## Beaufort Scale of Wind Force

| Force | Knots | Km/h | Description | Specifications for Use at Land |
|---|---|---|---|---|
| 0 | < 1 | < 1 | CALM | Calm; smoke rises vertically |
| 1 | 1–3 | 1–6 | LIGHT AIR | Direction of wind shown by smoke drift; but not by wind vanes |
| 2 | 4–6 | 7–12 | LIGHT BREEZE | Wind felt on face; leaves rustle; ordinary vane moved by wind |
| 3 | 7–10 | 13–19 | GENTLE BREEZE | Leaves and small twigs in constant motion; wind extends light flag |
| 4 | 11–16 | 20–30 | MODERATE BREEZE | Raises dust and loose paper; small branches moved |
| 5 | 17–21 | 31–39 | FRESH BREEZE | Small trees in leaf begin to sway; crested wavelets form on inland waters |
| 6 | 22–27 | 40–50 | STRONG BREEZE | Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty |
| 7 | 28–33 | 51–62 | NEAR GALE | Whole trees in motion; inconvenience felt when walking against wind |
| 8 | 34–40 | 63–74 | GALE | Breaks twigs off trees; generally impedes progress |
| 9 | 41–47 | 75–87 | STRONG GALE | Slight structural damage occurs (chimney pots and slates removed) |
| 10 | 48–55 | 75–87 | STORM | Seldom experienced inland; trees uprooted; considerable structural damage occurs |
| 11 | 56–63 | 103–117 | VIOLENT STORM | Very rarely experienced; accompanied by widespread damage |
| 12 | > 64 | > 118 | HURRICANE | — |

**THE WORK OF WIND: AIR, LAND, SEA**
Volume 1
**The Work of Wind: Land**

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workofwind.ca

the work
of WIND
AIR
LAND
SEA

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New Chapter
2017 and Beyond

**THE WORK OF WIND**
**AIR, LAND, SEA**

Volume 1

# The Work of Wind
# Land

co-edited by Christine Shaw
& Etienne Turpin

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## THE WORK OF WIND: AIR, LAND, SEA

In 1806, the British sea admiral Sir Francis Beaufort invented the Beaufort Scale of Wind Force as an index of thirteen levels measuring the effects of wind force. It was first used for the practical navigation of nineteenth-century ocean space; through a system of observation, wind speed was measured by observing how it composes at sea (for example, waves are formed) and decomposes on land (for example, leaves are blown from trees, chimney pots lifted, houses are destroyed).

Across a variegated set of curatorial and editorial instantiations developed by Christine Shaw in 2018/19, the Beaufort Scale of Wind Force becomes a diagram of prediction and premonition in the context of accelerating planetary extinction. *The Work of Wind: Air, Land, Sea* appropriates the Beaufort Scale of Wind Force as a readymade index for curating a site-specific exhibition in the Southdown industrial area of Mississauga, Ontario, Canada, and a publication divided into three conjoining volumes. The project is extended by the *Society for the Diffusion of Useful Knowledge*, a public program and broadsheet series.

While the title might suggest a weather project, it is not about wind but *of* wind, of the forces of composition and decomposition predicated on the complex entanglements of ecologies of excess, environmental legacies of colonialism, the financialization of nature, contemporary catastrophism, politics of sustainability, climate justice, and resilience.

# The Beaufort Scale of Wind Force
# This *Land* of Forces

Etienne Turpin

> This story that must be told; that can only be told by not telling.[1]
> — M. NourbeSe Philip

> Nothing is ever done with … [2]
> — Gilles Deleuze & Félix Guattari

Our human lives, despite their unequivocal varieties and intensities of love, hope, joy, sadness, and suffering, are composed among scales. Some scales are found nearly everywhere: we check the clock, the calendar, and the weather so regularly that we barely notice, let alone carefully examine, the subtle ways by which their scales of organization shape our thoughts and sensations. Other scales operate behind the scenes, like the remote data centers that coordinate the information arriving on the screens of our mobile devices to best manipulate our patterns of attention, or the inherited scientific taxonomies that augment our impressions while remaining below the threshold of conscious thought.[3] We know that the implications of these forms of organization are rarely benign, yet their quotidian, habit-forming presence often makes them hard to detect.[4] In 1806, Sir Francis Beaufort invented the scale from which this book takes its title, cover image, and mode of organization. The Beaufort Scale of Wind Force, eventually further developed and modified for both *Land* (the topic of this book) and *Sea* (the topic of a second book to come), takes as its object of consideration the wind and its observable effects. Perhaps the observation of the wind according to a predefined set of categories seems a rather obscure point of departure for a book-as-exhibition, but the system that allows people everywhere to observe, record, share, and compare what were, prior to its invention, only noisy and unstructured environmental sensations, remains in use to this day; the meaning and consequence of its global adoption, however, are only partially understood.

As friends with much more sailing experience than we have explained during the process of editing this book, the obviousness of the Beaufort Scale for anyone who has spent time at sea makes it a rather banal subject.[5] *06:00: record the wind and weather. 07:00: record the wind and weather. 08:00: record the wind and weather.* And so on … for hours, and days, and weeks, until the next port of call is reached. The banality of this form of observation, at least for those who have resided among the waves for long enough, is in part a matter of its repetition: once the scale is used often enough, it becomes little more than a clock or a calendar, and any interest in

1 M. NourbeSe Philip, as told to the author by Setaey Adamu Baotang, *Zong!* (Middletown: Wesleyan University Press, 2008), 194.

2 Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. with an introduction by Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 486.

3 This book contends that racial taxonomies are among the most violent and consequential of these inherited scales. Regarding the need to contest and defeat white supremacy, see Robin Diangelo, *White Fragility: Why It's So Hard for White People to Talk About Racism* (Boston: Beacon Press, 2018); on the history of environmental racism, see Razmig Keucheyan, *Nature Is a Battlefield: Towards a Political Ecology* (London: Polity Press, 2016).

4 See Geoffrey C. Bowker and Susan Leigh Star, *Sorting Things Out: Classification and its Consequences* (Cambridge and London: MIT Press, 1999), and Walter D. Mignolo, "Colonial/Imperial Differences: Classifying and Inventing Global Orders of Lands, Seas, and Living Organisms," in Walter D. Mignolo and Catherine E. Walsh, *On Decoloniality: Concepts, Analytics, Praxis* (Durham: Duke University Press, 2018), 177–93.

5 A special thanks to Skye Moret and Tomas Holderness for generously sharing their respective experiences of the sea, its wind, and the various meanings of their observation.

its operative and epistemological functions dissipates. From the perspective of a repetitive familiarity, the Scale is a static, background feature that fades in importance as the duration of the voyage extends and the vicissitudes of the ocean offer more animate affects and immediate concerns. The book project *The Work of Wind: Air, Land, Sea* reads the scale otherwise; like a clock, calendar, or weather forecast, the Beaufort Scale isn't simply a neutral readymade. When reread attentively and with an eye to common futures, it is a remarkable and poetic document that reveals much about civilization and its barbarisms as we have come to know them since the Scale's invention.[6] Thus, before we turn to a more precise explanation of this volume's organization and contents, it is important to describe the origins of the Scale and its implicit and explicit inclusions and exclusions.

