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Editorial

The inaugural issue of *Stages* presents a portfolio of thinking that emerged from the Banff Research in Culture (BRiC) residency titled 'Dock(ing); or, New Economies of Exchange' which took place in summer 2013, convened by Sally Tallant and Imre Szeman. Lead by Joseph Grima, Suzanne Lacy, and Hakan Topal, alongside the Liverpool Biennial curatorial team, artists, activists, economists and historians took the residency theme as a starting point to collectively explore some of the social, political and cultural challenges we face at the outset of this new century. This multidisciplinary, multifaceted investigation opened new vantage points on long-standing problems, considering the politics played out on physical and metaphoric docks.

The liminal spaces to which docks point include legal, national, physical and conceptual borders of all kinds – spaces and places where power is exerted over identities and collectives, and so, too, sites where power is actively challenged with the aim of enabling new possibilities. In the case of the city of Liverpool, for instance, whose fortune was built through its position as a major European dock in the late 19th century, this includes the very real trials involved in re-constituting genuine civic life in the wake of de-industrialisation, the role played by art in this process, and the difficulties of creating new urban possibilities and opportunities that do not follow the problematic script of capitalist gentrification.

Amongst the contributions, Brent Bellamy imagines the conditions of post-industry through the lens of zombie fiction; Jeff Diamanti proposes a re-narration of postmodernism's economic valences during the Venice Architecture Biennale's early history; and Logan Sisley uses the Banff Springs Hotel as a case study in the import and export of local and national imagery within the leisure industry. Imre Szeman brings to our attention a major shaper in current global infrastructures: oil; whilst Nadine Attewell speaks more directly to Liverpool, asking how its history within the context of global trade and industry, inseparable from the transatlantic slave trade, continues to inform its present.

Together, these reflections constitute part of a context of collaborative thinking from which Liverpool Biennial can continue to address new possibilities for cultural practice through the lens of urbanism and pedagogy, considering not only its own history, present and future but also how that may map on to other situations, globally.

Brent Bellamy, Vanessa Boni, Rosie Cooper and Laurie Peake

The Returns of the Past

That Liverpool, as the cultural theorist lan Baucom argues, must be numbered among 'the shipping, trading, and financial entrepôts that dominated and ushered into existence [the] long contemporaneity' of capitalist modernity, is largely a consequence of its involvement in the transatlantic slave trade.¹ The trade in slaves, as well as the industries on which it depended (shipbuilding and insurance, for example) and for which it, in turn, provided vital material support (commercial sugar production), generated enormous concentrations of capital in metropolitan port cities like Liverpool that continued to finance British ventures both at home and overseas long after the trade itself was abolished.² Not only commodities and capital passed through the port of Liverpool: in the late nineteenth and early twentieth centuries, the activities of Liverpool-based shipping companies like Ocean Steam Ship introduced local men and women to migrants originating from all over the globe, contributing to the establishment of multiracial and cosmopolitan dockside communities. These became the objects of considerable surveillance and regulation, to the extent that they were felt to threaten 'a particular vision and practice of domestic and imperial order'.³

Of what relevance are such histories – which implicate Liverpudlians in the violent processes by which power, capital and value have been distributed globally, usually along racially differentiated (and differentiating) lines - to present-day efforts to imagine a more robust future for Liverpool and other metropolitan port cities hit hard by deindustrialisation? Urban regeneration projects have often been inspired, as Michael Parkinson observes, by fears of urban disorder.4 In 1981, for instance, riots rocked neighbourhoods with high levels of unemployment and racial diversity in several of Britain's largest cities, seeming to underscore the necessity for the docklands development projects announced that same year in London and Liverpool. Advocates of such plans have tended to identify the inhabitants of neighbourhoods like Toxteth or Brixton, rather than the 'entrenched patterns of racial [and economic] discrimination and disadvantage' that have disenfranchised them, as the problem to be fixed.⁵ It is important to contest this dehistoricising move, not just in the interest of a more accurate analysis, but because, as the debate over Education Secretary Michael Gove's plans to overhaul the national history curriculum reminds us, the past is among the most critical of the terrains on and over which the struggle to define belonging plays out. At the same time, the past functions as a locus of trouble for and in the present. What Stuart Hall terms 'the givenness of the historical terrain' - that is, the 'tendential historical relations' that 'establish and define the fields along which ideological struggle is likely to move' - must be attended to if we are to understand how to move it otherwise. But in the past are also secreted alternatives that we might permit to haunt us as we pursue more just forms of sociality in the present.

Consider, for example, the increasing electoral purchase of the British far right. The white supremacist British National Party (BNP), which opposes both immigration and British participation in the European Union, first tasted electoral success in the Millwall by-election of 1993, when voters selected Derek Beackon to sit on Tower Hamlets Council. The Isle of Dogs, where Millwall is located, once housed the West India Docks, a now defunct system of docks possessing tremendous historical significance. Following the closure of the docks to commercial traffic in 1980, the Isle of Dogs was redeveloped by the London Docklands Development Corporation, which approved the construction of Canary Wharf, a complex of office and residential buildings, home to many of the world's most prominent financial and media corporations, on the old West India Docks site. The reasons for the BNP's success in Millwall – which has not, it should be noted, been repeated – are complex.⁷ Still, that such a former crossroads of empire as the Isle of Dogs should have proved so hospitable to the xenophobic blandishments of the BNP matters, I think, insofar as it points to the way in which docklands continue to function as the loci of struggle over how the goods of citizenship, including the good that is citizenship, should be distributed.

