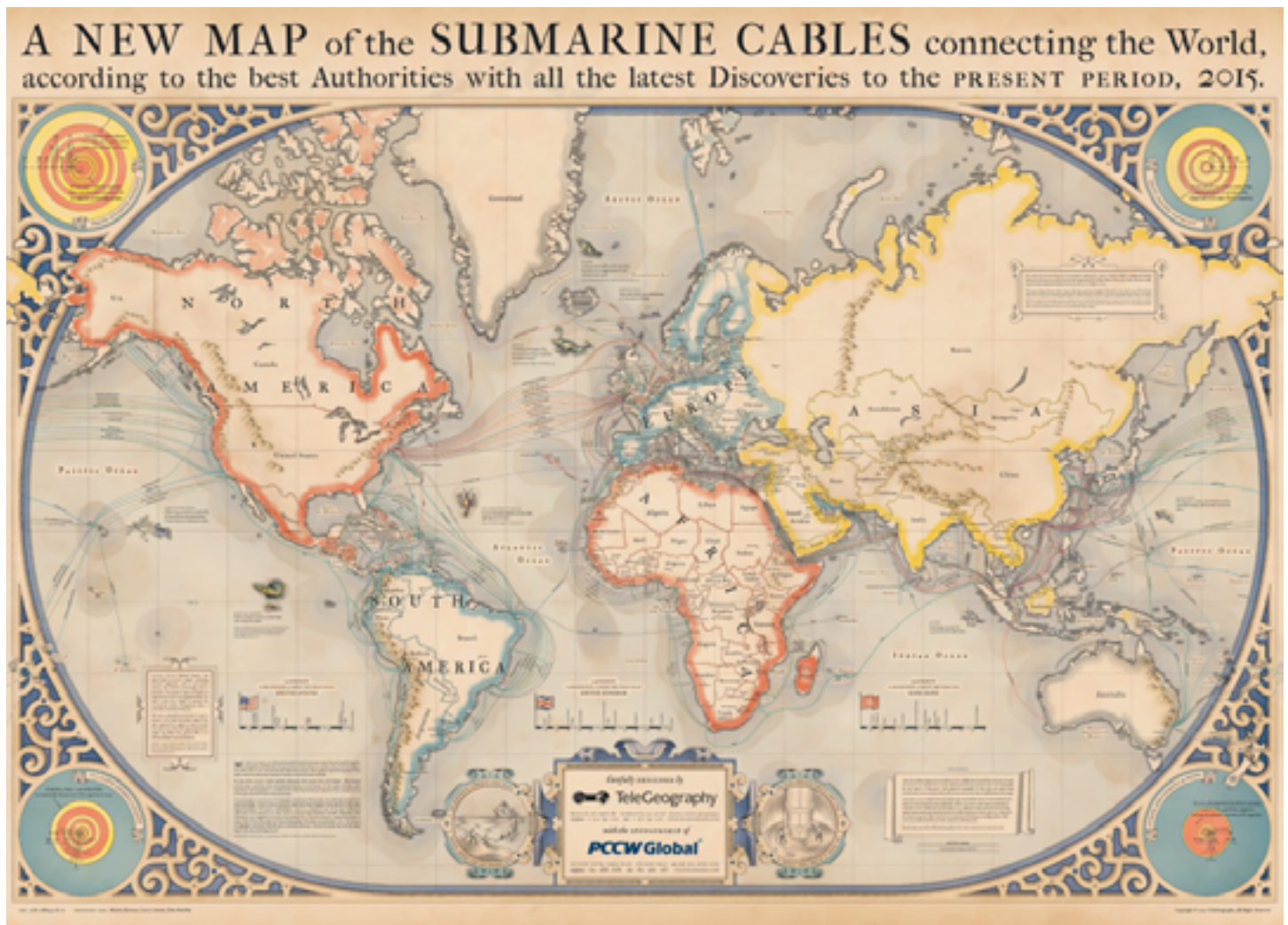
*Telegeography Submarine Cable Map (2015), a map showing contemporary submarine cable
infrastructure with elements of medieval and renaissance cartography.
www.telegeography.com.*

cables exchange data at virtually light speeds fathoms below, the surfaces of the seas constitute a corollary network supporting the much slower transportation of cheap consumer goods and raw materials across the planet. It is perhaps not surprising that the conditions of digital connectivity upon which so much of the exchange of capital relies also mimic the colonial trade routes of earlier generations of empire building and naval power.[ix]

As a parallel component of her art practice, much of Hito Steyerl's writing on the politics of the screen and the aesthetics of representation attempts to render the digital palpably tangible and material. She describes the Internet as a condition—not an interface, but an environment. [x] Accordingly, this Internet condition—a space in which nothing and no one is free from constant networking—is, "also a sphere of liquidity, of looming rainstorms and unstable climates. It is the realm of complexity gone haywire, spinning strange feedback loops. A condition partly created by humans but also only partly controlled by them, indifferent to anything but movement, energy, rhythm, and complication....We thought it was a plumbing system, so how did this tsunami creep up in my sink? How is this algorithm drying up this rice paddy?"[xi]

Through these contradictory metaphors, Steyerl reminds us that the Internet is ubiquitous in its spatiality, but operates as a material entity. We are now fully embedded in a computational landscape and are always attached to a network, indeed, to multiple networks, simultaneously; in real time, we update statuses, post pictures, hashtag emotional states, meme jokes, tweet politics. Despite this entrenchment in the virtual world, we are still tethered to an earth, and its oceans, whose physical spaces are the spaces of the Internet, try as we might to reduce the biological to the virtual once and for all.