In any of Beaufort's biographies, similar accounts regarding the invention of the Scale are available; here we refer primarily to journalist Alfred Friendly's description, which, for the purposes of a general introduction, is both concise and accessible to non-maritime readers.[7] As Friendly makes clear, the problem that the Scale was meant to solve is actually rather prosaic:

> Beaufort was unhappy at the ambiguity and subjectivity in the weather notation systems standard during his days at sea for the officers' log books and the log boards on deck. These called for noting at frequent intervals the direction of the wind, which was clear enough, but also for its force, any statement of which, without instruments, would be necessarily subjective. A 'small gale' to one ship's master or lieutenant might seem a 'fresh gale' to another.[8]

Yet, as the reporter notes, Beaufort understood that the potential for vast meteorological data collection was only forestalled by the absence of a system that could give the required reports more consistency individually and a greater coherence in aggregate. To this end, in a letter to Richard Lovell Edgeworth, dated 9 December 1809, Beaufort wrote: "There are at present 1000 King's vessels employed. From each of them there are from 2 to 8 Log books deposited every year in the Navy Office; those Log books give the wind and weather every hour […] spread over a great extent of ocean. What better data could a patient meteorological philosopher desire? Is not the subject, not more in a scientific than a nautical point of view, deserving [of] laborious investigation?"[9] While Friendly goes on to note that, "it scarcely ranks as one of the world's great scientific or intellectual landmarks," the pragmatic character of Beaufort's Scale makes it "a neat, handy, and efficient piece of systematization," which, "like many other useful things, is so simple and obvious that its chief wonder is why no one ever thought of it before."[10] Beginning in 1806, Beaufort used his own private log book to develop the system of observation that would become the scale for which he is best known; the key innovation in the process was to correlate the gradations of the wind force to "the amount of sail that a full-rigged ship would carry in different intensities of wind. Except at times of moderate breezes or less, there would be little argument about how much canvas would be set on a frigate or man-of-war. Thus, in a moderate gale that Beaufort first designated as Force 8, the jibs would be set, the royals not, and there would be double reefs elsewhere."[11] Thus,

6 The reference is to Walter Benjamin's well-known contention—which could undoubtedly be applied to the Beaufort Scale of Wind Force—"There is no document of civilization which is not at the same time a document of barbarism." Walter Benjamin, "On the Concept of History," in *Selected Writings: Volume 4, 1938–1940*, trans. Edmund Jephcott, eds. Howard Eiland and Michael W. Jennings (Cambridge and London: The Belknap Press of Harvard University Press, 2006), 392.

7 See also, among the available biographical literature, Scott Huler, *Defining the Wind: The Beaufort Scale and How a Nineteenth-Century Admiral Turned Science into Poetry* (New York: Three Rivers Press, 2004); and Nicholas Courtney, *Gale Force 10: The Life and Legacy of Admiral Beaufort, 1774–1857* (London: Headline Book Publishing, 2002).

8 Alfred Friendly, *Beaufort of the Admiralty: The Life of Sir Francis Beaufort, 1774–1857* (London: Hutchinson & Co., 1977), 143.

9 Quoted in Friendly, 142.

10 Friendly, 143.

11 Ibid., 144.

a system for structuring data regarding the observable wind force was created.

Yet, creation and adoption have different requirements. As Friendly notes, "It was not until 1829, twenty-three years later, when he became Hydrographer to the Navy, that he had the necessary influence."[12] Remarkably, Beaufort began his official campaign to convince commanders of the Navy's surveying ships with a letter to Captain Robert Fitzroy: "In this Register the state of the wind and weather will, of course, be inserted but some intelligible scale should be assumed, to indicate the force of the former [...] and some concise method should also be employed for expressing the state of the weather. The suggestions contained in the annexed printer paper are recommended for the above purpose."[13] The annex was, of course, the Beaufort Scale of Wind Force, which had its first recorded use by Fitzroy on the *Beagle* while it was carrying another passenger who would soon become especially well-known for other observations made during the voyage—Charles Darwin.[14]

12 Ibid.

13 Quoted in Friendly, 144.

14 Charles Darwin, *The Voyage of the Beagle* (London: Penguin Classics, 1989) [1839]. Friendly also makes a point to note that Captain Fitzroy went on to become the first Superintendent of the Meteorological Office in 1854.

The Beaufort Scale, as it is used today, would go through a number of additional modifications after the first systematic observations of wind on the *Beagle* in 1831, and then being adopted for international use at the first worldwide meteorological conference in Brussels in 1851. Notably, the Scale was adjusted by Beaufort himself to accommodate the increasing presence of steam vessels in the Empire's fleet, because

> when the age of steam began to supercede the age of sail, the notations based on the amount of sail that could be carried steadily lost their significance and utility; thereupon a notion based on the state of the sea was introduced in addition, to be correlated with the 0–12 gradations. […] The range is from 'sea like a mirror' to 'air filled with foam and spray.' More sophisticated specifications for that kind of correlation were brought into use in 1941. The result is a remarkable uniformity in sailors' estimates.[15]

15 Friendly, 147.

From the point of view of the official history of science, we could more or less leave it at that.

However, from the perspective of *decoloniality*, there is still much to be said—in this introduction as well as through the contributions that follow.[16] Let us begin by acknowledging that, in *The Darker Side of Western Modernity*, social theorist Walter D. Mignolo gives us many reasons to pause and reflect on the epistemic practices of modernity/coloniality; while he does not address the Beaufort Scale as such, much of his text can be read as a guide to both *the work of wind* and the work of the Scale in the service of Empire.[17] In his reading of Kant's *Geography*, Mignolo notes that, "[…] one of the basic hypotheses of decolonial thinking is that knowledge in the modern world was and is a fundamental aspect of coloniality. In other words, knowledge is not just something that accounts for (describes, narrates, explains, interprets) and allows the knowledge to sit outside the observed domain and, from above, be able to observe imperial domination and colonial societies, ignoring or disguising the fact that *knowledge itself is an integral part of imperial processes of appropriation*." He continues: "[C]oloniality of knowledge means not that modern knowledge is colonized, but that modern knowledge is epistemically imperial and, as we have

16 On decoloniality, see Aníbal Quijano, "Coloniality and Modernity/Rationality," in Mignolo and Arturo Escobar, eds., *Globalization and the Decolonial Option* (London: Routledge, 2010), 22–32, and Mignolo and Walsh, *On Decoloniality*.

17 On the maintenance of Empire by way of documents, devices, and drilled people, see John Law, "On the Methods of Long Distance Control: Vessels, Navigation, and the Portuguese Route to India," in *The Sociological Review* 32.1 (May 1984): 234–63.

seen in Kant, devalues and dismisses epistemic differences."[18] In any discussion of either objectivity or realism, it is therefore critical to distinguish between the *epistemes* of modernity/coloniality and the *ontologies* they served to construct.[19] In fact, distributed, scientific observation plays a key role in the former while it reifies the violence of the latter. In her essay "The Empire of Observation, 1600–1800," historian of science Lorraine Daston explains the stakes of scientific method, writing:

> The consolidation of an epistemic genre primarily linked to astronomy and medicine in the sixteenth century into an epistemic category essential for all the arts and sciences by the early eighteenth century was the result of remarkable innovations in the making, using, and conceptualizing of observation: new instruments like the telescope and microscope; new techniques for coordinating and collating the information from *far-flung* observers ranging from the questionnaire to the synoptic map; new thinking about the relationship between reason and experience—or rather, about new forms of reasoned experience, most prominently observation and experiment.[20]

While all of this is certainly true, we would do well to inquire further about where exactly these "far-flung" observers were located, and just what it was they were doing there. With reference to a similar historical timeline, Mignolo offers some suggestions:

