Nicholas Mirzoeff The Clash of Visualizations: Counterinsurgency and Climate Change

IT IS AUGUST 2010 AND I AM SITTING IN THE CANOE HOUSE BUILT by the Traditions About Seafaring Islands (TASI) group on Guam, the US dependency in the central Pacific (figure 1), where the indigenous Chamorro people have been claiming their long-ignored rights. As part of that endeavor, there has been a revival of traditional navigation in which canoes built by hand, using no modern materials, are sailed thousands of miles by navigators relying on their knowledge of the stars, the ocean, and its interrelation with land. I am talking with Manny, who uses only one name, a seventh-generation master navigator in this tradition. A man of few words, Manny explains his skill with an aura of authority. I ask him if he has seen any difference as a result of climate change. He notes that he has always been able to predict the weather. His colleague, Larry Cunningham, interrupts to give substance. Once the group was planning a voyage of about 1,500 miles; Manny simply said that they needed to be back by the end of the first week in July. On July 8 of that year a typhoon struck. In this equatorial region, weather patterns observed over generations have been sufficiently stable to allow for such precision, he explains. Manny looks at me. "Now I can't tell what the weather will be."

Guam and other small island states are on the front line of climate change. The waters of the South Philippines Sea are brown with soil



erosion, even as the US Navy Seabees build ever higher seawalls to try to keep the rising ocean at bay. From an official point of view, Guam is on the front line of the global counterinsurgency, as the Global War on Terror was renamed in 2006. Twenty-thousand troops and support personnel have been relocated to the island, which military leaders now declare to be the "tip of the spear" (Paik 2010). Our visualizing of this war actively prevents us from visualizing climate change. This is not just talk. Some \$800 billion has been spent on the war in Iraq, while the one solar panel company supported by federal investment has just gone bankrupt and the high-speed rail initiative proposed as part of the government's stimulus package has gone nowhere.

In the decade since the 9/11 attacks on the United States, the rhetoric of the "clash of civilizations" promoted by Samuel Huntington (1993) has been the dominant means of imagining global culture. Concomitant with this purported clash between the West and Islam has been a "war of images" in which each side appeared to use images as weapons against the other and against internal dissent. After the killing of Osama bin Laden and the emergence of the Arab Spring of 2011, this conflict now appears played out or exhausted. In the wake of this changed perception, the "image" no longer seems so powerful in itself. In this essay, I will suggest that the image is deployed within a regime of visualization, whose success or failure accounts for its reception. For 200 years, visualization and the resulting visuality has been a required military tactic when confronted with a battlefield (or "Area of Operations" in modern parlance) too extensive to be seen by any one individual. The general or other commander visualizes by means of what can be seen, from information supplied and by intuition. In 1840, the controversial Scottish historian, Thomas Carlyle, generalized this practice to all leadership, which he attributed to heroes, distinguished precisely by their ability to visualize the flows of history as they happen.

I suggest that America's concentration on counterinsurgency has not only supplanted and displaced climate change as a central issue but actively contests the possibility of visualizing it as such. The "clash of visualizations" between counterinsurgency and climate change is the engagement by which counterinsurgency seeks to (re)legitimize itself without becoming beholden to the very different claims to social ordering that a prioritization of climate change issues would entail. Looking at this clash of visualization at the US national level in New Orleans and at the level of the global imaginary via the Pacific Ocean and its island states, I stress that from both the formal and political point of view, such clashes center precisely on the definition of the real, the realistic, and their attendant realisms.

WHAT WE SAW

Let's first try to establish the state of play in the visualization of counterinsurgency and climate change respectively, before going into more detail on the histories of visualizing as a strategy and concluding with a consideration of the two sites, New Orleans and the Pacific. On May 1, 2011, US Special Forces carried out the targeted assassination of Osama bin Laden, marking a critical transformation for counterinsurgency operations conducted by the United States. Counterinsurgency, in the terms of the 2006 field manual of the same title produced by the US Army and Marine Corps, was intended to produce active and passive consent from the local population to the regime supported by counterinsurgency forces. This transformation depends on the practice of "command visualization" in which local commanders visualize their Area of Operations in terms not just of present hostile forces but of what we might call cultural geography: past histories, current grievances, culturally sensitive issues, potential flashpoints, and so on.

The regime of counterinsurgency extends far beyond the zones of combat to include even the home nation, since public support is taken to be crucial. For President Barack Obama, as commander in chief, the Area of Operations would be nothing less than the entire planet because the counterinsurgency doctrine imagines the world as the space of actual or potential insurgency. The killing of bin Laden marked an unannounced but clear shift in this doctrine from global counterinsurgency to ubiquitous anti-terrorism. Dependent on information and surveillance to launch its favored Unmanned Aerial Vehicle (UAV) or Special Operations assaults, ubiquitous anti-terrorism still visualizes its operations. Its surveillance tools are both active and passive. Active variants include biometric identification scans at borders and elsewhere, in which the iris is set to become the key marker of identity, replacing the nineteenth-century indexical fingerprint. Passive measures center on computer-monitored, closed-circuit television, particularly omnipresent in the United Kingdom. Given the failure of such measures to contain events such as the London street violence in August 2011, it is likely that a further merger of policing and military tactics will center on the use of small UAVs as surveillance platforms, such as those supplied to the Libyan rebels in 2011. This ubiquitous anti-terrorism prefers digital technology to human observation and small numbers of highly trained operatives to the mass "boots-on-the-ground" tactics of the "surge," as deployed first in Iraq, then Afghanistan and on the fourth day of the London events, when 16,000 police were on the streets.