In a blog post that draws heavily on the work of Stuart Hall and his colleagues presented in *Policing the Crisis* to contextualize the 2011 London riots, Ashley Dawson notes Britons' repeated use of the racialised figure of the immigrant to explain (away) that 'felt sense of crisis' through which postwar shifts in the economic, ideological, socio-cultural and political landscape of Britain have tended to make themselves known.⁸ Dawson focuses on the efforts of political actors like the BNP to pin 'the cause of the organic crisis on the figure of [the] Black immigrant.' In contrast, I want to emphasise the work involved in producing blackness as the property of the immigrant (rather than of the citizen). Until 1962, persons born or naturalised in any of a certain class of British territories,

including Britain itself, shared the common status of British subject; all such persons could settle in Britain without having to pass through immigration control. In 1962, however, Parliament, wishing to prevent (non-white) overseas British subjects from migrating to Britain, passed the first in a series of acts that transformed Britishness from an identity to which all imperial subjects had – in theory – access, to one reserved for those British subjects with genealogical ties to the British Isles. In Britain, then, the racialisation of the immigrant body has required that Britain's history as an empire be forgotten. That is, the extent to which, as the rise and fall of the Isle of Dogs' dock-centred economy indicates, the social goods of Britishness are a product of the labour and other resources of people who are, or can be made out to be, external to the familial community of Britishness.

The legislative record is littered with similar attempts to foreclose on the claims of a variety of marked subjects, including working-class men, women, slaves and colonised peoples, to the competencies and rights that are thereby rendered the property of (middle-class) men or metropolitan Britons alone. Catherine Hall reads the 1867 Reform Act, which extended the franchise to non-propertied (white) men, in relation to the refusal to do the same for women, as well as to the 1866 decision to reinstate direct British rule in post-slavery Jamaica: with property 'no longer the basis for the suffrage', 'race, gender, labour, and level of civilization now determined who was included in and excluded from the political nation'.10 Twenty-first century debates about the parameters and entitlements of British belonging are the legacy of 'prior such moments'. 11 But foreclosure entails a movement of encryption as well as of expulsion: what is foreclosed upon achieves a kind of substance through being denied. Recalling the history that first granted and then denied millions of non-Britain-born British subjects the right to lay claim to the property of Britain and Britishness lends force to the demand that non-white Britons should be fully incorporated into the community of the nation. At the same time, it hints at the limits of the project of inclusion: what does it mean that non-white Britons have had to petition for entry to a community to which they were encouraged to believe they already belonged? If, as Catherine Hall's discussion of the 1865-67 movement for parliamentary reform suggests, projects of inclusion turn on procedures of differentiation, then, as I have argued elsewhere, we would do well to revisit the assumptions about belonging and social justice that, in liberal democratic states, shape decisions about how social goods, including the franchise, should be distributed.¹²

Writing about Hamilton, the Canadian port city that I call home, Phanuel Antwi and Amber Dean note how much the logics that enable us to imagine deindustrialising cities like Hamilton as 'problems' in dire need of the 'fix' of development resemble colonial ones. As Dean writes elsewhere, however, such echoes should also alert us to a 'haunting': 'the resurfacing of this mythology in contemporary efforts to revitalize [urban centres] is an indication that these efforts are haunted by [their] colonial past, a past with claims on the present that are yet to be reckoned with. In his essay 'Broken Pine', another of my colleagues, Daniel Coleman, narrates the entwined histories of economic, environmental and colonial despoliation in the region that is the site of the present-day Hamilton. Regeneration, he implies, must involve decolonisation, the future sought in an opening to the disturbance of a past that, insofar as settler colonialism endures in Canada, is not really past at all. The far right is not everywhere ascendant in Britain. Still, recognition of the extent to which, as Salman Rushdie puts it, their history happened overseas, continues to elude many Britons. How might the imperative to decolonise reorient efforts to reimagine, make over, those former crossroads of empire, the docklands of Liverpool?

- 1 Ian Baucom, Specters of the Atlantic: Finance Capital, Slavery, and the Philosophy of History, Duke University Press, Durham, 2005, p.8.
- Thus, for example, as Amitav Ghosh's extraordinary recent novel Sea of Poppies (Picador, New York, 2008) makes clear, the nineteenth-century trade in opium cannot be understood without reference to the eighteenth-century trade in slaves: in this, the first in a trilogy of novels about the First Opium War, a diverse cast of characters converges aboard a former slaveship, the Ibis, which the son of a Liverpool timber merchant has converted for the purpose of circulating opium around the Indo-Pacific. Legacies of British Slave-ownership (http://www.ucl.ac.uk/lbs), a website run by a team of University College London historians including Catherine Hall, Nick Draper and Keith McClelland, documents the multiple dimensions of slavery's afterlife in Britain.
- 3 Laura Tabili, 'Women "of a very low type": Crossing Racial Boundaries in Imperial Britain', Gender and Class in Modern Europe, ed. Laura L. Frader and Sonya O. Rose, Cornell UP, Ithaca, 1996, p.188.
- 4 Michael Parkinson, 'Urban Regeneration and Development Corporations: Liverpool Style', Local Economy, Vol. 3, No. 2, 1988, p.109.
- 5 Gideon Ben-Tovim, 'Race, Politics, and Urban Regeneration: Lessons from Liverpool', in Regenerating the Cities: The UK Crisis and the US Experience, ed. Michael Parkinson, Bernard J. Foley and Denis R. Judd, Manchester University Press, Manchester, 1988, p.142.
- 6 Stuart Hall, 'The Problem of Ideology: Marxism Without Guarantees', Journal of Communication Inquiry, Issue 10, No. 2, June, 1986, p.41.
- 7 See Daniel Trilling's Bloody Nasty People: The Rise of Britain's Far Right, Verso, London, 2012, for more about the BNP's victory in Millwall.
- 8 Stuart Hall, Chas Critcher, Tony Jefferson, John N. Clarke and Brian Roberts, *Policing the Crisis: Mugging, the State, and Law and Order*, Holmes & Meier, New York, 1978, p.301.