> [T]he massive appropriation of land and resources (gold, silver) made possible by the "discovery and conquest of America," by the massive exploitation of the labor of Indians, and by the trade of enslaved Africans allowed for a qualitative jump in the use of "capital" already accumulated in the banks of Florence, Venice, and Genoa. Genovese lending to the Spanish monarchy facilitated transatlantic explorations and the emergence of a new type of economy: capitalism. The combination of capital, massive appropriation of land and resources, and massive exploitation of labor made it possible, for the first time in the history of the human species, to produce commodities for a global market.[21]

Mignolo adds a second, essential corollary to these claims, explaining that, "For the first time in human history, human lives became dispensable and irrelevant to the primary goal of increased production and accumulated benefits. What distinguishes slavery in the Atlantic from all previous forms of slavery is that slavery before the Atlantic was not entrenched with capitalist economy and, therefore, human lives were not a dispensable commodity." He goes on to explain that, "Enslaved Africans were not only an exploited labor force; they also came to be treated as a type of commodity—which could be trashed, like any other commodity."[22] Within the "colonial matrix of power" (described in greater detail by Mignolo in many of his path-breaking texts), both the production of enslaved Africans *as commodities*, and the production of new modes of *scientific observation*, were mutually *reinforcing*; because of this fact, a decolonial reading must interrogate the coloniality of allegedly neutral practices of coordinated observation and the enduring violence of the transatlantic slave trade.

18 Walter D. Mignolo, *The Darker Side of Western Modernity: Global Futures, Decolonial Options* (Durham: Duke University Press, 2011), 205.

19 For a compelling discussion of realism in relation to questions of objectivity in science and philosophy, see Manuel Delanda and Graham Harman, *The Rise of Realism* (Cambridge: Polity Press, 2017).

20 Lorraine Daston, "The Empire of Observation, 1600–1800," in *Histories of Scientific Observation*, eds. Lorraine Daston and Elizabeth Lunbeck (Chicago: University of Chicago Press, 2011), 82; italics added. For a comprehensive review of how quantification led to these processes of observation and social classification, see Alfred W. Crosby, *The Measure of Reality: Quantification and Western Society, 1250–1600* (Cambridge: Cambridge University Press, 1997).

21 Mignolo, *The Darker Side of Western Modernity*, 183–84. See also Peter Sloterdijk, *In the World Interior of Capital: Towards a Philosophical Theory of Globalization*, trans. Wieland Hoban (London: Polity Press, 2013).

22 Mignolo, *The Darker Side of Western Modernity,* 184; see also Hugh Thomas, *The Slave Trade: The Story of the Atlantic Slave Trade, 1440–1870* (New York: Simon and Schuster, 1997).

In this regard, like much of our contemporary world under global capitalism, the Beaufort Scale also has its *de facto* origins in the Middle Passage.[23] Among the most important and transformative texts that have made this relation known to us (the editors) is M. NourbeSe Philip's *Zong!*.[24] As Philip states in her reflection about writing the book, "There is no telling this story; it must be told."[25] The story that cannot be told begins in 1781, with the massacre of 150 enslaved Africans who were thrown overboard the *Zong*, under the order of Captain Luke Collingwood, in order to make their "loss" as cargo a viable insurance claim for the ship's owners—the ship itself was lost at sea as a result of navigational errors and, due to the delay, was said to be lacking provisions to such a degree that these slaves would have died "natural deaths" from dehydration had they not been intentionally murdered. Philip writes:

> Upon the ship's return to Liverpool, the ship's owners, the Messrs Gregson, make a claim under maritime insurance law for the destroyed cargo, which the insurers, the Messrs Gilbert, refuse to pay. The ship's owners begin legal action against their insurers to recover their loss. A jury finds the insurers liable and orders them to compensate the ship's owners for their losses—their murdered slaves. The insurers, in turn, appeal the jury's decision to the Court of King's Bench, where Lord Mansfield, the Lord Chief Justice of England, presides, as he would over many of the most significant cases related to slavery.[26]

The report of that decision, *Gregson v. Gilbert* (also commonly known as the *Zong* case), is the source material for Philip's poems in the book; however, while reflecting on this source document, she makes the point that she could not find any evidence of a new trial or of payments for the murdered slaves. However, what we feel the need to stress in relation to the Beaufort Scale is that the trial itself posed questions about oceanic risk to maritime insurance law in new ways; whether the slaves *as cargo* died "natural deaths" or were murdered for the insurance claim was a fundamental concern of the case, but it also brought to light the problem of human errors in judgment with respect to navigation and provisioning (if not murder and slavery), so often the result of sailing in bad weather. Thus, just as damages today can be claimed against one's insurance policy only when a land-based storm reaches a certain level on the Beaufort Scale, at sea, the log books of captains who risked the lives of slaves or other colonial "cargo" became, in the wake of the *Zong* and by way of the Beaufort Scale, subject to inspection to determine if they had sailed in fair weather (and could thus make valid insurance claims for unexpected loss and damages) or if the captain had made the decision to risk sailing into inclement conditions (and was therefore not covered by insurance). Following the work of Christina Sharpe, *in the wake*, the Scale itself became a kind of maritime insurance for coloniality.

To put the *Zong* trial, as well as Beaufort's own life, in further context, it is worth noting that, toward the end of the eighteenth century, Quobna Ottobah Cugoano wrote his first-hand account of the Atlantic slave trade, *Thoughts and Sentiments on the Evil and Wicked Traffic of the Slavery and Commerce of the Human Species*.[27] Published in London in 1787, the book is widely considered as seminal text for the European movements that sought to abolish slavery. Beaufort also witnessed (second

23 For other readings of how coloniality manifests at sea, see Teresa Shewry, *Hope at Sea: Possible Ecologies in Oceanic Literature* (Minneapolis: University of Minnesota Press, 2015); Cesare Casarino, *Modernity at Sea: Melville, Marx, Conrad in Crisis* (Minneapolis: University of Minnesota Press, 2002); and Paul Gilroy, *The Black Atlantic: Modernity and Double Consciousness* (London and New York: Verso, 1993).

24 Philip and Baotang.

25 Ibid., 189. On narrating and mapping the impossible, see Dionne Brand, *A Map to the Door of No Return: Notes to Belonging* (Toronto: Vintage Canada, 2001).

26 Philip and Baotang, 189.

27 Ottobah Cugoano, *Thoughts and Sentiments on the Evil and Wicked Traffic of the Slavery and Commerce of the Human Species* (Ann Arbor, Michigan: University of Michigan Library, 2005) [1787]; quod.lib.umich.edu/e/eccodemo/K046227.0001.001/1:5?rgn=div1;view=toc.

hand, which is to say, from Europe) the Haitian Revolution (1791–1804), during which time the former colony of Saint-Domingue fought and won the first and only successful slave-led revolution in the history of the Atlantic.[28] This unprecedented revolution provoked further discussion of and advocacy against the slave trade while *abolition* was slowly becoming an increasingly public question in Europe.[29] Notably for art historians, in 1820, Théodore Géricault exhibited *The Raft of the Medusa* in the Paris Salon, while the British artist J.M.W. Turner's *Slavers Throwing Overboard the Dead and Dying—Typhoon Coming On* (known today as *The Slave Ship*) was first exhibited in 1840 at London's Royal Academy to coincide with a meeting of abolitionists.