It was in keeping with this shift that Obama refused to release a photograph of bin Laden's killing and the body was disposed of at sea before the news was released. The contrast here with the "accidental" leak of a video of the execution of Iraqi President Saddam Hussein

in December 2006 is striking. Obama gave notice, in effect, that the undeclared "war of images"—9/11 "answered" by "shock and awe," Guantánamo Bay "answered" by videotaped executions-is over. The use of images as weapons from 2001 to 2006 can indeed now be seen as less effective or important than was thought at the time. To take a salient example, while Abu Ghraib was considered a scandal, all the officers in the chain of command above the prison administration were promoted after it became public knowledge; the issue did not feature in the 2004 presidential election in the United States; and even Charles Graner, widely accepted to have been the ringleader on the ground, was released early from military prison in August 2011 for "good behavior." Obama did not release Osama's photograph, or indeed the remaining Abu Ghraib photographs that are not in the public domain, to serve notice that his anti-terrorism is based on conventional secrecy, in which he and other leaders have seen things the ordinary citizen is told to ignore under the formula: "Move on, there's nothing to see here." Only, as in the case of bin Laden, there is and we know it and so do they.

"Visuality" is the name for that process by which certain persons claim the authority to determine what may or may not be "seen," literally and metaphorically, in the operations of power (Mirzoeff 2011; all further discussions of visuality come from my book, where extensive bibliographical information can be found). Against such authority, popular countervisuality claims autonomy, or what I have called the "right to look." Such seeing and looking are not perceptual processes but claims to relations of what is culturally and politically visible and sayable.

If there were ever a case where images ought to have made a clear difference to such relations, it must be that of climate change. To take one example: any comparison between photographs of glaciers taken decades ago and again more recently show very significant retreats by the ice. Discussion of glacier retreat has nonetheless become dominated by a single sentence in the 2007 report of the Intergovernmental Panel on Climate Change (IPCC), which claimed that Himalayan glaciers would disappear by 2035. Prompted by scientific concern, investigation showed that the specific claim was made in an interview without peer-reviewed evidence to support it. Although the IPCC was transparent in issuing this clarification, the slip has been used worldwide to "disprove" climate change. By the same token, the finding by the Indian Space Research Organization in May 2011 that 75 percent of Himalayan glaciers are retreating, while only 8 percent are advancing, was not reported in similar detail.

Perhaps the single most powerful icon of climate change has been the image of the polar bear hovering on an apparently melting ice floe. Used as a cover for *Time* magazine in April 2006, the association of polar bears with climate change has become metonymic. In 2010, Nissan advertised its electronic car, the Leaf, with a commercial showing a polar bear thanking a person who had bought one of the cars. The spot relies on the viewer connecting the reduced emissions from an electric car both to decreased global warming and to the survival of polar ice for bears and other wildlife. Time's own image came in response to accounts in global media circulating since December 2005 of polar bears drowning due to lack of ice. Although Charles Monnet, the author of this study, published in a peer-reviewed journal, doubts have recently (and inevitably) been expressed as to its accuracy. In any event, in themselves the polar bear photographs tell us nothing. If we see a polar bear poised on the edge of a small piece of floating ice, we make an anthropomorphic identification with the bear and fear being forced into the icy water. Polar bears in fact live by moving from floe to floe and are capable of swimming up to 100 kilometers. Given that the Time photograph and others of its ilk are, in the traditional photojournalism format, shot "tight" to the subject (meaning that the image centers on its subject with little background), it is impossible to tell whether or not there are other floes nearby. The real threat to the bears is open water with no ice for them to rest upon or use as a platform for hunting. However, a photograph of a bear swimming without visible land or ice would be far less compelling and would not allow for anthropomorphic identification. Nor could it be used to bolster claims about climate change without significant "outside the frame" justification: the image itself does not make an argument. Paradoxically, however, the widely trumpeted assertions that the glacier retreat data and polar bear drownings were faked have had widespread resonance. The very awareness of the ubiquity of visual images and the ease with which they can now be manipulated seems to lead to an expectation of faking or at least to a strong assumption that charges of faking are justified. Thus, a faked image is held to disprove a position, while one that supports an argument is always under suspicion, never a reliable or dispassionate witness.

