VOCABULARY & INFRASTRUCTURE IN THE PRESENT TENSE

AN EDITORIAL IN 3 PARTS

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PART 1 EVOLVING VOCABULARY

Amy Howden-Chapman

This issue surveys the language currently surrounding anthropogenic climate change. Cataloguing this cultural conversation, The Distance Plan positions the arts as having a critical role in responding to this issue. Through proposing neologisms and promoting less well-known terms, we wish to propel interdisciplinary discussion, and by extension accelerate the pace of action.

Art & Climate Change: A Lexicon also draws attention to the multifarious realms that climate change currently, and increasingly, affects. Discussions around the impact of new technologies, the refugee crisis, materialist feminisms, decolonisation, and the financialisation of lifestyle are already occurring within the arts. We assert that climate change is relevant to these exchanges, and seek to connect these by working with contributors from a range of fields. While our primary domain is the visual arts, this lexicon has been developed by other artists and curators, as well as by friends and colleagues who are earth scientists, physicists and conservation biologists, public policy experts working on transport and housing, writers, academics working in economics, sociology, public health, english literature, media studies, international relations, international aid and those working in grassroots political organisation.

Through this lexicon, we propose that the science around climate change is developing so rapidly that we need new language to articulate its processes and effects.[1] The lexicon is also based on the recognition that evolving science produces evolving policy, and politics must be commensurate with this. Writer Margaret Atwood has suggested that, given the scope of our new situation, *everything change* is perhaps a more appropriate term than *climate change.*

"The history of science is the history of progressive clarifications" writes physicist Carlo Rovelli. [2] Translating scientific knowledge into popular cultural understanding is always complex. As the science of anthropogenic global warming evolves, the 'truths' about climate change can never be more than

1 The naming of our current era as the Anthropocene is the most prominent example of such recategorisation. This act, though scientifically descriptive is politically problematic. See: Capitalocene.

2 'How should we perceive reality?: Host Tom Standage sits down with renowned physicist Carlo Rovelli,' *The Economist,* 7 October 2016, www.economist.com.

temporary; as writer Margaret Boysen proposes: "Global warming is an open process which is co-determined each and every day by the behaviour of human[sic]kind."[3] The question becomes how to build political consensus on a shifting terrain.

The usual scientific process of developing hypotheses which are then tested cannot fully apply in the case of the climate system, as we are running out of time. Instead, scientists must model projections of the trajectories which this great collective 'experiment' might take. But the natural uncertainty that exists in any model cannot be an excuse for inaction. An analogy (only in the sense that both are complex models) can be seen in the global financial industry which is another inherently interconnected elaborate dynamic globalised system. Yet uncertainty within the financial industry is seldom met with stasis; rather, the drive for profits prompts continued action, often with dangerous speed – think flash crash. The discrepancy between these two complex systems has become the tension of our time, the disconnect between reality and the orthodoxy that 'the market responds'. As far as the commons are concerned, the response from the market has been slow to the point of negligible. This is especially true for our treatment of the atmosphere, our most resplendent and precious common resource.

This tension is encapsulated in the research of Jonathan F. Donges, a physicist working at the Potsdam Institute for Climate Impact Research. In the past, Donges has modelled climate earth systems. Currently, he is working to model the effects of disinvestment[4] as part of a broad project analysing the most critical social tipping points that need to be reached in order for our current society to transform to carbon neutrality.

In considering how vocabulary limits and motivates political action, we draw on George Lakoff's ideas about framing,[5] and feminist critiques locating language as a site of power – including the work of Robin Lakoff, who asserted that "hedges such as *sort of, kind of*, and *I guess*; intensifiers such as *so* and *very*; and hypercorrect, polite linguistic forms ...suggest[s] that the association of indirect speech with women's language and direct speech with men's language is the linguistic reflection of a larger cultural imbalance between the sexes."[6] Recent developments in gender studies illustrate how both categories and terminology shape cultural norms and personal behaviour.

The cultural mechanisms through which language exerts power are seen in the history of environmentalism which provides a salient example of a powerful term – 'nuclear winter' – which helped galvanise public opinion around nuclear disarmament.

3 Margret Boysen, *Alice, the Zeta Cat and Climate Change* (Berlin: Edition Rugerup, 2016), 7.

4 Recent divestment action by groups such as 350.org and The Guardian Keep It In The Ground campaign called for pension funds and other organisations such as the Gates Foundation to divest from fossil fuels. In June 2015 Norway confirmed that it would divestment from coal in its $900billion Sovereign Wealth Fund.

5 George Lakoff 2010, 'Why it matters how we frame the environment', *Environmental Communication*, vol. 4, no.1, (2010),70-81.

6 Hall has noted the contested nature of this analysis by feminist scholars, with some claiming that "Lakoff's identification of women's language as cultural subordinate serves to affirm sexist notions of women as deviant and deficient." Kira Hall, 'Lip Service on the Fantasy Lines', Kira Hall and Mary Bucholtz (eds.), *Gender Articulated: Language and the Socially Constructed Self* (New York and London: Routledge, 1995), 183-216.

> *Using publicly available information on the effects of nuclear weapons and computer models of nuclear warfare, the NASA-Ames group investigated how nuclear exchanges of one hundred to five thousand megatons might affect global temperatures. (For comparison, the Mt. St Helens eruption was equivalent to ten megatons.) Their model suggested that even the smallest nuclear exchange could send the Earth into a deep freeze: surface temperatures might fall below freezing even in summer. Larger exchanges could produce near-total darkness for many months. The winter hypothesis had been born, but it could equally well have been called nuclear night. After even a modest nuclear exchange, we would indeed freeze in the dark.*[7]

7 Naomi Oreskes and Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (London: Bloomsbury Press, 2011), 48.

The phrase *nuclear winter* was fought for by environmentalists, whose models were challenged by a nuclear industry which claimed incorrectly that *nuclear spring* might be just as likely a scenario. The subsequent debate over the term *nuclear winter* foreshadowed continuing manoeuvres by industry to confuse public understanding of the environmental issues. Doubt rather than denial was seen as enough to forestall effective regulative action and maintain profits within the fossil fuel industry.