We do not refer to these events, all of which occurred during Beaufort's lifetime, to suggest that his work on the Scale should have, by historical necessity, been altered by their course, nor to claim, for example, that if he had opposed slavery he would have refused to construct such a system; such historical counterfactuals are meaningless when trying to grasp the violence of the slave trade. Beaufort was an officer in the Royal Navy and his work was done in the service of the world's most powerful, imperial naval force, which, in turn, operated in the service of the British Empire. Our intention is, instead, to situate the Beaufort Scale as it originated in the years immediately following the *Zong* trial, and the publication of Cugoano's narrative of slavery, to thereby claim it as historically contemporary with and relevant to coloniality and the slave trade. While acknowledging that it would have been all but impossible for Beaufort to be unfamiliar with at least some of these events, we can nevertheless say that *regardless* of his personal views on slavery, his Scale was used to organize and coordinate the distributed observations of trading, surveying, and war ships and therefore it is a document that cannot be separated from the history of the Middle Passage and the capitalist "development" that slavery made possible; similarly, the British and French ships that ferried troops and goods to North America as part of a campaign of continental genocide also used the Scale to ensure the safety of their respective crews and to consolidate their naval intelligence through coordinated environmental observation.

Are the sounds of the *Zong* massacre audible in the Beaufort Scale? If so, how can the victims of this atrocity, as well as all of the others who were subject to forms of colonial violence (when the Scale acted as a material witness or documentary accomplice) be heard today? While framing these decolonial provocations, which we hope will structure the reading of this book, we must also insist that the Beaufort Scale—although it bears the contingent traces of the "two foundational genocides of Western civilization,"[30] and should thus be considered among the evidence of coloniality—is decidedly *not* an "archive" of slavery.[31] Still, what we want to stress is that the environmental observation that it both mandates and coordinates is directly and precisely connected to European coloniality and, more broadly, to similar modes of *social* observation and classification that legitimized colonialism, slavery, and genocide. We can be certain that the Scale is, at least, a partial yet transformational response to the problem of maritime risk as it related to the "cargo" of Empire.[32] As lawyer Adrienne Telford, paraphrasing the Indigenous author Thomas King, asks in this volume with specific reference to settler colonialism in Canada: "Now that we know the story of colonialism, the violent and ongoing subjugation of Indigenous

28 C.L.R. James, *The Black Jacobins: Toussaint L'Ouverture and the San Domingo Revolution* (New York: Vintage Books, 1989) [1938].

29 For an account of the Haitian Revolution of Saint-Domingue and its influence on European philosophy, see Susan Buck-Morss, *Hegel, Haiti, and Universal History* (Pittsburg: University of Pittsburgh Press, 2009); for a literary account of the Caribbean world during the contemporaneous French Revolution, see Alejo Carpentier, *Explosion in a Cathedral* (Minneapolis: University of Minnesota Press, 2001) [1962].

30 Mignolo and Walsh, *On Decoloniality*, 178.

31 On the specters of slavery with respect to archives and archival practices, see Saidiya Hartman, *Lose Your Mother: A Journey Along the Atlantic Slave Route* (New York: Farrar, Straus and Giroux, 2008); and Saidiya Hartman, *Scenes of Subjection: Terror, Slavery, and Self-Making in Nineteenth-Century America* (Oxford: Oxford University Press, 1997).

32 On the politics of cargo, see Stefano Harney and Fred Moten, *The Undercommons: Fugitive Planning and Black Study* (London: Minor Compositions, 2013), 87–99; and Christina Sharpe, *In the Wake: On Blackness and Being* (Durham: Duke University Press, 2016), 68–101.

people, and the theft of their lands, what do we do about it?"[33] Similarly, as editors, we want to ask: now that we know this history of the Beaufort Scale of Wind Force, what do we do about it? Can the Beaufort Scale be read otherwise?

33 See, in this volume, Tom Keefer, Adrienne Telford, and D.T. Cochrane, "7—*Near Gale*: Unsettling Practices," 211–28.

## Attending to Worlds and How They Are Sometimes Known

As an approach to the necessarily transdisciplinary work of decolonial praxis, Mignolo suggests the need for "epistemic disobedience."[34] The curatorial project, *The Work of Wind,* which includes this book, was developed by Christine Shaw and exhibited in Toronto in the fall of 2015,[35] followed by *The Work of Wind: Air, Land, Sea* in Mississauga in September 2018.[36] Her approach to both of these public art programs used the Beaufort Scale as an organizational matrix for the commissioning and presentation of contemporary art engaged in questions of coloniality, environmental degradation, and aesthetic and political transformation. Its method is one of epistemic disobedience in that it attempts to dislocate and thereby release the poetic descriptions of wind that are contained within the Beaufort Scale from the colonial matrix of power they served, appropriating these criteria to instead critically question the coloniality of contemporary environmental politics and to intervene in public conversations about common futures. Of course, in the exhibition program, as in this book and the publications to come, the Scale has a difficult colonial provenance, but that makes it like much of the contemporary world under capitalism; as such, what matters most is learning to read it together and against the grain of Empire because practices of epistemic disobedience are also the work of decolonial composition.

34 Mignolo, *The Darker Side of Western Modernity*, 189.

35 On 1 October 2015, Scotiabank's Nuit Blanche Toronto was curated by Christine Shaw as a first iteration of her appropriating the Beaufort Scale of Wind Force as a point of departure for an exhibition of thirteen artworks installed in public space, specifically, the city's waterfront, blog .waterfrontoronto.ca/nbe /portal/wt/home/blog-home / posts/nuit-blanche-work -of-the-wind.

36 For a comprehensive overview of the 2018 iteration, centering around a ten-day public art festival taking place in the Southdown Industrial Area of Mississauga, Ontario, see workofwind.ca.

Following the 2015 exhibition, and in conjunction with the 2018 program, the book *The Work of Wind: Land* was created by inviting contributors from an exuberant range of backgrounds and positions to intervene in and on the Scale through reflections and provocations that could be expressed according to any discursive or visual format. The invitation was open, although as editors we tried to pick up threads of previous conversations, lectures, events, and other exhibitions by inviting collaborators, colleagues, and new and old friends engaged in radical activist, aesthetic, and scholarly practices that we respect and admire. The individual contributions are discussed in greater detail in the sections below, but suffice it to say here that, as editors, Christine and I were both moved by the generosity of the contributors as they composed these remarkably heterogeneous responses to the wind forces. The result is a book that welcomes lithe and attentive readers with unusual shifts in tone, style, genre, and voice that celebrate epistemo-diversity; together, we read *through* the Beaufort Scale to other worlds and their many winds.

Our work on the book was also motivated by encounters with other scholarly and artistic initiatives that reconsider environmental and elemental media and their consequences. In our ongoing dialogue with Anna-Sophie Springer, the director of K. Verlag, we discovered the recent work of John Durham Peters, whose book *The Marvelous Clouds* engages with the elements as media and suggests new forms of attention that such an epistemic shift can enable.[37] Similarly, the publication of Erich Hörl and James Burton's collection *General Ecology: The New Ecological Paradigm* emboldened our belief in the need for a theoretical reevaluation of the intersections

37 John Durham Peters, *The Marvelous Clouds: Toward a Philosophy of Environmental Media* (Chicago: University of Chicago Press, 2015).

of ecology and technology to create new frameworks for working and worlding.[38] Allan Sekula's *Okeanos*—as with so much of his work—was an inspiration that convincingly unfolded across disciplines to suggest new forms of attention and care that can weave together local epistemologies and global matters of concern.[39] Similarly, *Tidalectics: Imagining an Oceanic Worldview Through Art and Science*, edited by Stephanie Hessler, was an important interlocutor-publication as we worked through questions of wind and their relation to oceanic tidalectics.[40] *The Wild Living Marine Resources Belong to Society as a Whole*, edited by Randi Nygård and Caroline Tampere, was another point of reference, not least because its appropriation of Section 2 of the Norwegian Natural Resources Act suggested how administrative/legislative documents could be put to work in service of radical approaches to "nature" and thereby politicize conversations about "natural resources."[41] In this itinerant library of common atmospheric concerns, we felt assured that the line of flight from *The Work of Wind* as exhibition to publication could continue to share in the work of *unbecoming human*.