These might be considered trivial examples from the 24/7 media machine. So let's consider the dramatic and terrible images resulting from the devastating Japanese earthquake of March 2011 and the resultant tsunami. When Rajenda Pachauri, the head of the Intergovernmental Panel on Climate Change, suggested soon afterward in India that the tsunami was more powerful because of the higher sea level in the Western Pacific due to anthropogenic climate change, there was little or no Western media coverage, let alone political response. If there was any Western media coverage (other than on some climatedenier blogs), it did not attain that level of reiteration by endless professional and amateur commentary that designates something as "news." Pachauri referred only in general terms to the 17 cm sea-level rise over the course of the twentieth century. Measured in 2008 at the threatened island archipelago of Kiribati, Western Pacific levels had risen 6.2 cm since 1992 and continue to do so at the rate of 3.9 mm per year. Each centimeter of sea-level rise results in the loss of 1 meter of beach width. If we consider that the Western Pacific extends for approximately 32 million square miles, it is easy to see that there is far more water in the ocean now than any engineer could have imagined in 1975 when the Fukushima Daichii plant was designed. Tsunamis are caused when a volume of water is displaced by a seismic shock, so the greater the volume of water, the larger the potential tsunami. Further, were Pachauri's remarks to be taken into account, it would imply that official negligence was not solely to blame for the disaster at the nuclear plants, which were engulfed by the tsunami. Indeed, given that sealevel rise following from climate change is intensifying and has hitherto been concentrated in the Western Pacific due to unrelated current patterns, there would be serious implications for nuclear plants worldwide placed in proximity to the sea—which is to say, most of them.

For all the justifiable concern regarding the radiation leaks, these dots were not joined or even sketched in, whereas countless speculations as to the whereabouts of Osama bin Laden have now been followed by endless reams of assessment and comment in the aftermath of his death. The sea-level rise in the Pacific is not "visible" and causality by climate change is therefore not "sayable," whereas the demands of ubiquitous anti-terrorism are constantly in the foreground. Climate scientists and those concerned by their findings have come close to despair over this situation, seeing it as evidence of a great conspiracy by oil companies and other fossil fuel interests—which certainly exists (Oreskes and Conway 2010)-or even, in the case of Vice President Al Gore, as an assault on reason itself (2007). While these politics of climate change cannot be solved here, its visualization has much to tell us about the interrelated categories of the image, the imaginary, and the imagined community. First, let's pause the narrative to review what we mean by visuality and visualization.

VISUALITY: A BRIEF PRIMER

Visuality is a regime of visualization, not images. It is the means by which power claims authority. It does not act in and of itself but it seems to us that it does, like "empire" or "global capital." Since the Napoleonic era, military strategy has relied on the general's capacity to visualize the battlefield. In the opinion of Karl von Clausewitz, it is precisely this capacity that indicates the quality of leadership. For Clausewitz and Carlyle alike, the paradigm example of heroic visualizing was that of Napoleon himself (Mirzoeff 2011: 12-13). Clausewitz identified Napoleon's capacity to deceive his enemy as to his real intentions by making troops visible elsewhere as the key to his success. In short, to visualize is not to make visible but to suspect what can be seen and to manipulate it. Carlyle admired Napoleon for his ability to visualize History (Carlyle's capitalization) itself, first evidenced by his willingness to open fire on the Parisian crowd in 1795. Visuality in Carlyle's highly influential view was foundationally opposed to all revolutions and emancipations. The heroic leader offers one right alone to the modern mass population: the right to be led. This was to be a properly Platonic aristocracy, in which the very few who had the capacity should command, and the rest of us should do the work allocated to us and nothing else. Many progressives, from Friedrich Engels via Oscar Wilde and W. E. B. Du Bois, were misled by Carlyle's hostility to the aristocracy of birth and what he named the "cash nexus," into thinking he was on their side. For Carlyle, there were only two possible conditions for a nation: Order or Chaos. The Hero offered the tremulous possibility of Order against the Chaos of the modern, epitomized by modern forms of work against properly ordered forms of labor such as feudalism and plantation slavery.

If the ability to visualize a command situation is critical for a military leader, so then is the ability to visualize History for a political leader. Obama is, for example, fond of declaring that his anti-terrorism decisions are on what he calls "the right side of history," showing a radicality lacking elsewhere in his governance. His conceit offers the familiar Occidental confidence that "our" way is the right way. It also implies that the visualizer is aware that his or her decisions are going to be contested because the tactic is derived from military practice. It means that certain approaches can be visualized and others cannot. Visuality is a way of thinking—more precisely, a means of ordering.

There have been three regimes of visuality. I have called them "complexes," both to suggest the necessary elements of complexity in visualizing an entire society and to stress that it is above all a mental process, not one of physical perception. Visuality was first an operation of authority on the slave plantation and so its first complex was the plantation complex, using historian Phillip Curtin's term (1998). This was followed by the imperial complex and the current militaryindustrial complex. The very obviousness of these divisions suggests to me that they are correct. The components forming a complex are classification, followed by separation, and finally aestheticization. Thus in the military-industrial complex, the primary classification was between Communist and anti-Communist. These must then be separated, often using walls and other physical barriers, such as the Berlin Wall or the demilitarized zone in Korea, but also conceptual barriers, such as "zones of influence." The final stage is the hardest: to make this classification and separation seem so "natural" that it becomes right in all senses. This sense of being right creates a form of aesthetic pleasure, named by Frantz Fanon as the "aesthetics of respect for the status quo" (1963: 5). Once achieved, this aesthetic is extremely resistant to change.