The terms in this latest lexicon fit into four broad themes: modes of researching and imagining; embodied and daily experience of climate change; social jurisdictions; and infrastructure and adaptation. Lexicon terms in the first category include *Ocean Inflammation, Human Rain, The Precautionary Principle, Climate Research Solidarity, Very-long-baseline Interferometry* and *Ecocriticism.*

The lexicon terms that fall into category of embodied and daily experience of climate change include *Protest as Celebration, Citizen Science, Gendered Climate Impact*, *The Fuck Lycra Conundrum*, *First Person Climate Knowledge* and *Ordinary Knowledge*. These ideas are extended through artists' pages by Louise Menzies and Michala Paludan.

While an intention at the core of the lexicon is to expand the articulation of and precision of meaning around climate change, we acknowledge that language is only one of many tools available to artists. The Distance Plan also aims to contribute to the diversity of images used in discussing climate change.

Accordingly, photographs by Michala Paludan are interspersed throughout the lexicon. From a series titled *Kalliope, Kleio, Erato, Euterpe, Melpomene, Polyhymnia, Terpsichore, Thaleia and Urania* (2015 –), these images are part of a larger project about gender in the art world. As portraits of the hands of

artists who are both friends and colleagues of Paludan, the photographs initiate questions of intimacy and labour. In this context they become an invitation to consider climate change as within our everyday actions; not dislocated in space and time but embodied in our ordinary activities, exchanges and social relationships.[8]

In these images Paludan captures the range and forms of labour required of an artist, an occupation that has long been economically precarious and required entrepreneurial inclination. As employment becomes increasingly casualised and workers' protections are undermined, such strategic adaptability, including the trading of social capital (think Instagram followers and Airbnb and customer service ratings) is – regrettably – increasingly necessary for many contemporary workers within a capitalist infrastructure. Paludan presents us with hands engaged in the daily tasks of writing, recording, travelling and child care. As noted in our previous editorial, theorist Nancy Fraser has characterised reproduction, ecology and political power as the three necessary background conditions for "capitalism's economic front-story, stressing their functionality for commodity production, labour exploitation and capital accumulation."[9]

Louise Menzies' project in the journal is also an exercise in imagining climate change as a material thing. Her invitation for us to drink A Year, A Place, A Season, The Weather, is presented here alongside collected ephemera showing weather data and the harvesting of grapes. Menzies year of choice is 1960, and the place is West Auckland, New Zealand. Specifically, a bottle of Mazuran's vintage port becomes the object with which to literally imbibe history, through the distinct natural conditions of the sun, wind, rain and soil that the bottle's contents captures. The weather pages featured here forecasts the future, after the fact, and as we attempt to imagine the atmospheric conditions of previous time, the alcohol enters our bodies, already mingling past with present.

Menzies is interested in how weather is conceptualised and visualised, both in popular exchange and mass media. Weather is the part of climate that is embedded and personalised, and as extreme weather events become more frequent, so will the conversation around its place in our culture. In New Zealand the weather is discussed constantly, reflecting New Zealand's geographic situation as a small landmass amid a large ocean, with uncertain weather patterns. This obsession is also a vestige of New Zealand's agricultural past.

8 This process could be read as aligned with what art historian Carrie Lambert-Beatty has described as *parafiction*, defined as artistic reality experiments which encourage viewers to "practice a range of belief states the way musicians practice scales." We see Paludan's images as a means to practise the linking of daily activities with the concept and actuality of climate change.

9 Nancy Fraser, 'Behind Marx's Hidden Abode: For an Expanded Conception of Capitalism', *New Left Review* 86, March/April 2014, 69.

PART 2

GOVERNANCE REFRAMED, INFRASTRUCTURE REPLANNED: A SHARED FUTURE OF ABUNDANCE?

Amy Howden-Chapman

A promotional video on the website of a food replacement product asks: "What is Soylent?" Peppy music plays and a friendly voice states: "Widespread use of Soylent could drastically reduce the ecological impact of food production and encourage a shared future of abundance." The idea that food developed from algae in vats could be palatable, even desirable, was in the recent past a strange notion. At our current moment, we need to discover how quickly social norms can evolve, and whether it is still possible that we can develop a *shared future of abundance.*

It is clear that our shared future will have to be developed and promoted by more than a 'disruptive' tech company such as Soylent. It will require change in a broad range of social domains. Such change is captured in lexicon terms such as *Elongated Governance*, *Climate Hostage*, *Living Borders*, *Social Tipping Points*, *Climate Debt*, *Atmosphere as 'Aer Nullius', Time of Useful Consciousness* and *Denihilism.* These terms explore mechanisms that mobilise against climate change action, consider the very tight time-frame in which we have to enact change, and ask who has power within these processes.

A final category of lexicon terms related to infrastructure and adaptation includes concepts such as *Brute Force Infrastructure, The Dirty Cloud, Insurrectionary Agricultural Milieux*, *Indoor Atmosphere*, *Mounding*, and *Hinkley Folly.* These terms interrogate the major infrastructural forms of the present, from energy generation to digital frameworks. This category was also investigated in an exhibition in June 2016 at Human Resources Gallery in Los Angeles titled *Climate & Infrastructure.* This included an essay by Lina Moe which is reprinted in this issue. The essay gives historical context to the closure of New York City's L Train for post-Sandy repairs. The line's closure is an example of the increasing vulnerability of civic infrastructure, and Moe asks if retreat, rather than rebuilding, should be the goal, concluding that 'rebuilding' directly reflects the present state of denial about our growing environmental precarity.