- 9 Ashley Dawson, 'Policing the Crisis: Situating the 2011 London Riots in Historical Perspective', Uneven Developments, 10 August 2011, http://ashleydawson.info, accessed 10 June 2013.
- Catherine Hall, 'Rethinking Imperial Histories: The Reform Act of 1867', New Left Review, Issue 208, November–December, 1994, p.29. Given the 'Creative Class' boosterism of influential twenty-first-century urban theorists like Richard Florida (see his The Rise of the Creative Class, Basic, New York, 2002), it is worth noting that Matthew Arnold penned Culture and Anarchy, his paean to 'culture' as a prophylactic 'against whatever brings risk of tumult and disorder, [namely] multitudinous processions in the streets of our crowded towns', in response to the mid-nineteenth-century movement for parliamentary reform (Matthew Arnold, Culture and Anarchy and Other Writings, ed. Stefan Collini, Cambridge University Press, Cambridge, 1993, p.100).
- 11 Baucom, op. cit., p.20.
- 12 See the fifth chapter of my Better Britons: Reproduction, National Identity, and the Afterlife of Empire, University of Toronto Press, Toronto, 2013.
- 13 Phanuel Antwi and Amber Dean, 'Unfixing Imaginings of the City: Art, Gentrification, and Cultures of Surveillance', Affinities, Vol. 4, No. 2, 2010, http://affinitiesjournal.org/index.php/affinities/article/view/61/184, accessed 10 June 2013.
- 14 Amber Dean, 'Space, Temporality, History: Encountering Hauntings in Vancouver's Downtown Eastside', The West and Beyond: New Perspectives on an Imagined Region, ed. Alvin Finkel, Sarah Carter and Peter Fortna, Athabasca University Press, Edmonton, 2010, p.118.
- Daniel Coleman, 'Broken Pine', Hamilton Arts & Letters, Issue 3, Vol. 4, No. 1, Spring, 2010, http://samizdatpress.typepad.com/hal_issue_three1_spring_2/broken-pine.html, accessed 10 June 2013.
- 16 Salman Rushdie, *The Satanic Verses*, Viking, London, 1988, p.343.

New Economies of Exchange and the Zombies of Industry¹

"In so far as the process of exchange transfers commodities from hands in which they are non-use-values to hands in which they are use-values, it is a process of social metabolism. The product of one kind of useful labour replaces that of another. Once a commodity has arrived at a situation in which it can serve as a use-value, it falls out of the sphere of exchange into that of consumption."

-Karl Marx

Karl Marx's turn of phrase 'new economies of exchange' signals a moment early on in his description of the unfolding logic of capital when the circulation of commodities is shown to produce no value on its own. As Joshua Clover reminds us, the sphere of circulation cannot operate without the sphere of production,² and thus, mapping the movement of commodities and the origins of their value remains an important sticking point when considering the work of culture today, especially in transitioning and postindustrial cities such as Liverpool in the UK and Banff in Canada. It comes as no surprise, then, to find a recent zombie sci-fi novel – a hybrid genre that historically imagines the revenant and violent return, allegorical or not, of colonised and racialised bodies – thinking through the complicated flows of culture, labour and goods today.³

In World War Z (2006), Max Brooks represents the global circulation of commodities through the figure of the zombie – the return to life of pre-apocalyptic bodies – and the standard zombie narrative – which replaces an old, industrial form of the social with a new one. Probing the limits of how we depict the changing face of labour and value, Brooks emphasises the fact that the dominant forms of labour today imbricate bodies and services through bioengineering, pharmaceuticals and financial speculation on demographic statistics, highlighting the point that postindustrial doesn't mean post-value or post-production.

World War Z begins at the end as Max Brooks, the name of the author and his fictive reporter, conducts a series of interviews in the wake of 'The Zombie War'. These interviews are leftover artefacts from a document also written by Brooks (the character): the United Nation's Postwar Commission Report. In antagonism to the factual report, the interview style of the novel attempts to sketch the totality through the sheer accumulation of points of view, patching together a global perspective of the War over the course of ten years. These perspectives effectively provide a mapping of the appearance and the movement of the infected. The accounts that make up the bulk of the text are unified by the interviewer, who, as we learn in the introduction, has already compiled a study based on facts and figures of the zombie outbreak. The disease that causes it is given a number of different names throughout the novel, but the most prominent one at this point in the narrative is 'African Rabies'. The collected interviews frame temporal categories: discovery, reaction, survival, migration, retaliation and, finally, all-out war. Instead of forming a unified whole, these snippets of narrative trace out the fractures and fragments of the global economy: they represent, for example, the illegal movement of bodies in South-East Asia, black-market medical operations and the lightening-quick marketing of 'Phalanx' a false-vaccine, placebo-medication.