Counterinsurgency has not established this cultural legitimacy, and with the Obama administration opting for ubiquitous anti-terrorism, whose hallmark is the targeted killing by UAV, it is clear that approval is now sought only from the domestic audience, not the so-called host population in combat zones. The collapse of autocratic regimes in Tunisia and Egypt, whose support from the West was continually justified in terms of counterinsurgency and the threat of Islamic takeover, has further eroded the strategy of global counterinsurgency. Indeed, the very visibility of visuality as a strategy of authority makes it apparent that it lacks full legitimacy, to use a favored term of counterinsurgency theorists. To take a historical parallel, when Carlyle devised the term visuality as a key attribute of the hero, the locus of authority was very much contested in Britain, as Chartists and other radicals asserted the sovereignty of the people. If the first Indian war of independence, also known as the Indian Mutiny, in 1857 marked the point at which what one might call Carlyleism gained respectability, by the time Victoria declared herself Empress of India in 1877, the concept of the imperial mission directed from the center had become the "status quo." The current crisis of visualized political authority could develop in several ways:

Anti-terrorism could become newly legitimized as a means of linking border controls, the containment of domestic disorder such as the London riots, and counterinsurgency centered on UAV assassination.

- A new form of authorizing authority might be created, whether from democratic, revolutionary, or theocratic foundations, which might or might not use visualizing as a tactic.
- Those elements of the contemporary, like climate change, that have been kept out of "sight" by the military-industrial complex's means of visualizing the social, could come to play a newly central role in ordering.

The clash of visualizations is, then, the working out of the contradiction between the first and the third of these possibilities, which may be displaced altogether should the combination of market crisis and political upheavals produce a new formation.

If visuality has been an active modality by which power has both operated and claimed authority for itself across the modern period, it has actively been challenged in three registers. First comes the opponent that visuality itself predicates as the necessary enemy, from the French and Haitian revolutions castigated by Carlyle to today's fear of "global Islam." There have also been modes of what I call "countervisuality" deployed by those excluded from the narrow confines of those authorized to "see." The first such strategy was the revolutionary hero, incarnated in figures like Jean-Paul Marat and Toussaint Louverture, later to be appropriated by Carlyle. The component elements of such countervisualities have been comprised of relations between forms of democracy, education, and what we would now call sustainability. Democracy is the overturning of order, as Carlyle understood it, because it is the rule of those who (should) have no part in ruling. Education by the same token has long been understood as the means by which a person can escape the place designated for them. It is the third claim of modern countervisuality to sustainability that is perhaps its most radical aspect.

Sustainability was the demand of antislavery revolutionaries from Haiti on. Once the Haitian revolution had established a form of authority in 1800, the revolutionary rank-and-file began to claim what they saw as their new right to sufficient land to sustain themselves and their extended families. Under the regime of plantation slavery, the enslaved were allocated a small, regularly shaped piece of land to grow food to supplement their meager diet. However, in surveys taken on Jamaica after the end of slavery, the formerly enslaved can be seen to have amalgamated their patches of land into larger, irregular plots, where groups of men, women, and children collectively grew staple crops, fodder for livestock, and cash crops for local exchange purposes. The cooperative society imagined by such practice did not remain possible for long, as Britain reasserted central governance in 1865 and restored plantation cash-crop cultivation.

In the same fashion, Toussaint had not only limited land ownership to those who could afford 150 hectares or more in his constitution of 1801: he also required all those without other special skills to work on the land. In what has since become a familiar confrontation. Toussaint offered the right to existential freedom in exchange for the responsibility of specific forms of wage labor. Toussaint took this step because he imagined cash crops, like sugar and coffee, the products of slavery, to be indispensable to sustain the nation-state, both in the immediate need to repay loans to the United States, and in the long term. From his optic, Toussaint imagined the nation not as a printculture community as suggested by Benedict Anderson (1991), but as a hierarchical order, structured by workers sustaining the legal personality of the new nation. The subalterns of Saint-Domingue revolted against this new order, an insurgency of insurgents, and Toussaint repressed them, executing their leader, who was also his nephew. It was a counterinsurgency against sustainability, to use anachronistic terms that nonetheless reflect the issues.

Thus were demands for "40 acres and a mule" shelved after the defeat of Reconstruction in the United States in favor of sharecropping. The subalterns claim was not, of course, motivated by climate change. But it did respond to the palpable environmental devastation of plantation culture, which deforested the island of Barbados as early as the seventeenth century and asserted a claim to autonomy rather than the authority demanded by the nation-state. In an ironic coda, policy specialists began recommending small-scale collaborative cultivation

as a solution to Haiti's economic needs after the devastating earthquake of 2010.