Moe's essay is a timely case study of how the soft infrastructure of institutions responds to the effects of climate change on hard infrastructure. The L's closure raises question of how inclusion, equity, and efficiency play out within the community and civic institutions of New York City.

In the coming years, urban population growth will require cities to expand while at the same time they will have to be retro-fitted to reduce carbon emissions and rebuilt following the increase in extreme weather events and sea levels. During these processes, citizens will expect that quality of life is maintained, defined by notions such as "self-efficacy, identity, solidarity, a sense of belonging, trust and social networks."[10] It is vital we acknowledge who is part of the current conversation around climate change. Who is missing? Whose voices are being listened to, and who is being ignored? I will discuss these questions and how they intersect with the notion of infrastructure and adaptation in more detail below.

10 See WBGU (German Advisory Council on Global Change), report *Humanity on the move: Unlocking the transformative power of cities* (Berlin: 2016), 3.

In his recent work *Decolonizing Nature,* T.J. Demos asserts:

> *My analysis of art and environment extends from the view that climate change is first and foremost a political crisis, not one that poses insurmountable technological problems or natural barriers… we cannot address climate justice adequately without also targeting the corruption of democratic practice by corporate lobbying, or the underfunding and failure of public transport systems, or indigenous rights violations by industrial extractivism, or police violence and the militarization of borders. For these areas all link up in one way or another as interconnected strands of political ecology.*[11]

11 T.J. Demos, *Decolonizing Nature: Contemporary Art and the Politics of Ecology* (Berlin: Sternberg Press, 2016), 12.

Following Demos, forms of governance that privilege political inclusion become key. We must stop asking the question 'How do we *make* people care about climate change?' And start supporting processes which recognise a universality of 'care' already exists. Even 'deniers' care about the stability of their communities. Climate change is often talked about as a problem of educating people. Naomi Klein has however noted that "As a person who is very involved in the climate movement, [I notice] that the climate movement is not listening enough to the people who are most impacted by climate change and other ecological stresses."[12]

12 Klein's comment during the Q&A segment of her lecture, 'Let Them Drown: The Violence of Othering in a Warming World', London, 4 May 2016. Audio available at www.lrb.co.uk/v38/n11/naomi-klein/let-them-drown.

As a climate justice movement, we need to pay closer attention to how diverse realities are represented in the social and physical infrastructure of our societies. We need to acknowledge that political agency cannot exist without economic inclusion.

The current American presidential election illustrates this point. Kenneth Bone, a mustached red-sweatshirt-wearing undecided voter asked in the second presidential debate: "What steps will your energy policy take to meet our energy needs while at the same time remaining environmentally friendly and minimizing job layoffs?"[13] Coming from a 34-year-old operator at a coal plant in Illinois, Bone's question was personal, but also acknowledged the collective. By thinking of what it takes

13 The political polarisation flowing from the economic hardship caused by the contraction of the fossil fuel industry within certain states in the US – Illinois and West Virginia – has an analogy in the European context in the high level of climate denial and skepticism in Poland. Poland is home to the world's second-largest coal-fired power station, and 52% of the country's energy is generated by coal. The influence of the coal sector in the cultural conversation is substantial, in part due to the strong bargaining power of the coal sector's trade unions, which is much stronger than industries with a comparable number of workers, such as the textile industry.

to be "environmentally friendly" he was inherently thinking beyond himself and his immediate Illinois community.[14]

Building consensus around what shape the future will take in a divided electorate is most effectively achieved through offerring a model (a blueprint of process based inclusion) within a world of rapidly changing demographics.

> *The global urban population could increase from just under 4 billion today to 6.5 billion people by 2050 – and urban infrastructures will grow with it. About two-thirds of humanity will then have their homes in cities. The force of the urbanization surge will primarily affect developing countries and emerging economies in Asia and Africa. Almost 90% of urban-population growth up to 2050 is expected on these two continents.*[15]

In China alone, more cement was used in the three years from 2008 to 2010 than in the entire twentieth century in the United States.[16] Such facts make very clear very quickly that urban development globally will largely determine whether it is possible to prevent dangerous climate change. The physical forms contemporary cities take are reflect the decisions made by a powerful few; yet they host an increasingly diverse collective of people with correspondingly diverse needs. Alongside this is the growing awareness that the governing elite is not proving responsive enough to the stresses climate change is putting on a swelling urban population. Wide-scale infrastructural changes, from the way we move around our cities,[17] to the resilience and energy efficiency of the building and housing stock in those cities, to how we generate our power, are required.

Future infrastructure depends on decisions made now. More often than not energy infrastructure is superimposed upon ecosystems and social landscape with brute force, rather than with any consensual processes that have regard for existing communities. Speaking of the damming of Colombia's Magdalena River, artist Carolina Caycedo has written, "The technological accomplishment involved in the engineering and building of a dam functions as a taming process of a wild and remote nature, but also as an ideological tool that regulates our relationships to bodies of water, and to the landscape. Nation-states and corporations monopolize imaginaries around dams."[18]

The narratives of *Brute Force Infrastructure* [p.85] are considered in the Californian context by Susannah Sayler and Edward Morris's 2016 project *The American River Archive (Water Gold Soil)*. This follows a single flow of water in California from origin to end-use, showing "the basic economic reality of water in California in counter distinction from its possible scenic representation." Their investigation reveals that

14 Hillary's Clinton's answer to this question included her acknowledgement that climate change was a "serious problem." A welcome change from the previous debate in which Donald Trump repeatedly referred to Clinton and the Democrats' "war on coal". See Jonah Engel Bromwichot, 'Ken Bone Is Closer to Deciding, After Debate,' *The New York Times*, 10 October 2016, www.nytimes.com.