This working bibliography also extended to texts that were less content specific but nevertheless ethically on point and, as such, helped us more carefully frame out our decolonial agenda. We found Alexis Shotwell's imperative to get over the impossible obsessions with purity especially urgent.[42] It resonated with our objective for the book not least because, like nearly every other aspect of contemporary global capitalism, the legacy of modernity/coloniality is one that makes nearly every radical point of departure and reappropriation *impure*, as is certainly the case with the Beaufort Scale. Yet, by reckoning with this constituent impurity, *another knowledge is possible*.[43] But, *another* knowledge requires both an acceptance of impurity and the requisite social investment in *pluriversality* and its attendant infrastructures to enable diverse forms of epistemic enunciation and reciprocation. The work of creating space and attention for pluriversality is decolonial work, because, as Mignolo notes, "colonial differences do not describe the world but offer a *vision* of the world, falsely projected onto a universal scale. Like the world map, colonial narratives, descriptions, and arguments appropriated the world and condensed it into a house of *universal fictions*. We are still inside that house."[44] As cisgendered, able-bodied, white settlers in Canada, we (the editors) still live in this house, too, and thus have access to many of the privileges it affords, including the opportunity to make this book, the possibility to fund it, and the ability to select and invite contributors. However, we also recognize that, as settlers, the very act of making an invitation—to work on and through stolen land, by way of "This *Land* of Forces"—reinforces the colonial matrix of power. Because of this fact, how we can best use our access to these resources to challenge and whenever possible undermine dominant power structures is a question that has guided our work on this book as well as our respective practices more broadly. The house Mignolo describes is also the container which constraints and describes "nature" within an enduring colonial matrix of power.[45] The consequences of this seemingly intractable colonial image of nature is carried over in the present, typically under the term "development."[46] As Macarena Gómez-Barris suggests, with respect to epistemological self-determination and embodied knowledge, only "submerged perspectives anchored within

38 Erich Hörl and James Burton, eds., *General Ecology: The New Ecological Paradigm* (London: Bloomsbury, 2017).

39 Allan Sekula, *Okeanos,* eds. Daniela Zyman and Cory Scozzari (Berlin: Sternberg Press, 2017).

40 Stefanie Hessler, ed., *Tidalectics: Imagining an Oceanic Worldview Through Art and Science* (Cambridge, MA: MIT Press, 2018).

41 Randi Nygård and Caroline Tampere, eds., *The Wild Living Marine Resources Belong to Society as a Whole* (Oslo: Ensayo 4, 2017).

42 Alexis Shotwell, *Against Purity: Living Ethically in Compromised Times* (Minneapolis: University of Minnesota Press, 2016).

43 Boaventura De Sousa Santos, ed., *Another Knowledge is Possible: Beyond Northern Epistemologies* (London and New York: Verso, 2008). See also De Sousa Santos, *The End of the Cognitive Empire: The Coming of Age of Epistemologies of the South* (Durham: Duke University Press, 2018).

44 Mignolo and Walsh, *On Decoloniality*, 187.

45 On nature as an invention and a process, see, respectively, Mignolo, *The Darker Side of Western Modernity,* 153–76; and Didier Debaise, *Nature as Event: The Lure of the Possible* (Durham: Duke University Press, 2017).

46 On coloniality and its afterlife as development, see Walter Rodney, *How Europe Underdeveloped Africa* (Cape Town: Pambazuka Press, 2012) [1972], especially 95–113 on the legacy of the Atlantic slave trade in Africa; and Gilbert Rist, *The History of Development: From Western Origins to Global Faith* [Fourth Edition], trans. Patrick Camiller (London and New York: Zed Books, 2014).

social ecologies that reorganize and refute the monocultural imperative" can attend to the resonances of lived embodiment as world-shaping activities as they resist the violence of capitalist development.[47]

## The Geopolitics of Force-Forms

Wind is a geopolitical force that gives form to worlds. The geopolitics that shape forces-becoming-forms are a key concern in *The Work of Wind: Land* because the way in which forces are consolidated as forms is a matter of consequence for decolonial thought and practice. In the essay "Air's Substantiations," Timothy Choy remarks: "Though breath is vital, wind is dangerous. 'Wind is the first evil,' my acupuncturist back in California, Marliese, explained to me: 'It opens the body to secondary ills.'"[48] This is because, as he goes on to explain, "[A]ir is the substance that bathes and ties the scales of body, region, and globe together, and that subsequently enables personal and political claims to be scaled up—to global environmental politics—and down—to the politics of health."[49] The interaction of global political economy and personal health and well-being is thus the site of an unfolding of decolonial engagement.

Such is the case in Amy Balkin's contribution to this volume, "After the Storm," which uses a collage methodology to produce a palimpsest of responses to challenges faced by residents of Captiva Island, a barrier island in southwestern Florida, where the destruction caused by Hurricane Charley reveals the compelling force of wind and the need to create new communal strategies for adaptation to climate change. Balkin's work is included *outside* of the Beaufort Scale, both as a reminder of the very real and existential effects of the weather and as a heuristic piece meant to frame readings of the Scale as variously imbricated in these catastrophic times. Similarly, Allen S. Weiss's essay "Cold Wintry Wind," which borrows its title from a Japanese *guinomi*, or sake cup, anticipates the Scale as it follows the wind through the history of art as an itinerant, speculative exhibition called *Atmosphere*.[50] The force-form of wind, in Weiss's dispersive adumbration, is a necessary agent with which we can rethink the desperate and anthropocentric isolationism of art history.

In conversation with D.T. Cochrane, Tom Keefer and Adrienne Telford—in the context of Beaufort Wind Force 7–*Near Gale*—discuss the enduring violence of settler colonialism, which is also a decisive agenda for this book.[51] The need to connect coloniality, white supremacy, and current political and environmental struggles makes this an especially important discussion, not least because, as Eve Tuck and K. Wayne Yang have stressed: "decolonization is not a metaphor."[52] Thus, while we have thought about *the work of wind* and this book as situated in the context of the Anthropocene, we take that term to be a marker of the urgent need for decolonial thinking and practice, and not as a means to reinstitute the decidedly Eurocentric logic of universalism.[53] Therefore, any account of the Anthropocene would necessarily involve, following Mignolo's analysis, "the invention of America, the massive slave trade, the massive appropriation of land, the pulling to pieces of the great civilizations of Mesoamerica and the Andes, the two foundational genocides of Western civilization (of Indigenous people and enslaved Africans), and the historical foundation in the

47 Macarena Gómez-Barris, *The Extractive Zone: Social Ecologies and Decolonial Perspectives* (Durham: Duke University Press, 2017), xvi.