THE CLASH OF VISUALIZATIONS

There is, then, a history of displacement of sustainable claims to autonomy by centralized authority in the name of the productive nation. This project might be called "modernizing," stemming from Francis Bacon's oft-repeated call for the "conquest of nature ... for the relief of man's estate" in The New Atlantis (1624). The natural world is understood as at best virgin territory ripe for conquest (like the *terra nullius*, empty land, of the Americas and Australia in European eyes), perhaps even an enemy. The conquest of nature became a received cliché, taught in schools from the late nineteenth century onward, and often seen in journalism. Understood in relation to climate change, the dynamics of the conquest of nature are several. First, it generates the sense that there is a choice between a military posture and a capitulation to nature, where the latter would be a sustainable or carbon-neutral society. If it is manly and warlike to conquer nature, it is by extension effeminate and cowardly to accommodate it. It also leads to the adoption of militarized tactics to deal with the consequences of climate change. Finally, the maintenance of this artificial distinction has led to palpable contradiction and incoherence in the visualization of both counterinsurgency and climate change.

As a city seemingly claimed from the ocean and permanently under guard against the waters of all kinds, New Orleans might stand as a metonym of the conquest of nature, its very name hinting at the idea of a new Atlantis. From plantation slavery to the Louisiana Purchase, the Civil War, *Plessey vs. Ferguson*, the Civil Rights movement, and today's crisis, New Orleans has been central to the project of nationformation in the United States. Historian Bruce Cumings (2009) has recently shown how the Louisiana Purchase opened the United States to becoming a Pacific-oriented power, linking to our second case study. Environmental historian Karen O'Neill (2006) has further suggested that the 1824 federal law declaring the Mississippi and other waterways open to all and outside state jurisdiction was central to the formation of the modern United States. That is to say, just as the declaration of the principle of the "high seas" (oceans outside territorial waters) by Dutch jurist Hugo Grotius in 1610 has been taken to be foundational of international law, global trade and indeed European imperialism, so too was the possibility of unrestricted internal navigation vital to creating an "imagined community" out of the amalgam of the Thirteen Colonies, the Louisiana Purchase and Westward expansion.

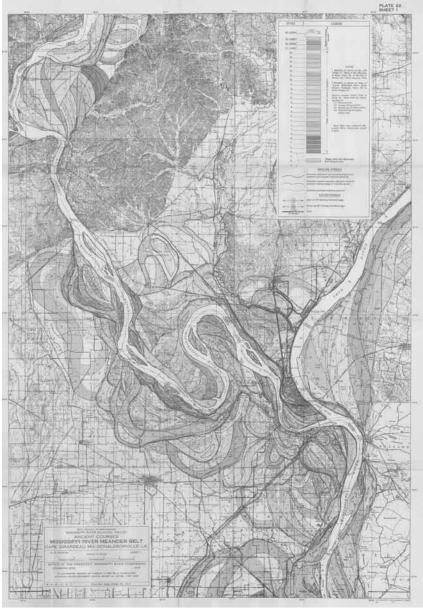
It was this very centrality to the formation of the United States that made the now notorious failure of the response to Hurricane Katrina in 2005 so shocking. In the imaginary of the post-9/11 security state, all considerations are secondary to the eponymous "security." Aid to humans had to wait until order was felt to have been restored. The metonym of this visualization was the photograph of President George Bush viewing the disaster from Air Force One, the presidential airplane. Rather than "risk" being on the ground, Bush looked at the city from the air, the viewpoint of modern militarized visuality. While many American citizens languished on rooftops, highway bridges, and in other insalubrious locations, police, National Guard, and regular troops were busy building a new high-security prison at the New Orleans Greyhound Bus station, using convict labor from Louisiana's notorious Angola State Penitentiary. As documented by the writer Dave Eggers in his 2009 book Zeitoun (named for his subject, a Syrian contractor, who was imprisoned there without charge), some 1,200 mostly African-American men were detained in breach of all habeas corpus rights under suspicion of being "terrorists," "Al Qaeda," or "Taliban." Meanwhile, after what have now proved to be false rumors, of rape and gunfire, the-then governor of Louisiana, Kathleen Blanco, made an emotional appearance on television where she declared that the National Guard units had returned from Iraq and were "ready to kill." One National Guard officer described the city to the Army Times as being like a "little Somalia," a reference to the 1992 expedition represented in the film Black Hawk Down. At the same time, such actions racialized the situation so that when a "white" citizen took things from shops, they were described as having found them, whereas their African-American counterparts were described as looters (Kinney 2005).

In the first days after the storm, it was journalists and bloggers who contested this story of insurgency. In Spike Lee's award-winning 2006 documentary for HBO entitled When the Levees Broke: A Requiem in Four Acts, two striking examples can be seen. A BBC journalist, normally very calm, showed in his report a group of soldiers or National Guard surrounding a young man accused of looting. Panning the camera, we then see an elderly woman in a wheelchair being pushed through the water with considerable difficulty, to the undisguised anger of the correspondent. A day later, CNN interviewed the now infamous Michael Brown, head of the Federal Emergency Management Agency (FEMA). It was in the course of this interview that Brown learned from the CNN anchor that there were thousands of people stranded at the New Orleans convention center. It seemed that the media were better informed and more caring than the government. Not only that, journalists were moving in and out of a city that was officially "impassable." These images shocked the United States and the world. They proposed a countervisuality to the visuality of security—the right to be seen. Nonetheless, six years after the event, one can see how the outrage caused by handling the Katrina crisis as a security issue generated a response focusing primarily on what the government should have done, leaving long-term responses climate change out of the discussion.