15 WBGU report, op.cit, 7.

16 Vaclav Smil, *Making the Modern World Materials and Dematerialization* (Chichester: Wiley, 2014).

17 How we travel means how we the move around the world, as well as how we commute daily. As companies like Uber accelerate investment in self-driving car technology, they are trying to move after not just the taxi industry, but the personal mobility industry. One potential advantage of this is to forestall private car ownership before it takes hold in the developing world. Car ownership is still relatively very low in China, so if Uber or their competitors can hook passengers early enough, they can potentially have customers for life.

18 Carolina Caycedo, in correspondence with the author, May 2016.

California is both "a manufactured landscape, a vast terra-forming project"[19] in which, "water has a technological, not a natural reality."[20] As the project reveals all water in California is managed, beginning with more than 1,400 dams and more than 1,300 reservoirs.

19 Edward Morris and Susannah Sayler, 'Water Gold Soil: project description including some notes on a politically engaged use of allegory in contemporary art,' working paper (*Third Text*, thirdtext.org, forthcoming).

20 Ibid.

'Path dependency' describes an economic concept where the choices available to us in the present are contingent on knowledge and decisions made in the past, and that future capacity for change is substantially determined by our current planning and thus the path we decide to take. If the road is built, it is easy to keep driving down the road into the future. If there are no train tracks, it is unlikely there will be a train leaving the station, either today, or tomorrow. The German Advisory Council on Global Change suggests:

> *It is not so important to look to the future from today's perspective, which usually makes the path already being followed look inevitable; rather, one should look back to the present from a desirable future: what paths should be followed and what dead-ends should be avoided today to make this sustainable future possible?* [21]

21 WBGU report, op.cit, 9.

As noted in our lexicon, we are now in a *Time of Useful Consciousness* [p.106]. In this brief window we must acknowledge that what precipitates necessary paradigm shifts are likely to be processes or systems that facilitate rather than obstruct Social *Tipping Points* [p.30]. (see also *Elongated Governance*) [p.66].

Writer Nicholson Baker has asked:

> *How is it that whole cultures and civilizations can change their 'minds' in ways that seem so susceptible to synoptic explanation? From the distance of the historian of ideas, things blur nicely: one sees a dogma and its vocabulary seeping from discipline to discipline, from class to class; if you squint away specificity you can make out splinter groups, groundswells of opposition, rival and revival schools of thought. The smoothness and sweep is breathtaking; the metaphors are all ready-made."*[22]

22 Nicholson Baker, 'Changes of Mind,' *The Size of Thoughts: Essays and Other Lumber* (New York: Random House,1982/1996), 5-9.

To unpack the sweeps and swells which Baker speaks about, it is important to note that different elements in society change at different paces. Informal institutions such as customs, religions and traditions are typically the longest elements to make transitions, often taking three generations or more. Formal institutions, such as laws, regulations and property rights have the ability to change more swiftly, within a matter of decades. Governance structures, which are sets of relationships, often between individuals, can also be relatively elastic and under the right conditions these can change over a period of years.[23] Within the arts, strategies such as institutional critique

23 Oliver E. Williamson, 'The New Institutional Economics: Taking Stock, Looking Ahead', *Journal of Economic Literature,* 38: 3 (2000), 595–613. See page 597.

consider how structural changes occur.[24] Infrastructure and technology can in theory rapidly change our society, for example if 'shovel-ready projects' are waiting in the wings.[25] But, as exemplified in the case of renewable energy neither infrastructure or its technological components can become ubiquitous without a supportive political and regulatory system (See *Hinkley Folly*, p.102).[26]

Sarah Rara's video work *Broken solar [Accumulator]* (2016–) comprises slow panning shots of the riparian hills of Ukiah California, and Arizona solar farms, the splendour of a flowering cactus and the reflecting black surface of solar panels. The camera studies photovoltaic surfaces and strategies for converting light into electricity and heat, traversing sites of production, from the skeleton of a blue whale to Biosphere 2. These panels were originally installed in the early 1990s, and by documenting corroding technology at the Biosphere 2 site, Rara tracks an already lengthy narrative of solar panel production, installation, maintenance and abandonment. The tone of the film is one of patient observation. It imparts a sense that reflection (including the study of natural processes, such as photosynthesis) is a necessary precursor to action.

Life lived against the backdrop of accelerated technological change is the subject of Steve Kado's video work *AGPTL* (2016) (included in *Imagine the Present,* the 2016 Distance Plan exhibition at St PAUL St Gallery, Auckland, New Zealand). The film ends with a long sequence of appropriated footage that shows a robot trying to open a door. The robot's efforts are both infuriating (just open the goddamn door) and touching (the poor creature can barely open the door) and these conflicting feelings bring a sense of sobriety to the pertinent question of when the future will arrive, and whose social worth will it most drastically challenge. As left-accelerationists Nick Srnicek and Alex Williams state, "The most recent wave of automation is poised to change this distribution of the labour market drastically. Rapid developments in robotics and exponential growth in computing power (the source of big data)… are coalescing into a 'second machine age' that is transforming the range of tasks that machines can fulfil."[27]

AGPTL is an acronym for *a good place to live.* Contemporary art sometimes seems to have adopted purely cynical answers to this question of where such a place might exist. Christopher Kulendran Thomas's *New Eelam* (2016) appropriates advertising strategies nearly identical to the Soylent mode, but rather than a food substitute, the product on offer is a fantasy nationless state in which citizenship is as fluidly attainable as a room is through Airbnb. See *Climate Hostage* [p.62]; *Living Borders* [p.89].