The interviews early in the book render the geographic spaces where zombies first emerge as heavily populated zones, often with a thriving black market for smuggled bodies or body parts. Tracing the movement of infection begins to make visible those ports connected by invisible lines of circulation, what Allan Sekula and Noel Burch call 'the forgotten space'.⁴ These interviews lay bare modes of capitalist circulation in which infected but not yet zombified individuals pay to be smuggled out of the Asian subcontinent to countries in the West. As smuggler Nurvy Televaldi says, 'I was an importer: raw opium, uncut diamonds, girls, boys whatever was valuable from those primitive excuses for countries. The outbreak changed all that. Suddenly we were besieged with offers, and not just from the liudong renkou [China's 'floating population' of homeless labour].' ⁵ Here, the novel figures the logic of circulation as nearly identical to our own.

The flood of valuable commodities (i.e. organs from the recently dead) manifests the ruin of the value form in the shape of a crisis. Fernando Oliveira, an MD who specialises in importing organs, explains the shift from surplus to crash:

You remove the heart not long after the victim's died ... maybe even while he's still alive ... they used to do that, you know, remove living organs to ensure their freshness ... pack it on ice, put it on a plane for the Rio ... China used to be the largest exporter of human organs on the world market. Who knows how many infected corneas, infected pituitary glands ... Mother of God, who knows how many infected kidneys they pumped into the global market. And that's just the organs.⁶

These organs chart the infectious breakdown of the fantasy generated by the surplus of organs found in bodies that are soon to be zombies: once these organs are transplanted, their peculiar use-value becomes something that the receiving patient did not anticipate. In the words of Marx, 'Once a commodity has arrived at a situation in which it can serve as a use-value, it falls out of the sphere of exchange into that of consumption', which is both completely expected (i.e. the organs will do their work in pumping, filtering and revitalising blood) and a terrible, zombifying surprise. Further, this collapse plays out on a global register: as a pandemic narrative, *World War Z* represents the contact points where one infected body, or body part, encounters another. (The opening sequence of Steven Soderbergh's *Contagion* of 2011 is a cinematic version of this.)⁷ The novel itself attempts to represent the social totality in the form of circulation not in the global market, but in the shadow economy currently employing, according to a recent *Forbes* article, over 1.8 billion pre-apocalyptic labourers.⁸

Having tracked the spread of disease, the novel turns to contemplating what Naomi Klein calls 'disaster capitalism'. One interviewee, Breckinridge 'Breck' Scott, decides as soon as the panic starts in the US to put a vaccine on the market. He markets a rabies vaccine as a zombie vaccine, calling it 'Phalanx', which people start buying *en masse*. Scott accounts for the quick success in terms of risk management, explaining that a cure would be far less successful, because you would have to be sick in order to require it, but a vaccine is preventative. 'It wasn't even the idea of safety anymore, but the idea of the idea of safety!', he exclaims, continuing:

It protected them from their fears. That's all I was selling. Hell, because of Phalanx the biomed sector started to recover, which in turn, jump-started the stock market, which then gave the impression of a recovery, which then restored consumer confidence to stimulate actual recovery! Phalanx hands down ended the recession! I ... I ended the recession! ¹⁰

Scott's awareness, and insistence, on capitalism as a deeply cultural phenomenon situates his account within the motif of miraculous returns; his marketing and the regaining of market confidence stand out more prominently than the millions of resurrecting bodies that form the basis for his capitalisation.

From the shipyards in India, where ships were once broken down for parts and now are flocked to by refugees in order to take to sea, to the island of Cuba, which emerges as the dominant world power in the wake of the war, to the communities architecturally designed to be zombie proof – buildings on stilts, retractable ladders, walls and watchtowers – *World War Z* struggles to rebuild new modes of social organisation in the face of a social totality understood not through the mode of production but through circulation and exchange figured as contagion. Indeed, what is produced and reproduced in the novel is not capital but zombies, each one a spitting image of a former labourer in pre-apocalyptic times. Perhaps we could read the intersection and relation of the disparate interviews as a form of fragmentation itching to be brought back together to form a larger view of the social totality. But what is so compelling about the novel is that it effectively challenges the representability and manageability of the world *as globe*. The question is not about the origin of the zombies, but about the real remainder of *World War Z*, the real contradiction between capitalist circulation and production. The novel leaves us with a chilling lesson about the post-industrial: new economies of exchange cannot emerge without raising their own zombies of industry.

- 1 Thanks to the participants in Banff Research in Culture 2013 Dock(ing): or New Economies of Exchange for the lively discussions and comments on my piece. A special thanks to Alexandra Carruthers, Jeff Diamanti and Rafico Ruiz for their valuable input and comments.
- 'The inability to think value in terms adequate to the critique of political economy – to grasp the moving contradiction of the value form, of use and exchange, production and circulation – proved a nearabsolute limit to understanding the historical situation.' Joshua Clover, 'Value|Theory|Crisis', PMLA, 127.1, 2012, p.113.
- 3 See Evan Calder Williams, Combined and Uneven Apocalypse, Zero Books, Ropley, Hants, 2011, and my review, Brent Bellamy, 'We Are Apocalyptic,' Reviews in Cultural Theory, Vol. 2, Issue 2, Sept, 2011, p.13–16.
- 4 The Forgotten Space, dir. Noel Burch and Allan Sekula, Wildart Film, 2010.
- 5 Max Brooks, World War Z, Three Rivers Press, New York, 2006, p.12.