48 Timothy Choy, "Air's Substantiations," in Kaushik Sunder Rajan, ed., *Lively Capital: Biotechnologies, Ethics, and Governance in Global Markets* (Durham: Duke University Press, 2012), 135.

49 Choy, "Air's Substantiations," 140; see also Peter Sloterdijk, *Terror from the Air*, trans. Amy Patton and Steve Corcoran (Los Angeles: Semiotext(e), 2009).

50 Remarkably, Weiss begins his speculative exhibition with Jules Olitzki's desire to release and suspend spray-painted colors into the air as a new sculptural mode of practice; Olitzki's painting *LOVELAND* (1968) was the conceptual starting point for Charles Stankievech's multipart installation *LOVELAND* (2009–11), which includes an artist's book, one of the first projects of K. Verlag. In 2015, the video component of this artwork was screened at 33 Harbour Square as part of Christine Shaw's first iteration of *The Work of Wind* exhibition series.

51 Regarding this conversation, see also Marianne Ignace and Ronald E. Ignace, *Secwépemc People, Land, and Laws: Yerí7 re Stsq'ey's-kucw* (Montreal and Kingston: McGill-Queen's University Press, 2017).

52 Eve Tuck and K. Wayne Yang, "Decolonization is Not a Metaphor," *Decolonization: Indigeneity, Education and Society* 1, no. 1 (2012): 1–40.

53 On this point, see Heather Davis and Zoe Todd, "On the Importance of a Date, Or, Decolonizing the Anthropocene," *in ACME: An International Journal for Critical Geographies* 16, no. 4 (2017): 761–80.

Atlantic (the Americas, South and North, the Caribbean, Africa, and Europe) of a new type of economy: economic coloniality, also known as capitalism."[54] The Anthropocene is thus the geological trace of Empire and enduring coloniality; this book works toward its dislocation by refusing capitalism as—so we are told—the only viable option for the organization of social life. The book also takes an emphatic position against colonial *mastery* and its capitalist aftermaths. According to Julietta Singh,

> The subject that has formed modern Western thought, the one inherited by postcolonial thinking, is one whose unequivocal goal of mastery has fractured the earth to the point of threatening destruction of its environment and itself. […] This is a moment in which human-induced ecological catastrophe is both in effect and imminent, in which human population displacement and species extinctions have become normative expectations. It is a moment, in other words, when human practices of mastery fold over onto themselves and collapse.[55]

Weathering the storms of this collapse requires attention to both the structural and quotidian forms of mastery.

## The Disorder of Things

The disorder of the world of things can be disquieting. How to co-inhabit and create among the strangeness of the world and its various material affordances is a question addressed by artist Ilana Halperin in Force 0–*Calm*, where she uses an epistolary form to discuss her entanglements with geological cycle. As she narrates the "bumpy temporalities"[56] of brick and stone, Halperin reveals her process for composing more-than-human worlds out of the ruins of industry.[57] Reflecting on Beaufort Force 10–*Storm*, curator Jesse Birch describes recent experiences of *unfamiliarity* in British Columbia, where his attention was disturbed by events that appeared both out of time and out of place as a result of climate change.[58] Evoking Walter Benjamin, Birch contends that when unfamiliar creatures appear at one's feet, there is an urgent need to reconsider both the processes by which such lives are ordered and the forms of violence that lead to their loss.[59] Critically, the unfamiliar everydayness described by Halperin and Birch is also nested in macro-phenomenal patterns of classification.

Through a reading of the life of Gladys Bentley as a response to Force 1–*Light Air*, artist and researcher Mimi Onuoha describes how these processes of social classification continue to homogenize Black and queer bodies through algorithmic surveillance. According to author Christina Sharpe, "We have been reminded by [Saidiya] Hartman and many others that the repetition of the visual, discursive, state and other quotidian and extraordinarily cruel and unusual violences enacted on Black people does not lead to a cessation of violence, nor does it, across or within communities, lead primarily to sympathy or something like empathy. Such repetitions often work to solidify and make continuous the colonial project of violence." Sharpe then asks, "With that knowledge in mind, what kinds of ethical viewing and reading practices must we employ, now, in the face of these onslaughts? What might practices of Black annotation and Black redaction offer?"[60] In his recent book *Critique*

54 Mignolo and Walsh, *On Decoloniality*, 178.

55 Julietta Singh, *Unthinking Mastery: Dehumanism and Decolonial Entanglements* (Durham: Duke University Press, 2017), 19.

56 On "bumpy temporalities," see William E. Connolly, *Facing the Planetary: Entangled Humanism and the Politics of Swarming* (Durham: Duke University Press, 2017), 89–120.

57 On "speculative ethics," see Maria Puig de la Bellacasa, *Matters of Care: Speculative Ethics in More Than Human Worlds* (Minneapolis: University of Minnesota Press, 2017).

58 On modes of attention and attunement relevant for lives in capitalist ruins and on this damaged planet, see Anna Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2015), and Anna Tsing, Heather Swanson, Elaine Gan, Nils Bubandt, eds., *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene* (Minneapolis: University of Minnesota Press, 2017).

59 On the question of animals, animality, and politics, see Vinciane Despret, *What Would Animals Say if We Asked the Right Questions?* (Minneapolis: University of Minnesota Press, 2016); Brian Massumi, *What Animals Teach Us About Politics* (Durham: Duke University Press, 2014); and Eben Kirksey, ed., *The Multispecies Salon* (Durham: Duke University Press, 2014).

60 Sharpe, *In the Wake*, 116–17.

*of Black Reason*, Achille Mbembe emphasizes a necessary feature of these violent onslaughts: "colonial domination requires an enormous investment in affect and ceremony and significant emotional expenditure that few have analyzed until now."[61] Onuoha describes how, in the early twentieth century, the *endo-colonization* of Black and queer bodies in the United States relied on similar forms of affective investment and expenditure, which changed radically at the end of the Depression, leading to abrupt transformations of previously permissive cultural practices and thus to new forms of marginalization. Attending to the conformity required by contemporary modes of surveillance, she then considers how new forms of media communication produce marginalized bodies through obscure, digital processes of social classification.[62] Indeed, marginality is a product of epistemic coloniality; yet, as Félix Guattari notes: "Nothing is less marginal than the problem of the marginal. It cuts across all times and places. Without getting to the marginal there can be no question of social transformation, of innovation, or revolutionary change."[63]

Rouzbeh Akhbari and Felix Kalmenson, working as the artist duo *Pejvak*, respond to Force 5–*Fresh Breeze*, through a photo essay "Meghri/Agarak," which moves our attention from bodies to boundaries, namely, the Armenian border, and the transformations of sovereignty, work, and passages underway in this former Soviet Republic. Adapted from their film project *Make Breeze* (2018), the artists investigate the porosity of the border by way of the Free Economic Zone, which privileges the movement of capital over the mobility of people. How to read the wind in these borderlands? In *Elemental Passions,* Luce Irigaray calls our attention to "what can be sung now, and not what might be true for all time."[64] As a children's choir in Agarak's former Soviet theater announces the major embarkation points of the discontinued Yerevan-Baku Railway, Akhbari and Kalmenson's photo essay calls to mind the *contingent* obligations (read: *not* historical necessity) of collapsing Empires, as once vast infrastructures are slowly turned to dust in the Caucasus mountains, making breeze.