AGPTL and *New Eelam* both survey the current era of global mobility experienced by the wealthy in the (pre-Brexit?)

24 Fiona Connor's ongoing art work *A letter to the unwritten future* (https://alettertotheunwrittenfuture.com), presented as part of the *Climate & Infrastructure* exhibition, can be considered emblematic of such a process. Connor draws on the artistic tradition of institutional critique to advocate that institutions of all scales be cognisant of their energy use, and that actors across multiple levels of institutions must press for change.

25 The term 'shovel-ready' is a political neologism used to describe a construction project (usually larger-scale infrastructure) where project planning, engineering and funding have advanced to the stage where labourers may immediately be employed to begin work. 'Shovel ready projects' understand the moment before action begins but when the energy required for action is already present.

26 At the height of the energy crisis in 1979, President Jimmy Carter installed 32 solar panels on the roof of the White House, which were promptly removed by President Reagan. In 2010 President Barack Obama decided to reinstall the panels.

27 "[A]s it comes to encompass every aspect of the economy: data collection (radio-frequency identification, big data); new kinds of production (the flexible production of robots, additive manufacturing, automated fast food); services (AI customer assistance, care for the elderly); decision-making (computational models, software agents); financial allocation (algorithmic trading); and especially distribution (the logistics revolution, self-driving cars, drone container ships and automated warehouses). In every single function of the economy – from production to distribution to management to retail – we see large-scale tendencies towards automation as…a 'second machine age' that is transforming the range of tasks that machines can fulfil." Nick Srnicek and Alex Williams, *Inventing the Future: Post capitalism and a world without work* (New York: Verso, 2015), 196.

developed world. The actors in *New Eelam* glide between cosmopolitan centers, flopping down on newly made beds in apartments with just the right mix of technology and mid-century modern. Kado presents this lifestyle tangibly, producing a small run of canvas bags, perfectly proportioned to maximise what can be *placed under the seat in front of you.* These objects are condensed narratives regarding the physicality of flight, of what one can fit in hand luggage, and of how lugging luggage around the world is part of the daily life, and daily waste, of our times.[28] Such global mobility seems increasingly tenuous, given both its contribution to climate change and the disruptions predicted by climate change. Climate scientist Anders Levermann notes: "It is the unanticipated impacts on fragile infrastructures and supply networks that constitute the largest threat of global warming. While climate change is often considered to be a problem for the global poor and for fragile ecosystems, the impact of extreme events on the global economic network will test the stability of America as much as that of Europe."[29]

28 These bags were included in the Human Resources exhibition, one hanging on the wall next to another sculptural work of Kado's, with all the debris from the production of the exhibition – wood, bags of trash – covered by the canvas skin of a billboard advertising an idyllic desert vista. Nature crumpled. Idealised nature printed at high resolution over our own waste. An image of our times.

29 Anders Levermann, 'Heed the warnings in extreme weather – or risk losing Earth,' *The Guardian,* 31 January 2014.

The concept of the Carbon Staircase is a useful visualization of the 'steps' required to move down from our present peak carbon consumption towards a zero carbon economy by around 2050. The longer the time taken, the higher the risk of overshooting the steps as the global temperature level increases. The first step is the most time-critical. If we do not reduce emissions now, it will be very difficult to find a 'staircase' that is not precipitously steep, and to follow commitments already made internationally, including the removal of fossil fuel subsidies. Descending the Carbon Staircase requires the *controlled implosion* of the fossil fuel industry. It is clear that it will be necessary to phase out essentially all internal combustion engines, and – more widely – phase out all forms of energy production entailing carbon emission. The essential transition is to replace fossil fuels with renewable energy, in such a timeframe that the production of renewable energy systems does not create a problematic carbon overshoot. Meanwhile, future cities not only need to be low carbon but to lock carbon in.[30] We need to build with materials that store carbon, such as wood, and avoid creating sprawl in favour of "polycentric urban structures,"[31] that "increase the absorptive capacity and resilience of urban societies."[32]

30 As a carbon sink, wood can lock up carbon from the atmosphere. This process may be made possible by the widespread adoption of wood as a building material; it does not have the high carbon footprint of steel and concrete.

31 WBGU report, op.cit, 10.

32 Ibid.

In this era of *Post-Truth Climate Politics* the continuing process of misinformation around both climate science and the necessary move towards a low carbon economy is being financed by those who have vested financial interests in 'business as usual'. American billionaires the Koch brothers – whose fortune is based largely on oil and petroleum – have recently created a series of courses of the 'Grassroots Leadership Academy' to promote neoliberal ideas. One of the sessions, called the 'Moral Case for Fossil Fuels,' teaches

attendees to argue that "a turn away from fossil fuel use would ultimately be disastrous to humanity – especially the poorest of the poor."[33]

We carry out everyday life within complex social, economic and cultural structures, dependent on a fragile environment. In *The Painting of Modern Life*, T.J. Clark begins his consideration of modernism by describing in detail a painting by Édouard Manet titled *Le Chemin de fer.* A train has just come into the station. "The steam and smoke from the railyard hang in the air for a few seconds before evaporating. For the little girl watching, time stands still. The woman who looks up at the viewer keeps her place in her book with one finger, expecting the moment to pass: our attention is banal and short-lived (we are male passers-by, dragging her out of her identity as governess and chaperone for an instant, but only as long as it takes her to stare us out of countenance)."[34]

Clark lists both the infrastructure and the interactions present in the painting, the bars – belonging to the cities street, transport – the train, labour – the woman at work, class – her position as a governess, the book – a symbol of an imaginary. Clark considers the painting's potential is as a site of change; what does "transposition into a form like this do to the meanings and appearance of the everyday world – especially a world rushing by, renewing its imagery week by week? Whirr, whirr, all on wheels! Wizz, wizz, all by steam!"[35] The steam train is driven by coal, it's 1873, and we are witnessing the beginning of the ominous carbon curve.