Indeed, the Army Corps of Engineers, responsible for the protection of New Orleans by levees, tends to refer to water as the "enemy" and adopts what has been called a "fortress" model to the preservation of the city. The fortress both conceptually and practically anchors and consolidates the grids of the modern city from street layout to electrical provision and the urban imagination visualized by artists like Mondrian. Since Katrina, many calls for the restoration of the levees have followed that fortress model, albeit often in a variant that might be called "green modernism," in which protection is supplemented by limited wetlands restoration or other such gestures. Hydrologists, for example, will often speak of "governing" the river, as if it were a subject people, and no journalist will miss the cliché of describing a flood or hurricane as "angry." Here it is helpful to contrast the remarkable mapping of the Mississippi River flood plain made by Harold Fisk of the Army Corps of Engineers in 1944 with today's visualizations (figure 2). Fisk shows an intensely complex set of meanders and bows formed over geological time, looking like a William Blake painting more than a map. Twenty-first century maps of the river by the corps show it as a straight line, constrained between impassable levees that are only as strong as their weakest point. *When the Levees Broke* ends with an extended discussion about engineering, proper levee construction, and the failures of the corps. Certainly it is sobering to see the computer-controlled movable steel gates used in Holland contrasted with the piles of sand used by the corps. But we should perhaps ask instead: why is the Army in charge of the river at all? The visualization of the "conquest of nature" as human authority imposed on natural chaos by militarized action has become so naturalized as to be aesthetic: it feels right.

In An Inconvenient Truth (2006, directed by Davis Guggenheim), Vice President Gore took the militarization of climate change up a level. In this expanded version of his illustrated lecture on climate change, Gore first introduces the science concerned and his own growing involvement with it. He notes that the climate-induced warming of the oceans renders hurricanes more powerful, followed by a striking and powerful montage of images of Hurricane Katrina, suggesting that Katrina was the first example of this tendency. He then cites the words of former British Prime Minister Winston Churchill, concerning what Gore calls "another storm," meaning the rise of Nazism in Europe. Specifically, he quotes Churchill's speech to the House of Commons in November 1936, in which Churchill argues that the attempt to appease Hitler has now entered "the period of consequences," that of prevention now being over. Gore draws a parallel between his own difficulties in convincing the US Congress to take action on global warming and Churchill's ignored warnings about Nazism.

It is true that the consequences of climate change are now all too apparent, although it can never be said with certainty that a specific metereological event like Katrina was "caused" by it. However, one wonders whether it is useful to compare these consequences to the annexation of the Rhineland. By that standard, six years later we



should be entering the "final solution" phase of climate change, having had several years of total war. There was certainly a hint of such apoca-



lyptic thinking after Katrina and in Hollywood efforts like *The Day After Tomorrow* (2004). Gore was no doubt mindful that any attempt to catch the media imagination appears to require a parallel to Nazism, and he would have been all too aware of the way that President Bush had justified the 2003 invasion of Iraq by such means. Further, Gore wanted his audience to treat climate change as the most serious issue confronting them and he understood that framing it as a war was the best way to do so. At the same time, accepting that war is the highest priority means that actual war necessarily takes precedence. Rhetorics of energy independence or green jobs have notably failed to alter this hierarchy.

It is in the small island states and colonies of the Pacific that such issues appear in their full range of contradiction. As noted earlier, since a reduction in the number of troops in Japan, Guam has become a key node in the military visualization of the planet as a global counterinsurgency. Guam is indispensable as a link in the global networks of communication and supply, providing a permanent base in the Western Pacific. The Seabees, the Navy equivalent of the corps, have recently built new seawalls on the island that are already in danger of overtopping at each high tide (figure 3). The contradiction between such climate change adaptations on Guam and the declaration of its permanent strategic importance is such that it cannot be visualized:



that is, it exceeds the capacity of the visible and the sayable. Examples abound across the "sea of islands," to use the name given by Fijian scholar Epeli Hau'ofa (2000) to the region.

The island nation of Palau has a Compact of Free Association with the United States, entered into in 1976 after the island was placed under US mandate by the United Nations at the end of World War II, when Koror, the capital, had been the Japanese capital of the Pacific. Palau's economy depends on the payments made by the United States under the compact in exchange for military access to Palau's territorial waters and airspace, as well as Japanese reparations. Oil has now been discovered offshore from a remote island, and it is no doubt a coincidence that the Arab League decided shortly thereafter to open an office in Palau with the aim of increasing investment and disbursing funds to mitigate the impacts of climate change. Palau is one of the nations most threatened by climate change (figure 4). Higher tides threaten the capital as well as the cultivation of the staple food, taro. Even greater threats come from the salination of water and increased desertification of the archipelago, meaning that it is as likely that the islands become uninhabitable as that they flood.