Liquid Visuality

If the destruction wrought by human activity across the globe structures a collective anxiety about the future, it is through the aesthetics of such destructive forces that we register such anxieties. By visualizing water in the context of the Anthropocene, artists are able to make explicit both its value as an increasingly rare commodity that all life requires and the force with which it is increasingly destructive. As Irmgard Emmelhainz has argued, "The Anthropocene [means] not a new image of the world, but rather a radical change in the conditions of visuality and the subsequent transformation of the world into images."[xii] The circumstances of life, and the visibility of its processes, have been transformed. As a speculation on environmental integrity or a transformative portrayal of shifting geopolitical boundaries, water's fluidity and its multidimensional complexities speak to an ongoing anxiety about the environmental, climatic, economic, social, and political crises of our time. It is easy to think of water as the virtual metaphor par excellence for the digital world, widely imagined as fluid, shape-shifting, and formless. But the metaphor is also somewhat ill-fitting, balancing the necessity of a valuable resource against the environmentally destructive networks that support global communications.[xiii] Water refuses to be stilled, it can rarely be contained, and although it is necessary for life, too much or too little can be fatal; moreover, it controls, in some way, almost every climatic pattern and weather event on earth. Despite the vastness and, for many, the inaccessibility and invisibility of the

world's oceans, water may come to be—more than oil and gas, more than the minerals in our computer chips, more than the air we breathe—the resource that most defines the contemporary era.

Footnotes

[i] Simon Albert, Alistair Grinham, Badin Gibbes, Javier Leon, John Church. "Sea Level Rise Swallows 5 Whole Pacific Islands," *Scientific American* online, May 9, 2016. http://www.scientificamerican. com/article/sea-level-rise-swallows-5-whole-pacific-islands/

[ii] Mirzoeff states that, "Like all forms of countervisuality, contesting the Anthropocene visuality is a decolonial politics that claims the right to see what there is to be seen and name it as such: a planetary destabilization of the conditions supportive of life, requiring a decolonization of the biosphere itself." Nicholas Mirzoeff, "Visualizing the Anthropocene," *Public Culture* 26: 2 (2014): 230.

[iii] Nicholas Mirzoeff, "The Sea and the Land: Biopower and Visuality from Slavery to Katrina," *Culture, Theory and Critique* 50 (2009): 291.

[iv] *The Forgotten Space*, directed by Allan Sekula and Noël Burch, 2010.

[v] Dipesh Chakrabarty, "The Climate of History: Four Theses," *Critical Inquiry* 35 (2009): 206. Chakrabarty is frequently credited with bringing the discourse of anthopogenic climate change into the humanities. The first scientists to use the term Anthropocene, to name a new geological age, were chemist Paul J. Crutzen and his collaborator, marine scientist Eugene F. Stoermer, in a short statement in 2000, which was then elaborated in 2002. See Paul J. Crutzen and Eugene F. Stoermer, "Geology of Mankind," *Nature* 415, (Jan. 3, 2002).

[vi] See Simon L. Lewis and Mark A. Maslin, "Defining the Anthropocene," *Nature* 519 (March 12, 2015) for a critical assessment of anthropogenic signatures in the geological record that suggest a new epoch is under way.

[vii] Peter Sloterdijk, *Terror from the Air*, trans. Amy Patton and Steve Corcoran (Los Angeles: Semiotext(e), 2009).

[viii] Among other accounts of the cloud's material history, see Metahaven, "Captives of the Cloud: Part I," *e-flux journal* 37, September 2012. http://www.e-flux.com/journal/captives-of-the-cloud-part-i/

[ix] For a historical account of oceanic trade routes, see Emily Casey's essay on Benjamin Franklin's representation of the Gulf Stream, published in this issue.

[x] Hito Steyerl, "Too Much World: Is the Internet Dead?" *e-flux journal* 49, November 2013. http://

www.e-flux.com/journal/too-much-world-is-the-internet-dead/

[xi] Ibid.

Footnotes Continued

[xii] Irmgard Emmelhainz, "Conditions of Visuality Under the Anthropocene and Images of the Anthropocene to Come," *e-flux* 63, March 2015. http://www.e-flux.com/journal/conditions-of-visuality-under-the-anthropocene-and-images-of-the-anthropocene-to-come/

[xiii] This is largely because of the vast amount of energy required to power data centers, which has increasingly been reported in the mainstream media. For example, see Bryan Walsh, "Your Data is Dirty: The Carbon Price of Cloud Computing," *Time*, April 2, 2014. Accessed June 9, 2016. http://time.com/46777/your-data-is-dirty-the-carbon-price-of-cloud-computing/ and Ingrid Burrington, "The Environmental Toll of a Netflix Binge," *The Atlantic*, December 16, 2015. Accessed June 9, 2016. http://www.theatlantic.com/technology/archive/2015/12/there-are-no-clean-clouds/420744/

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About the Author

Jayne Wilkinson is a Toronto-based writer, editor, and curator. She holds an M.A. in art history and critical theory from the University of British Columbia (Vancouver) and her research interests focus on the intersection of aesthetics and politics in contemporary photographic practices, with specific attention to the interaction of visibility and obscurity in the surveillance state. She is currently director/curator of Prefix Institute of Contemporary Art and editor/publisher of *Prefix Photo* magazine.