The steam of the industrial revolution gave way to a second technological revolution of computing, the internet, and now advanced automation. How we transition to the third revolution – of a carbon free society – will depend as much on the vividness of our plans, and the fortitude of our communities and institutions as it will on hard infrastructure and technologies.

The Distance Plan calls for less *Empty Animation* [p.105], less of the inflammation and precarity brought on by 'business-as-usual', and more resistance to our current political systems "rhythm of entrenched cycles" (see *Elongated Governance,* [p.66]. Who benefits and who loses from decarbonising the economy is a question that through political agency returns us to the fundamental social justice questions at stake in discussions around climate change.

33 Ashley Parker and Maggie Haberman, 'With Koch Brothers Academy, Conservatives Settle in for Long War', *New York Times*, 6 September 2016.

34 T. J. Clark, *The Painting of Modern Life: Paris in the Art of Manet and his Followers* (Princeton: Princeton University Press, 1986/1999), 4.

35 Ibid.

THE PRESENT TENSE
Abby Cunnane

PART 3

Today we went to Ihumātao. Ihumātao is in Māngere, half an hour's drive from Auckland city centre, then a 3.5 kilometre walk if you take the course we did: along the Renton Road foreshore, through a former forest of fossilised Kauri trees, into the Otuataua Stonefields Reserve and then to the mouth of the Oruarangi Awa, the river. Lava flows from Maungataketake's eruption 84,000 years ago cord the landscape with basalt; 500 metres from where we stopped to listen to archaeologist Ian Lawlor speak there is the raw red scraping sound of a scoria quarry on Maungataketake where mining continues.

As jets from the adjacent airport passed overhead the wind and everybody's hair and the Karaka leaves went mad for a short time. The existing runway is mostly made from the scoria quarried from these maunga (mountains); a proposed new runway will fill in the next gully along, likely closing off public access to Renton Road beach. A Special Housing Area (SHA) is also marked for development right beside the Otuataua Reserve, which holds urupā\(Māori burial grounds) and other wahi tapu (sacred sites). Local iwi and activist group S.O.U.L are opposed to the development; the hīkoi (walk) today was in solidarity with that.[1] Roger drove us all on a bus back to the carpark at the start of the walk; as we passed the SHA Brendan Corbett told us that the development company includes HSBC, JP Morgan, Goldman & Sachs and other banks among its nine top shareholders.

Why am I recounting this just-finished walk, this very specific geography and a group of local people walking, vernacular politics, language for trees and river and graves that really make sense only here, where they are, in Aotearoa

1 For a full account of S.O.U.L's work see http://www.soulstopsha.org/; for a recent summary of the Ihumātao campaign see http://tvnz.co.nz/sunday-news/rock-and-hard-place-video-6493401

New Zealand? It's to bring into focus a discussion about now, *now* — a moment when the 84,000-years-ago volcanic eruption, the 30-million-year-old limestone 'country rock' that the eruption threw up from deep beneath the greywacke bedrock, the multinational banks and the wet hair steaming in the pale sun conversations about the development that we had after the walk — are all caught up in a transitory-constant, that is, the present. Within this is the suggestion that our experience of the present is locally distinct, belonging just to this place.

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Historian Dipesh Chakrabarty has commented that the timescale of climate change is such that it's hard to think politically about, that we habitually think politically only on a human timescale. His comment raises the possibility that thinking politically from within *this* present — a present where ecological change is happening at an unprecedented rate — requires more than conventional reason, that the politically astute approach for now may be in equal parts imagination, attentiveness, and remembrance. We may need to think about time altogether differently, looking closely at the places we inhabit and know. Working through what can seem an irresolvably difficult present set of political and ecological circumstances may require us thinking outside of linear and measurable timescales, that is, thinking within multiple presents.

Imagine the Present, the 2016 Distance Plan exhibition at ST PAUL St Gallery, Auckland, took such 'other' presents as starting point. The group of works differed vividly in their relationship to places, among them Walden's Pond, Massachusetts, USA; the Waiapu River in Gisborne on the East Coast of Aotearoa; Reykjavík, Iceland, and an unspecified site in a feral future. Climate change acted mostly as subtext rather than subject in these works. Common among them was the idea that locating an alternative view of the present is a political, spiritual, *and* ecological imperative.

The potential of the present as the time of change has frequently occupied feminist thinking. For Carla Lonzi, working in the 1970s, "feminism is the present."[2] Speaking of Lonzi's work, Giovanna Zapperi writes, "The present as the time of feminism is a powerful idea still, and perhaps especially today when the motor of our neoliberal society is 'promise': the promise of a career, a better future, money and so on. But it's just an empty promise. To think of a change in the present is also a way of fighting the idea of a future to come, the very idea of a promise, the patriarchal structure of history."[3]

2 Giovanna Zapperi, 'Finding resonances with Carla Lonzi', *Makhzin* 2, 1 April 2016, http://www.makhzin.org/issues/feminisms/finding-resonances-with-carla-lonzi

3 Ibid.

Atmospherically the exhibition borrowed from author Ursula LeGuin's image of a Yin utopia – "dark, wet, obscure, weak, yielding, participatory, circular, cyclical, peaceful, nurturant, retreating, contracting, and cold"[4] – as a place where forms, species, ideas other than those reliant on the Yang-dominant values of brightness, heat, progress might exist. LeGuin's is not a utopia set in the future.[5] Rather, it's a circular or non-linear present, within which the deep past is also held, still happening.