- 6 Ibid., p.27.
- 7 I have written elsewhere about Contagion's attempt to grasp the social totality through a spatial dialectic similar to World War Z. Brent Bellamy, 'Steven Soderbergh's Contagion', Science Fiction Film and Television, Issue 6.1, Spring, 2013, p.119–223.
- 8 Marco Rabinowitz, 'The Rise of the Shadow Economy: Second Largest Economy in the World', Forbes, 7 November 2011, http://www.forbes.com/sites/benzingainsights/2011/11/07/rise-of-the-shadow-economy-second-largest-economy-in-the-world/, accessed 4 June 2013.
- 9 Naomi Klein, *The Shock Doctrine: The Rise of Disaster Capitalism*, Picador, New York, 2008.
- 10 Brooks, op. cit., p.58.

The Shifting Sightlines of Montreal's Silo no. 5

Though, during the 1920s, Montreal's port enjoyed the distinction of being the greatest exporter of grain in the world, its significance today is primarily historical. Silo no. 5, the most recognisable relic of the port's former glory, is a massive complex of grain elevators built in stages between 1903 and 1959; measuring almost a half a kilometre long, it is also the city's largest industrial ruin, abandoned in 1994. In the intervening twenty years, there has been much handwringing in the local press about the fate of the derelict grain elevators, alternately derided as a dangerous urban blight or heralded as a monument to the city's industrial past. Despite its designation as a Recognised Building by the Federal Heritage Buildings Review Office in 1995, the silo has largely been left to moulder. It was not widely considered a potential tourist attraction until its purchase in 2010 by the Canada Lands Company (CLC), a Crown property management firm, as part of the Federal Government's 'Montréal's New Harbourfront initiative', an urban development project undertaken in 2007 with the mandate to create an 'exceptional urban space for Montrealers to live, work and play'.

Since its construction, the silo has enjoyed an ambivalent, sometimes fraught relationship with the city that has been largely negotiated through visual media. From early postcards and paintings showing the silo as a technological wonder, to the use of its undulating concrete surface as a giant screen for large-scale projections in the 1990s, it is the persistence of the silo as a visual phenomenon that has largely determined public reaction to the otherwise inaccessible site. Though the CLC's plans for the site are still undetermined, there are indications that this approach to the complex as a primarily visual phenomenon will continue. The aestheticisation of the Silo as an erstwhile urban ruin suitable for commercial redevelopment mirrors the situation in other postindustrial port cities such as Liverpool, which has similarly incorporated former sites of industry into contemporary sites of culture and leisure.

It was not until the early twentieth century, with the construction of unprecedentedly large concrete and steel silos, that Montreal's port gained an imposing visual presence. At its construction in 1903, Elevator B – exempt from the city's ten-storey height restriction² – stood at approximately twelve storeys. At its construction seven years later, the now-demolished neighbouring Silo no. 2 became the tallest building in Montreal, dwarfing a city skyline previously dominated by church steeples. The widespread industrialisation of the port garnered mixed reactions from citizens: the most vociferous complaint about the massive new grain elevators, aside from a more general Victorian distaste for industrialism, was that they created a barrier between the city and the river, obscuring the picturesque view of the water with concrete and steel. As Stephen Leacock described, these structures were 'a blot on the landscape, a disfigurement of nature's work ... [but] they mean so much to the life and industry of Canada, to the life line of imperial safety, that the eye that looks on them becomes trained to a new adjustment.' This new adjustment, a description that echoes Walter Benjamin's characterisation of the 'complex kind of training' that the human sensorium had to undergo in confrontation with modernity, was formalised and negotiated by the contemporaneous development of representational media such as photography and the postcard.

Internationally, the postcard became one of the most important ways in which the images of new industrial buildings permeated the public imaginary and symbolic landscape. This medium was a powerful tool for disseminating an image of the grain elevators as modern architectural curiosities representative of technological progress, wherein the monumental 'sublimity' of the structures was emphasised. In these images, the complexity of the structures was downplayed in order to transform them into 'transcendent symbol[s] of technology', what Le Corbusier described as 'the magnificent first-fruits of the new age'. Early postcards of the silos of Montreal tended to represent the structures as cut off from their wider urban context: in *Towards a New Architecture* (originally published in 1923), Le Corbusier went so far as to remove the cupola of Marché Bonsecours from a photograph of Silo no. 2, so as not to distract from the pristine form of the elevator. As Réjean Legault points out, photographs such as these continue to haunt architecture as a creation myth for modernism, which partially explains their contemporary heritage value.

There is evidence that these same photographs took on an important iconicity in Montreal, where Charles O'Shea created a series of stained glass windows for the City Council Chambers, crowning the Mayor's chair with a quasi-religious depiction of Silo no. 2 that appears to be based on the same postcard that Le Corbusier reproduced in his book a year later. Local artists Adrien Hébert and Marian Dale Scott painted heroic portraits of Montreal's silos and industrial port during the 1920s and 1930s, and the Federal government drew on this same vernacular for the 1937 Paris

Exposition, where the Canadian national pavilion was designed to resemble a complex of concrete silos in an attempt to rebrand the country as technologically sophisticated. During these years, the image of the silos represented progress and the promise of a prosperous future, as in Gabrielle Roy's classic Depression-era novel *The Tin Flute*, first published in 1945, where the ambitious working-class character Jean Lévesque looks to the rows of elevators for 'a final confirmation of his destiny'.⁷