61 Achille Mbembe, *Critique of Black Reason*, trans. Laurent Dubois (Durham: Duke University Press, 2017), 114.

62 On endo-colonization, see Eric Alliez and Maurizio Lazzarato, *Wars and Capital*, trans. Ames Hodges (Los Angeles: Semiotext(e), 2016); Alliez and Lazzarato's discussion of "war against the population" is also of particular relevance for discussions of surveillance and control in the contemporary condition they describe as a "civil war of capital"—see especially 312–38.

63 Félix Guattari, *Soft Subversions: Texts and Interviews 1977–1985*, ed. Sylvere Lotringer, trans. Chet Wiener and Emily Wittman (Los Angeles: Semiotext(e), 2009), 229.

64 Luce Irigaray, *Elemental Passions*, trans. Joanne Collie and Judith Still (New York: Routledge, 1992), 85.

## Dehumaninzing Affinities

Regarding agential affinities with nonhuman forces and their potential for new modes of composition, like Virginia Woolf, we wanted to "follow the curve of the sentence wherever it may lead, into deserts, under drifts of sand, regardless of lures, of seductions […]."[65] The curve of the sentence led us, in this *work of wind*, to *The Undercommons*, where, thanks to Stefano Harney and Fred Moten, we found new ways to *study* (that is, to share in the processes of learning together) and *plan*.[66] Contingent curves also led us to Richard Powers's *The Overstory*, a novel that reimagines the possible relationships between humans and nonhumans in ways that biodiversify the undercommons and reveal its many hidden, botanical, and mycorrhizal entanglements.[67] To call these *dehumanizing affinities* is to follow again the work of Julietta Singh, who explains that, "Dehumanism […] aims to bring the posthuman into critical conversation with the decolonial," and further, that *dehumanizing* work is "united with queer inhumanisms as it presses us toward an overtly global, imperial critique of the making and mapping of Man and its proliferating remnants."[68] However and

65 Virginia Woolf, *The Waves* (Ware, UK: Wordsworth, 2000 [1931]), 48.

66 Harney and Moten, *The Undercommons* (Brooklyn, NY: Minor Compositions, 2013).

67 Richard Powers, *The Overstory* (New York: W. W. Norton & Company, 2018).

68 Singh, *Unthinking Mastery*, 4–5.

wherever we locate the human in these narratives, it is certain that there is work to be done to delink human practices from the inheritances of colonial mastery.

Fortuitously, between *The Undercommons* and *The Overstory*, we encountered thoughts and beings conspiring to invent and invite new ways of inhabiting the wind. Tomás Saraceno's response to Force 2–*Light Breeze*, "Stillness in Motion," narrates a radical new approach to airborne flight that leaves behind the carbon-based fuel economy for a more attuned and rhythmic mode of atmospheric floating.[69] As an aspirational series of gestures, practices, and work in-the-making, Saraceno's call for a slower, more patient mode of experimentation, also known as the *Aerocene*, makes decolonial forms of art and science possible at new altitudes.[70] Artist Barbara Marcel, in her essay "The Gardener, the Rubber Tapper, and the Herbalist," responds to Force 3–*Gentle Breeze* with a story that entangles a personal narrative, a history of cinema, and a rubber plantation, connecting the salons of Paris and the rainforests of the Amazon.[71] As a text written in anticipation of a film-to-come, Marcel reveals other decolonial ways of inhabiting the garden through her work with the herbalists at *Casa Chico Mendes* in the city of Santarém.

"Trapped in the Dream of Another," Revital Cohen and Tuur Van Balen's response to Force 4–*Moderate Breeze*, was contributed in collaboration with Eva Wilson as writer. The piece is a reflective description of a performance work linking China's manufacturing sector with mining sites in the Democratic Republic of Congo. Moving among various sites of control and processes of expenditure, Cohen, Van Balen, and Wilson demonstrate how the contemporary coloniality of extraction practices in the DRC can become legible by running them in reverse. Artist Tania Willard responds to Force 6–*Strong Breeze*, with her text *Cme'sekst*, written in part by the wind as it scattered the cut-up fragments of a guidebook on Canada's nature parks. Willard explains: "Words were cut up from *Canada's National Parks* because these parks are Indigenous lands that themselves have been cut up and cut off from our love and our connection."[72] Willard shares other stories from BUSH gallery, including the tale of a tipi lost to the wind, reminding readers that sometimes we must rely on the wind to tear out or tear up our expectations.

Decolonial theorist Macarena Gómez-Barris, responding to Force 8–*Gale*, addresses "Colonialism at the Sea Edge of Extinction," through a critical survey of writings by Rachel Carson, Charles Darwin, and Rigoberta Menchú.[73] Referencing Lacuna author Leslie Marmon Silko's *Almanac of the Dead*, Gómez-Barris echoes her call for "the tall wave of Indigenous resurgence."[74] Resistance and resurgence are also the concern of author Anna Feigenbaum, who, in her essay "The Gunshots Turned Out to Be Tear Gas," responds to Force 11–*Violent Storm* with a series of case studies regarding the use of allegedly "nonlethal" weapons against civilians. Developed as an introduction to her book-length study of tear gas, as well as to her activist practice, via RiotID.com, of tracking tear gas used against protesters worldwide, Feigenbaum contends that counter-forensic practices can contest the violence of the state and its atmospheres of toxicity.[75]

69 In his essay, Saraceno also draws on the work of Bruno Latour and his reframing of the Gaia hypothesis; see Bruno Latour, *Facing Gaia: Eight Lectures on the New Climate Regime* (London: Polity Press, 2017).

70 See also Isabelle Stengers, *Another Science Is Possible: Manifesto for Slow Science* (Cambridge: Polity Press, 2018).

71 Related to this, see Gene Ray, "Resisting Extinction: Standing Rock, Eco-Genocide, and Survival," in *South as a State of Mind* 9 [documenta 14 #4], 141–60.

72 See, in this volume, Tania Willard, "6–*Strong Breeze: Cme'sekst*," 189–206.

73 Gómez-Barris, *The Extractive Zone;* for another perspective on extraction, energy, and politics, see Timothy Mitchell, *Carbon Democracy: Political Power in the Age of Oil* (London and New York: Verso, 2011).

74 See, in this volume, Macarena Gómez-Barris, "8–*Gale:* Colonialism at the Sea Edge of Extinction," 233–42.

75 Anna Feigenbaum, *Tear Gas: From the Battlefields of World War I to the Streets of Today* (London and New York: Verso Books, 2017).

Let's return to the second epigraph which framed this introduction, from Deleuze and Guattari, and add their subsequent remarks: "Nothing is ever done with: smooth space allows itself to be striated, and striated space re-imparts a smooth space, with potentially very different values, scope, and signs. Perhaps we must say that all progress is made by and in striated space, but all becoming occurs in smooth space."[76] Reading academic "applications" of Deleuze and Guattari's concepts, including those of smooth and striated space, can sometimes feel as redundant today as taking the Beaufort Scale measure every hour; still, as I conclude this essay, I want to return to this point for two reasons: first, indeed—*nothing is ever done with*. What seems to be historically or pragmatically contained (that is, stratified) can quickly reemerge to smooth the space of politics, as with the current global, neo-fascist resurgence.[77] Our reconsideration of the Beaufort Scale is a reading practice that attempts to challenge and transform the predominant *monoculture* of attention dominating art and culture under capitalism, including its indulgence of far right terrorism and neo-fascism. Second, like its colonial predecessor, as a mode of social organization, contemporary capitalism, or "Integrated World Capitalism," works through processes of smoothing and striating *simultaneously*.[78] Still, if revolutionary becomings occur in and through smooth space, as Deleuze and Guattari contend, it is only by way of collective forms of enunciation that refuse coloniality, capitalism, and their requisite forms of violence.