Artist Natalie Robertson, whose installation *Nought of the portion for Taho* (2016) was included in the exhibition, wrote in an earlier essay about her broader ongoing project,

> *There is a gap between what is real and what is imagined. If this gap could be measured, perhaps it would be similar to the distance between what is now, and what will be. If we measure in mass, our unit might be cubic meters or yards of earth stabilised. If we measure in volume, it could be the cubic feet of clear water free of suspended sediment…If we measure this gap in the current era of the Cenozoic geological timescale, it might be the wing-beat of a piwakawaka, a fantail.*[6]

The 'gap' is where Robertson's work sits, performing its own series of measures of the ongoing change that occurs in a familiar landscape over a lifetime, and the relationships held in that place. Her *Pohautea 1-4* (1996/2015) are large-scale photographs of the Waiapu Ngutu Awa (river mouth) on the East Coast, overlaid with the bones of trees after flooding caused by Cyclone Bola in 1988. This is part of a larger history of colonial deforestation since 1890. Printed for the first time nineteen years after they were taken, the photographs are also witness to that interval, the tons of silt that have washed out to sea, and the widening of the river mouth. The work was presented along with an audio component. Entering the gallery you heard the sound of a nineteenth century mōteatea (lament) by Hone Rongomaitu, *He Tangi Mo Pahoe,* re-interpreted, sung and recorded for the exhibition by Rhonda Tibble.

Shannon Te Ao's video *Untitled (epilogue)* (2015) is shot in darkness. The potted plants that move across its frame don't seem reliant on photosynthesis but are artificially lit, which makes them appear as if they are in deep space, or deep under the sea. The voice, reading a poem by Noeline Arnott, is that of a person dislocated by grief – it could be the end of the world or a bad day. As an epilogue, the work is a kind of ending, but its darkness is also a place of possibility. Te Ao refers to Te Kore as both void and potentiality, the nothingness from which everything else emerged; as scholar Moana Nepia has written: "Te Kore may articulate extreme states of emotion, and also the need for space or time to restore balance."[7]

4 Further on in the same essay Le Guin writes, "If utopia is a place that does not exist, then surely (…) the way to get there is by the way that is not a way. And in the same vein, the nature of the utopia I am trying to describe is such that if it is to come it must exist already." 'A Non-Euclidean View of California as a Cold Place to Be' [1982], *Dancing at the Edge of the World* (New York: Grove Press, 1989), 90, 93.

5 Ibid.

6 Natalie Robertson, *Te Ahikāroa: Home Fires Burning* (CA: C.N. Gorman Museum, University of California Davis, 2014), 11.

7 Moana Nepia, *Te Kore—Exploring the Māori concept of void* (thesis, Auckland University of Technology, 2012), 24. See also Shannon Te Ao, *Part Tree, Part Canoe* (thesis, Massey University of Wellington, 2015).

Bjarki Bragason's *Perhaps that in which it* (2013) is a series of photographic images of plaster moulds formed around a piece of shelf ice used by Reykjavík glaciologists in reconstruction modeling of historical climates. The artist found the ice discarded after a conference on his way home, and later made the moulds as a way of documenting its disappearance. This sat alongside a second work, *Ten thousand and one years (one year of emissions at 449,5 meters)* (2016) that looks at the Carb-Fix project, in which scientists are working with industry to mineralise CO^2 by pumping it into subterranean basaltic rock in Iceland, accelerating carbon fossilisation that would otherwise take thousands of years. Documents of the resulting core samples, these photographs could also be read as ambivalent monuments to the nightmarish speculative reach of the 'tech-fix.'

Nicholas Mangan's *Dowiyogo's ancient coral coffee table* (2010) is made of coral limestone, from a section of sculpture formerly installed in front of the high-rise Nauru House in Melbourne. Originally this coral came from Nauru Island in the 1970s, at that time wealthy as a result of local phosphate (in the form of guano, fossilised bird droppings) mining by New Zealand, Australian and British companies. By 2003, the phosphate nearly all gone, Nauru President Bernhard Dowiyogo told an American reporter his plan to save the country from bankruptcy by selling ancient coral coffee tables. Completing this likely tongue-in-cheek proposal, the artist made a lasting marker of the colonial exploitation that saw 80% of the island's topsoil removed, leaving an inhospitable moon-like landscape. The work also de-emphasises human-centric time — capital and industry shrinks to something absurd relative to the geological timespan over which fossils form. The limestone in this work will outlast today's conversations about the Anthropocene, likely by thousands of years.

Steve Kado's *AGPTL* (2016) video installation moves through a three-chapter observation of living spaces, leisure, travel, 'nature', and the development of symbiotic robotics. The voiceover provides a poetic pseudo-anthropological analysis of a contemporary class of globally mobile, identity-conscious consumers. For every image of pristine alpine landscape there is another of an air-conditioning unit, an iPhone, an electric jug; ubiquitous forms that tell the everyday story of aestheticised resource consumption. A second screen measures time passing as melting ice in a glass, and the pace of the tide; like the mountain-scene billboard draped behind the video in this installation, it can be hard to tell which is digital wallpaper or background, where real time experience begins.

George Watson's *The world continues to infect / there is no perfect form* (2016) is a garden, or a compost, of straw and salt, soapflakes and sago. Or a whole closed-system ecology which fuses the organic and inorganic — as her accompanying

piece of writing put it: 'it/me'. Originally made for an outdoor setting as part of *Autumn of Spit* at Canapé Canopy, the work for *Imagine the Present* was reconfigured for and by the indoor space, where it became an inhuman lifeform incubated under lights, even a whole new microcosmic planet, complete with its own artificial solar system.