Given this thumbnail sketch, it is to say the least surprising that it was to Palau that the Obama administration relocated six Chinese Uighurs from the prison at Guantánamo Bay. Unable to return them to China, where they would undoubtedly be persecuted but equally unable to persuade other governments to accept individuals they had themselves designated as the "worst of the worst," US officials have thus adopted a place where climate change is already a catastrophe as a "secure location." Such action has been repeated on the much larger scale by the Australian government, which uses the remote Christmas Island in the Western Pacific to warehouse asylum seekers. It is one thing for the "police" to say to the people "Move on, there's nothing to see here." It is another for them to in effect say it to themselves, as their efforts to develop Oceania into a counterinsurgency platform are conducted in willed blindness to the dramatic effects of climate change across the region.

FOR ANTHROPOCENE VISUALITY

The clash of visualizations cannot, then, be resolved in some Hegelian fashion into a superior synthesis. Indeed, as visuality was both a product and a technology of colonization, it would be surprising if it could be fashioned into a planetary visualization proper. As the persistent "invisibility" of the Pacific amply demonstrates, the visualization produced by global counterinsurgency is not equivalent to the planetary. One way to summarize the challenges posed by climate change would be to highlight the need for what I shall call "Anthropocene visuality." Here I follow the suggestion of historian Dipesh Chakrabarty (2009) that the announcement of a new geological era caused by human activity, known as the Anthropocene, should mark a watershed in all our thinking. Geologists have designated the past 10 to 12,000 years as the Holocene period, itself a small fragment of the 1.3 millionyear-old Quaternary. The Holocene has been characterized by stable climatic conditions favorable to human agriculture. The Anthropocene commenced with the beginnings of the Industrial Revolution around 1750, a blink in the eye of geological time. Nonetheless, it affects all planetary spheres-the atmosphere of course, but also the biosphere, the hydrosphere, even the lithosphere. As Chakrabarty puts it, because human actions are making a world where it will be impossible for humans to live, "our usual historical practices for visualizing times, past and future, times inaccessible to us personally—the exercise of historical understanding—are thrown into a deep contradiction and confusion" (2009: 198). His insight shows that visualization depends on a sense of congruity between past, present, and future. For Carlyle, a historian, this consistency meant that past tradition projected present and future order against the dispersive forces of chaos—the people, democracy, equality, and so on. If the future of the species per se cannot be assured, such projections no longer seem valid.

Whereas modernity has often been the province of a financial elite or intellectual vanguard both within and across national cultures, and visuality was the attribute of heroes, the Anthropocene is humanity's one truly collective creation. For, while certain nations and regions clearly take more responsibility than others, the atmosphere is a comprehensive archive and it records and retains all emissions above and beyond those established in the carbon cycle. The carbon cycle maintained the relative proportions of atmospheric gases at stable levels. The Anthropocene, by contrast, renders a set of interrelated living and nonliving systems into an entity whose prime characteristic is the deviation from their former homeostasis into a nonstable mutually reinforcing dynamic, inducing rapid change. If events like Hurricane Katrina are natural disasters rendered into human-created catastrophes by bad planning, the Anthropocene as a whole is not a catastrophe: it is a new "model" (Edwards 2009). That model may be characterized by the frequency of extreme weather events, rising sea levels, and melting ice caps—but it is now the geological reality. We are struggling to visualize it because no visualization (or countervisualization) in the modern tradition in which one "side" is trying to defeat another is adequate to this new reality.

The Anthropocene requires a new mode of realism to render it comprehensible and visualizable. Whereas visuality sought to render human experience comprehensible by presenting it as a divided battlefield presided over by heroes, Anthropocene visuality needs to find ways to render what Chakrabarty provocatively calls the "universal." Given the geological point of view, one might beg to differ: the universe

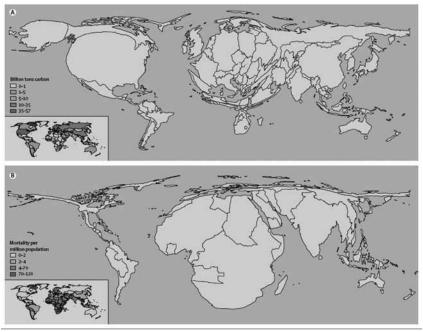


Figure 5

is not vulnerable to the homeostasis of the carbon cycle on one planet. An Anthropocene visuality cannot claim authority over the geological processes humans have engendered; it can only accept responsibility. Nor can any claim for autonomy from the Anthropocene make any sense. Anthropocene visuality will not be the domain of the hero. The scenario of "scientist-as-hero," rendering data so transparent that no one could fail to act—however much I may agree—is not producing the necessary results. Nor can we rely on government leaders, as the failure of the 2009 Copenhagen summit and its successors have amply demonstrated. Certain basic forms of Anthropocene visuality can be established. Simply put, it is here and now. In temporal terms, it is now, and cannot be deferred to the future, as so many media and political discussions are wont to do. The flooded island nations of Oceania are the index both of the failure of modernist visuality and of the active development of the Anthropocene. In the current moment of globalization, which is nothing if not a means of conceptualizing the social spatially, it is essential to conceptualize such locations as "here" not

"there": in the Anthropocene there is finally no there anywhere: it is all here. In short, the planet is now our backyard and no location can be relegated to the status of the "there," where one can ignore the symptoms of anthropogenic climate change. In terms of visuality, if its classification is now "anthropocene," there is no simple separation.