When the Saint Lawrence Seaway opened 1959, it allowed many ocean-going vessels to bypass trans-shipping to Montreal, and the giant silos grew increasingly obsolete; by the mid-1960s, resentment was growing regarding the inaccessibility of the harbour, which had been cordoned off by a permanent fence during World War II. The sudden visibility of the silos was also seen as a problem by organisers in the run-up to the 1967 World Exposition, who worried that the massive grain elevators would detract from the picturesque view of Montreal that they wished to present from the manmade island fairground across the river. Given the triumphalist tone of technological progress characteristic of Expo, the disused silos represented a reminder of technological obsolescence. In an attempt to help them blend in with the view of the city, the silos were given a coat of grey paint.⁸ Despite these efforts, they generated much attention during Expo: Melvin Charney published an article about them in *Architectural Design* that summer,⁹ and visiting critic Reynar Banham remarked that the grain elevators 'suddenly became some of the most widely commented [on] buildings there'.¹⁰

As early as the mid-1960s, proposals calling for the demolition of the silos as a way to open a 'window on the river' ¹¹ became commonplace in local newspapers. With the designation and redevelopment of Old Montreal as the city's first historical district in 1964, the network of silos was increasingly represented in the local press as an obstacle to the city's heritage, in that they blocked the view of Old Montreal from the water. While a few dissenting voices argued for their preservation, most were in favour of the eventual demolition of Silos no. 1 and 2 in 1983 and 1978, respectively. Despite its heritage status, the fate of Silo no. 5 was uncertain, with editorials showing a split in public opinion regarding the silo as patrimony or monstrosity.¹²

Abandoned now for nearly twenty years, Silo no. 5 has been host to a number of artistic interventions such as the light installation *Projections* by Atelier In Situ in 1997, their 'Machine à voir' campaign in 2000, and the Silophone project in 2002. These projects, which foreground the site's status as a neglected urban landmark in the city, have consecrated the Silo, making it more important as a heritage building replete with cultural credentials. Though the CLC's plans for the site remain unclear, it has said that it plans to repurpose and not demolish the structure, and there is preliminary evidence that the historical approach to Silo no. 5 as a primarily visual phenomenon will continue; so far, the only major external change has been the installation of a system of floodlights along the base of Elevator B-1 as a way to beautify the view of the silo from Old Montreal as part of the 2011 *Festival Montréal en Lumière*. One official has also mentioned the possibility of creating an observatory at the summit of the silo,¹³ and in 2011, the company posted a video on YouTube featuring a 360° view from the top of Elevator B-1.¹⁴

The redevelopment of decommissioned industrial sites into urban promenades is something that has gained popularity in recent years. The appropriation of urban ruins functions as an efficient way to make the erstwhile industrial site itself more picturesque, while simultaneously reorienting the gaze away from the structure back towards the city in much the same way that Maupassant recommended lunching at the Eiffel Tower as a way to avoid having to look at it.¹⁵ A deceptively simple and powerful way of colonising once-inaccessible sites, this conversion process also effectively capitalises on the 'contemporary ruinophilia' ¹⁶ and industrial nostalgia of the present as a way to bring tourism and gentrification to previously underused areas of the metropolis.

For over a century, Silo no. 5 has continued to challenge Montreal as an anomaly: a symbol of modernity that the city could not readily assimilate or claim outright; a blight on the local landscape praised by international critics; a heritage building that distracts from the city's historical quarter, and a barrier to Montreal's sightlines with unparalleled views of the metropolis. In the CLC's tentative proposal to create a belvedere at the top of Silo no. 5, an obstacle in the city's panorama is potentially converted to the site of its ultimate reconciliation, where one might glimpse the fractured spaces and histories of Montreal's modernity and urbanity reanimated in a fantasy of visual plenitude.

- 1 www.montrealsnewharbourfront.ca/en/, Montreals New Harbour Front,
- 2 Jason Gilliland, 'Redimensioning Montreal: Circulation and Urban Form, 1846–1918', in?, eScholarship@McGill, 2011, p.24.
- 3 Stephen Leacock, Montreal, Seaport and City, McClelland & Stewart, Toronto, 1942, p.241.
- Walter Benjamin, 'On Some Motifs in Baudelaire', Illuminations: Essays and Reflections, Pimlico, London, 1999, p.175.
- 5 Le Corbusier, *Towards a New Architecture*, Pimlico, London, 1999, p.175.
- 6 Ibid. p.104
- 7 Gabrielle Roy, *The Tin Flute*, McClelland & Steward, Toronto, 1980, p.221.
- 8 Gilles Lesage, 'L'apparence du port sera amélioré pour l'Expo', *Le Devoir*, Montréal, 11 November 1966.
- Melvin Charney, 'The grain elevators revisited' Architectural Design, July, 1967, p.328–31.

- 10 Reyner Banham, 'Megacity Montreal', Megastructure: Urban Futures of the Recent Past, Harper & Row, New York, 1976, p.117.
- 11 Lesage, op. cit., p.3.
- 12 Nicolas Kenny, 'Patrimoine ou monstruosité? S.O.S. silo!', *La Presse*, Montréal, 4 October 2004.
- 13 Kaj Huddart and Cory Lesk, 'The former glory of grain: Investigating a relic of Montreal's industrial past', The McGill Daily, 17 October 2011, http://www.mcgilldaily.com/2011/10/the-former-glory-of-grain/, accessed 5 February 2013.
- 14 'Pointe-du-Moulin, Montreal Silo No.5 360° view', http://www.youtube.com/watch?v=fsNKt8sDsiE>, accessed 6 January 2011.
- 15 Roland Barthes, 'The Eiffel Tower', Rethinking Architecture: A Reader in Cultural Theory, Routledge, London, 2003, p.172.
- 16 Svetlana Boym, Architecture of the Off-Modern, Temple Hoyne Buell Center for the Study of American Architecture: Princeton Architectural Press, Princeton, 2008, p.20.