Amy Howden-Chapman's film *What you are about to see* (2016) looks at how transcendentalist Henry David Thoreau's late nineteenth-century observations of Walden Pond in Concord, Massachusetts are today used by conservation biologist Richard Primark to track the local effects of climate warming. The narration is delivered as a sequence of lyrics or short statements, moving from one to the other of the two registers according to the urgency of the music track behind the voice. Read as a series of almost immediately fulfilled predictions, or a looser-form essay about observation and change, the work performs a convergence of literary, political and philosophical underpinnings of environmentalism with empirical scientific process around monitoring climate change. The film projection sat adjacent to a five metre long wall, a photographic object that replicates a wall from Elysian Park, Los Angeles, commemorating the benevolence of 'petroleum industry pioneer' Charles S. Jones for acts of community beautification.

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In Tāmaki Makaurau Auckland, *Imagine the Present* could be read a measure of the distance between acutely different geographical and cultural contexts, each offering a different view of the present. Acknowledging this condition of pronounced difference, as well as the long arcs of time embedded in the geology, cultural narratives and scientific methods that each of the works referred to seems increasingly important in a present that might equally be defined by modes of global production and mobility, by undifferentiated consumers and substitutable labourers, by forced migration.

That is, in a present marked by processes of colonisation, and in which environmental movements frequently perpetuate systemic power imbalances. Ahilapalapa Rands frames it, "you want to affect change – it's a two-tiered thing. It's not just a climate change issue – it's also structural racism, it's also white supremacy…these kinds of [social justice and environmental movements] have to be decolonising, or they'll be nothing, right? Because we are at the front lines: it's our bodies that are on the line, it's our islands, it's our whenua."[8] Simply put, the effects of climate change are racialised, gendered, and geographically defined, as are all socio-political crises.

8 Discussion with Pala Molisa, Teanau Tuiono, and Tina Ngata, 'Kava club: On climate change for beginners, decolonisation, and self-care', 15 May 2016, Wellington, https://blackstone.net.nz/category/climate-change/

So it's one thing to establish an understanding of the present as differentiated across contexts; the question then becomes about whose version of the present has precedence. In an academic and popular framework (including in this journal) the Anthropocene is widely and often unquestioningly upheld as designator of the present geological age. Métis Canadian scholar Zoe Todd, among others, has critiqued the category of the Anthropocene as a homogenising form of 'white public space', that inscribes a basic injustice: "[T]he current framing of the Anthropocene blunts the distinctions between the people, nations, and collectives who drive the fossil-fuel economy and those who do not. The complex and paradoxical experiences of diverse people as humans-in-the world, including the ongoing damage of colonial and imperialist agendas, can be lost when the narrative is collapsed to a universalising species paradigm."[9]

Another way of looking at this is asking in whose present harmful climate change impacts are actually occurring. In the Pacific these increasingly take the form of violent weather. Many Pacific island countries, including the Solomon Islands, Vanuatu, Fiji, Tonga and the Federated States of Micronesia, lie in the path of tropical cyclones. In February 2016, Cyclone Winston, the strongest ever recorded in the Southern Hemisphere, hit Fiji with damage and losses amounting to one fifth of the country's GDP.[10] Later the same year, in September 2016, the *Crystal Serenity* cruise ship made its pioneering passage through the Arctic Northwest Passage, a route connecting the Atlantic to the Pacific, enabled by massive shelf melt due to global warming.[11]

What does it mean if the colonialist project is taken seriously as implicated in the production of climate change? One thing it means is acknowledging that ecological discourses sit inside the same power dynamics. As First Nations Canadian artist Loretta Todd has said, "Our 'past' was once the preoccupation of the colonizers, and we developed codes to negotiate the performative nature of being the Aboriginal of an imagined past. Now our future is the growing preoccupation but the power dynamics seem to remain the same."[12]

This journal issue puts forward the modest proposition that a shift in attention to the present, and to language which can name and re-articulate that present, is a political shift that brings change with it. This is not intended as a negation of the past, as living temporality that informs the way we understand places and ourselves. Rather, we suggest that to focus on the present can be an act of critical resistance within discussions of contemporary art and climate change that typically look to the future rather than address the present at hand.

9 Zod Todd, 'Indigenizing the Anthropocene', *Encounters Among Aesthetics, Politics, Environments and Epistemologies*, Heather Davis and Etienne Turpin (eds.), (London: Open Humanities Press, 2015), 244.

10 See *After Paris: Climate Finance in the Pacific Islands*, Oxfam Research Report September 2016, https://www.oxfam.org.au/wp-content/uploads/2016/09/FULL-REPORT-After-Paris-Climate-Finance-in-the-Pacific-Islands.pdf

11 Andrew C. Revkin, 'Where ice once crushed ships, open water beckons,' *The New York Times*, 24 September 2016. See also Crystal Cruises Instagram, https://www.instagram.com/p/BJ_nzJFgpEA/

12 Loretta Todd, *Close Encounters: The Next 500 Years*, curated by Candice Hopkins, Steve Loft, Lee-Ann Martin, Jenny Western (Plug In Institute of Contemporary Art, 2011).

I was told that Ihumātao translates to ‘cold nose’, referring perhaps to the southerly that knifes along the coast as you come around the beach to the place where waka landed, near a spring that one could carry water inland from, or perhaps to the nose-shaped landform of the headland. At Ihumātao there is a line of white flags bordering the site marked for development. At Ihumātao there is a paddock of avocados; if you ask you can take five each before you go. At Ihumātao, when the tide is out, you can hear the mud seeping and cracking, alive with microorganisms, active as enzymes in a giant gut.

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