Responding to Force 9–*Strong Gale*, d'bi.young anitafrika adapted and excerpted her theatrical score for *LUKUMI*, which was previously performed as a dub opera. The theatricality of the work, which invokes, especially in "Act I," a revolutionary animality and a conspiracy of beings against the violence of capitalist extraction, reminded us of Fred Moten's question in *Black and Blur*: "But how do we address that privileging of narrative that might rightly be seen to emerge from a certain politics, a certain theory of history, a certain desire? Not by opposition; by augmentation."[79] Regarding this augmentative bend, Moten adds another remark in an essay on Jimmie Durham that appears much later in the book, but which seems especially pertinent here: "So how do you go from pleasingly putting lots of things together to having nothing quite add up, to letting nothing be so thoroughly in the work that a certain unworking of the work gets done? The work of letting be the nothing in the work that undoes the work till it and the artist are eased with being nothing."[80] He continues with a mesmerizing evaluation of the museum: "The museum of that is walking around in exile and humility, endlessly having to have something to say for itself so it can help you make you strange to yourself. Estrangement, here, is all up in the rub or glance, not in the work, because to be strange to yourself, to be able to have been disabled in the museum, to walk in but not walk out (as you), and then to walk on, aesthetically, is to be unable to have found the work." Because, fundamentally, "The whole thing is radically untenable and then there's the fact that we have to take responsibility for it. Europe is our project. America is our thing. You have to say that a million times before blowing them up becomes a necessary option."[81] d'bi.young anitafrika's dub opera *LUKUMI* (and its adapted version, included here)

76 Deleuze and Guattari, *A Thousand Plateaus*, 486.

77 See Michel Foucault's Preface to Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism & Schizophrenia*, trans. Robert Hurley, Mark Seem, and Helen R. Lane (Minneapolis: University of Minnesota Press, 1987), xi–xiv, wherein Foucault asks: "How does one keep from being a fascist, even (especially) when one believes oneself to be a revolutionary militant? How do we rid our speech and our acts, our hearts and our pleasures, of fascism? How do we ferret out the fascism that is ingrained in our behaviour?"

78 On "Integrated World Capitalism," see Guattari, *Soft Subversions*, 224–77. For an especially useful commentary on Guattari's practice with respect to resisting the modalities of capitalist subjectivation, see Isabelle Stengers, "Relaying a War Machine?" in Eric Alliez and Andrew Goffey, eds., *The Guattari Effect* (London and New York: Continuum, 2011): 134–55.

79 Fred Moten, *Black and Blur: consent not to be a single being* (Durham: Duke University Press, 2017), 3.

80 Ibid., 224.

81 Ibid., 224–5.

can be understood as an invitation to her audience to take responsibility for this postponed explosion; it is a pertinent, poetic reminder of the many worlds upon which the all-too-human world depends.

In *In Catastrophic Times*, Isabelle Stengers makes a complementary, urgent claim when she writes, "it is in these milieus that one also deals with those who are engaged in experimenting with what 'thinking' means to live or survive, thinking *in the sense that matters politically, that is to say in the collective sense*, with one another, through one another, around a situation that has become a 'common cause' *that makes people think*."[82] She adds, "And we need these histories to affirm their plurality, because it is not a matter of constructing a model but of a practical experiment. Because it is not a matter of converting us but of repopulating the devastated desert of our imaginations."[83] As the final contribution to this collection, Juliana Spahr rewrites Force 12–*Hurricane*, as "The Theory of the Fire Ants," a poem that describes the planetary storm of capitalism and calls for "no more."[84]

Following Spahr's hurricane, I cannot think of a more fitting way to conclude these introductory remarks than by quoting the American poet Ross Gay, who I first heard about during a lecture by Mia Charlene White. Since hearing White's unforgettable reading of this poem, I have been thinking about how wind and breath are both forces that interact with the Earth. This is not least because of how Gay entangles respiratory politics with the struggle for equality and justice, while also reminding his readers that some of the seeds, which will grow to nourish emancipatory commitments to equality, solidarity, and climate integrity, have already been planted. These animate, persistent interactions—subtly but steadily connecting subterranean, terrestrial, and atmospheric worlds—should not be taken for granted. "A Small Needful Fact,"

> Is that Eric Garner worked
> for some time for the Parks and Rec.
> Horticultural Department, which means,
> perhaps, that with his very large hands,
> perhaps, in all likelihood,
> he put gently into the earth
> some plants which, most likely,
> some of them, in all likelihood,
> continue to grow, continue
> to do what such plants do, like house
> and feed small and necessary creatures,
> like being pleasant to touch and smell,
> like converting sunlight
> into food, like making it easier
> for us to breathe.[85]

Can the ease of respiration afforded by Eric Garner to those who survive him become a kind of living, breathing memorial—part of an indelible and necessary rhythm that reminds us to attend more urgently to the necessary struggles against racialized capitalism and for equitable climate integrity—something like an imperative of

82 Isabelle Stengers, *In Catastrophic Times: Resisting the Coming Barbarism* (London: Open Humanities Press, 2015), 131.

83 Ibid., 132.

84 For a radical, decolonial approach to narration that complements Spahr's reading of Force 12–*Hurricane*, see Leanne Simpson, *Islands of Decolonial Love: Songs and Stories* (Winnipeg: Arp Books, 2013).

85 Ross Gay, "A Small Needful Fact," splitthisrock.org/poetry-database/poem/a-small-needful-fact.

the wind?[86] To breathe and become with the wind is our hope for this book; this is because, as decolonial anthropologist Kristen Simmons emphasizes, "In a porous relationality—attuning to how others (cannot) breathe, our haptics are enhanced and we develop capacities to feel one another otherwise. [Timothy] Choy reminds us of the Latin root of *conspire*, as a breathing together, declaring: 'Breathers of the world, conspire!' We need to conspire to strategize logics of agitation, which displace and unsettle. Doing so calls us not to ignore difference, but to create alter-relations with one another. As Choy underscores elsewhere, 'breathing together rarely means breathing the same.'"[87]

In this introduction, by relaying ongoing conversations with my co-editor, Christine, I have tried to situate the Beaufort Scale historically, as a document of civilization and its barbarisms, but also as a means to dislocate its poetic attunement from its colonial provenance. Reading the descriptions as potential modulators of both breath and attention, as editors we believe that while the Scale was developed in order to constrain and focus environmental observation in the service of Empire, it can also be read with a view to other practices of world-making with common futures. The book's epistemic disobedience is thus a way to encourage and sustain diversities in the face of the ongoing and homogenizing coloniality of global capitalism. In this sense, we are in agreement with The Invisible Committee when they write: "Here it is not a question of a new social contract, but of a new strategic composition of worlds."[88] As one small composition among many worlds of struggle and many ways of world-making, we hope to have shared through this book-as-exhibition the work of wind and some premonitions of *the winds to come*.

86 See also Klaus K. Loenhart, ed., *Breathe: Investigations into Our Environmentally Entangled Future* (Basel: Birkhauser, 2018).

87 Kristen Simmons, "Settler Atmospherics," in *Cultural Anthropology* (20 November 2017), culanth.org/fieldsights/1221-settler-atmospherics.

88 The Invisible Committee, *Now*, trans. Robert Hurley (Los Angeles: Semiotext(e), 2017), 89.

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