How to Know About Oil

How to know about oil: is this the right question to pose?¹ Don't we already know everything we need to know about it – that this substance on which we depend for much of our energy generates geopolitical misadventures, environmental destruction and (for some) massive profits? Don't we already know that because it is of necessity a limited resource, our dependence on it constitutes something like a civilisational category mistake – one that we are unlikely to rectify, not because we can't identify the error, but because we are people who live in societies so saturated with the substance that we cannot imagine doing without it?

And yet, 'how to know' *is* the right question to ask about oil. We need to understand our multiple forms of being in relation to it. Oil is a physical substance – a thing identified by a concrete noun rather than an idea named by an abstract one (such as freedom or identity). Even so, oil only has the significance as it does for us as a result of the social and cultural narratives that shape our understanding of it. Oil has almost always been seen as an external input into our socio-cultural systems and histories – a material resource squeezed into a social form that pre-exists it, rather than the other way around: as giving shape to the social life that it fuels. But what if we begin to see – *really* see – oil as fundamental to the societies we have now, from the scale of our populations to the nature of our built infrastructure, from the objects we have ready to hand due to our agricultural and food systems, from the possibility of movement and travel to *expectations* of the capacity to move and interact? How, for instance, might oil make us rethink the shape of our histories and the way we understand the relationship between aesthetics and politics?

Alternative Histories

It is no exaggeration to suggest that the twentieth century would not have been the same without oil. Histories of the century that are alert to the significance of energy inevitably provide a vision of the recent past in which the presence of oil is amongst the central forces shaping human life. J.R. McNeill's environmental history of the twentieth century quickly identifies the capacities, technologies and infrastructures enabled by oil to be the single most significant factor in the massive expansion of population over the century, which in turn generates staggering increases in water consumption, CO₂ production, industrial output and more.²

Timothy Mitchell's Carbon Democracy also offers a powerful re-narration of the petrocarbon era that is alert to the material significance of oil in shaping capacity and possibility. There are two key points in Mitchell's book that speak to the 'how' of oil. The first is his account of the social consequences of the use of coal as a source of energy on a broad scale. One of the transformations produced by coal was that in industrialised countries the vast majority of people became dependent on energy produced by others. The production of coal at specific sites across northern Europe that then had to be channeled to other sites along narrow railway corridors generated the material conditions for a form of political agency that could be asserted through the disruption of energy flow. The ability of workers to effectively and immediately disrupt energy flow through mass strikes or sabotage gave their political demands especial force, and led to major gains for workers between the 1880s and the interwar decades, while also supporting the development of worker's consciousness of their social circumstances. For Mitchell, the switch to oil from coal as the primary energy source for the global north from the 1920s onward was a major factor in impeding the demands of labour and constituted the basis for a form of government that has managed the struggle for democracy. The production of oil requires fewer workers than coal in relation to the amount of energy produced; labourers remain above ground in the sight of managers; and from the 1920s '60 to 80 percent of world oil production was exported', which made it difficult to impact supply via strikes. Mitchell is blunt in his claim: the mass politics that emerged alongside coal was defeated by the rise of fossil-fuel networks that made mass action more difficult, and changed the conditions within which class struggle took place.

The discourse of economics has played an essential role in the system of democratic government that Mitchell explores. And here, too, oil plays an essential, if hitherto unrecognised role. Mitchell argues that 'the economy' as an object didn't exist in its current form prior to World War II. Nineteenth-century political economy concentrates on the 'prudent management of resources applied especially to the resource that had made industrial civilization possible' – that is, coal.⁴ This is an economy understood in terms of limits and scarcity. The shift from coal to oil produces a change in how the economy is conceptualised and governed. In place of natural



Imre Szeman, Pumpjack, Edmonton, AB, 2012

resources and energy flows, economics becomes the measurement of money, and 'the economy' transforms into a measurement of 'the sum of all the moments at which money changed hands'.⁵ Mitchell argues that 'the conceptualisation of the economy as a process of monetary circulation defined the main feature of the new object: it could expand without getting physically bigger'.⁶

As the dominant energy source of the century, oil fuels the idea of the economy as an object able to grow without limit in two ways. First, because of its continuous decline in price (adjusted for inflation) over much of the century, the cost of energy was thought to have little bearing on economic activity; energy appeared virtually free within overall calculations of the economy. Second, the apparent abundance of oil and the ability to move it wherever needed made it possible to treat it as inexhaustible. Mitchell concludes: 'Democratic politics developed, thanks to oil, with a particular orientation towards the future: the future was a limitless horizon of growth. This horizon was not some natural reflection of a time of plenty; it was the result of a particular way of organising expert knowledge and its objects, in terms of a novel world called "the economy".'

Leftist politics on the one hand, the economy on the other – the first impeded by the appearance of oil, the second fuelled by it. This is already a shift in how we know oil that should produce new possibilities for how we might act in relation to it.