However, it can certainly be mapped. A striking diagram produced for the British medical journal The Lancet in 2009 generated a contrast by mapping countries first by the quantity of emissions they produce and next by the expected consequences of anthropogenic climate change (fig. 5). Startlingly, these qualifiers are all but inversely related: Africa and Oceania, which are among the lowest emitters both in the present and historically, are nonetheless set to experience the worst consequences. So ending the colonial model of separation cannot be used an excuse for what were termed "First World" nations under that model to evade responsibility. Indeed, the 2011 report of the Australian Climate Commission argues that the next 10 years are "the critical decade." Choices made in that time by developed nations may determine the severity of the consequences of anthropogenic climate change. It is entirely outside the realism demanded by the Anthropocene to envisage the impoverished multitudes in Africa and Asia enacting the required emissions reductions in this time frame, as so often demanded by Western politicians.

Creating a realism to render Anthropocene visuality will have to counter the already existing Anthropocene aesthetic. Climate change in particular has generated a sophisticated aesthetics that renders its transformations of planetarity not just acceptable but beautiful. This aesthetics finds beauty in the immersion in pollution. By way of canonical example, one can cite Claude Monet's *Impression: Sun Rising* (1873), the now legendary "foundation" of impressionism as a school of modern art. Considered from this point of view, and without excluding previous interpretations, the painting is a study of the effects produced by the smoke pouring from the numerous smokestacks visible behind the soon to be redundant masts of the sailing ships. The light of the rising sun refracts in this blue haze in newly intense form. A century and a half later, we recognize this claim to realistic representation from our long experience of such dust and smoke filled light. None of us can know what a pre-industrial Holocene sunrise looked like. But Monet captures the Anthropocene just as it began to accelerate. By the midtwentieth century, it is common to see a certain nostalgia expressed for London "fogs" (actually dense smog caused by coal smoke) by both Londoners abroad and those visiting the city. From Sherlock Holmes to the classic American raincoat, London connotes fog. It was not until the "great fog" of 1952 killed some 12,000 people that the British government finally began a gradual cleanup. If the spectacular smogs of Delhi, Beijing, and Mexico City have yet to create such responses, you can see nostalgia for a full-blown LA smog—less common these days because of tighter regulation—in Tom Ford's 2009 movie, *A Single Man*.

Contesting these aesthetics means repurposing and refashioning tools that are already to hand: there is no time for the modern cult of the new. Already existing international law can be repurposed to mitigate carbon emissions. In 2011, the Federated States of Micronesia presented a legal challenge to Prunerov II, a Czech Republic power station that is set to expand to become one of Europe's largest coalfired plants and hence a very substantial emitter of greenhouse gases. Pressing for an environmental audit of the plant, known as a Transboundary Environmental Impact Assessment, Micronesia has taken a tool hitherto applied between geographical neighbors and applied it on the planetary scale. The legal theatre has compelled the Czech Republic to entertain the suit, regardless of what face-saving concessions are ultimately made, and set a precedent for such global environmental law, intended to worry multinational energy companies and developed nation governments. More broadly, it reasserts the rule of law, as opposed to the permanent state of emergency demanded by ubiquitous anti-terrorism. In the Pacific, such an emphasis highlights the peculiar forms of sovereignty by which small island nations are ruled—as if they are still only to be offered the right to be led.

The militarized conception of the oceanscape further requires a cultural repossession. As already mentioned, Pacific Islanders have revived traditional navigation and boat-building to this end. By building canoes without modern materials and then steering them without the use of charts or compasses across thousands of miles of open sea, Pacific peoples are demonstrating that they were always technologically capable. There are equally pressing current concerns. For example, after 9/11, Hawai'ian islands, including Kauai, realized that there was ordinarily only two or three days of food stored locally. So changes in cultivation and transport are essential rather than gestural. When a Category One hurricane, like Katrina, can knock out a major city, or a tropical storm, like Irene, can cut off electrical supply to much of the East Coast of the United States, such concerns are not limited to remote locations. With the failure of the fortress model comes the failure of the grid it is supposed to protect.

The canoe voyages performatively further enacts a claim to the ocean space as lived, rather than empty. When the nuclear accidents in Japan resulted in fallout entering the Pacific or being blown over it, many Western media outlets saw this as a lucky twist in sending radiation into empty space, the contemporary *terra nullius*. Not only are there of course hundreds of thousands of people across the island archipelagos, the radiation is no respecter of national boundaries. Ocean currents and winds disseminate it across the planet, while the marine food chain concentrates it in ever-larger animals until the top predators-humans-sit down to eat the toxic flesh of tuna, swordfish, sea bass, and other coveted seafood. The performative sea of islands is the counterpoint to the Pacific theatre of war, a small-scale, low-budget sustainable performance contesting the special effects action movie of climate change. What will be the outcome of such contests? In this instance, you are a voting member of the academy. In a very real sense, it's up to you. And me. We cannot move on, there is something to see and we must claim the right to look (at it).

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