Aesthetics and Politics

Near the end of *The Long Emergency*, James Howard Kuntsler makes the claim that: 'the collective imagination of the public cannot process the notion of a nongrowth economy, even though the limits to growth are visible all around us in everything ... We are not capable of conceiving another economic way. We are hostages to our own system.' Such doubts about the public's capacity for radical change represents a genuine challenge for artists, writers and critics hoping to create new collective imaginings through their work. One such project is Edward Burtynsky's *Oil* (2009), which is made up of both new and old images addressing the topic of oil from every possible angle.

Burtynsky describes *Oil* as the outcome of an 'oil epiphany'. 'It occurred to me that the vast, human-altered landscapes that I pursued and photographed for over twenty years', he writes, 'were only made possible by the discovery of oil and the mechanical advantage of the internal combustion engine ... These images can be seen as notations by one artist contemplating the world as it is made possible through this vital energy resource and the cumulative effects of industrial evolution.' The exhibition is divided into three sections intended to document the life-cycle of oil. 'Extraction and Refinement' includes images of older oil fields in the California desert jam-packed with drill rigs and pumpjacks, of the expansive oil-sands extraction sites and tailing ponds in Northern Alberta, and the visually dynamic twists and turns of refinery structures around the world. 'Transportation and Motor Culture' begins with a series of Escher-like images of enormous highway interchanges, before taking us to massive car import lots in the US and China, as well as sites at which people accumulate around the fantasy of driving, as in the biker jamboree held in Sturgis, South Dakota.

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Maria Whiteman, Fort McMurray #1, June 2012

If the photos in the first two sections draw our attention to the hidden infrastructures that produce and are produced by oil, 'The End of Oil' probes the consequences of oil society, especially through the detritus it leaves behind. The multiple images of the ancient oilfields of Baku, as well as of gigantic graveyards of cars, planes, tyres and oil drums, are concluded with a sequence of photos about the shipbreaking yards of Chittagong, Bangladesh, where nineteenth-century labour meets twentieth-century garbage through the mechanism of twenty-first century off-shoring of multinational capitalism's expenses and responsibilities.

The impulse of documentary photography with political aims is to introduce to vision otherwise hidden practices or spaces that we should know about, but don't, either because we don't want to or because we aren't meant to. While Burtynsky's images have this impulse, there is more going on. His attention to the spectacle of scale and the elevated vantage point from which his images are taken simultaneously exemplify and critique the enduring fantasy of Enlightenment knowledge. The god's-eye perspective produces the enormity everywhere on display – a form of knowledge that makes it possible to see the outcome of petro-societies, but which is also able to create systems that leave signs of human activity on a planetary scale.

An epiphany means to understand the familiar 'how' in some new way. In another register, it can mean that one finally comes to understand that one *doesn't* understand, or can't possibly understand, what humanity has wrought as a result of oil. The feeling one gets in moving through Burtynsky's photo-narrative of oil is more the latter than the former – the dissipation of knowledge as opposed to its expansion. And this is to his credit: the painful and beautiful images on display in *Oil* never stoop to render oil manageable or fully graspable, except as a dimension of contemporary social life from whose blunt reality we can no longer hide away. Burtynsky offers no solution to the problem on display, but shows that the language of (easy) solutions is part of the system that generated the problem to begin with. Mitchell points out that since there is no way to distinguish between beneficial and harmful growth, 'the increased expenditure required to deal with the damage caused by fossil fuels appeared as an addition rather than an impediment of growth'. *\footnote{10} All these images are images of growth. *\textit{Oil} confirms James Howard Kunstler's worries, though in a way that might yet generate the capacity for new social imaginaries.

How to Know About Oil

Putting oil at the centre of our investigations of social limits and possibilities opens new vantage points about politics, the environment and aesthetics. The insights offered by Mitchell about the significance of oil in contemporary democratic government gives us new insight into the forces shaping and enabling contemporary capitalism. The civilisation possibilities introduced by oil are seductive and far easier to defend with representational fictions of petro-plentitude (which accord with the specialised narratives of economics as well as with quotidian common sense) than with still abstract ideas and ideals of environmental devastation on the horizon. And work such as

Burtysnsky's *Oil* produces representational openings into our imaginaries, even if it has to struggle with its capacity to intervene meaningfully at the level necessary to generate social and political change. The introduction of oil and energy into our thinking would make us alert to the necessity of mass energy for the enormous social and infrastructural systems we inhabit *and* those we prophesise. It would also alert us to the dead end of any environmental discourse that continues to ally itself with economics (as in some variants of theories of sustainability) – a discourse that depends on oil being virtually 'free' – and the need to create aesthetic *and* political interventions that oppose the narrative of endless growth with something more direct and more powerful than the ecological ethics on which we continue to depend.

- 1 This is an abbreviated version of a longer essay in a Journal of Canadian Studies forthcoming 2014 edition.
- J.R. McNeill, Something New Under the Sun: An Environmental History of the Twentieth-Century World, Norton, New York, 2000, p.362.
- 3 Timonthy Mitchell, Carbon Democracy: Political Power in the Age of Oil, Verso Books, London and New York, 2011, p.37.
- 4 Ibid., p.127.
- 5 Ibid., p.136.

- 6 Ibid., p.139.
- 7 Ibid., p.143.
- 8 James Howard Kunstler, 'The Long Emergency: Surviving the Converging Catastrophes of the Twenty-First Century', Atlantic Monthly, New York, 2005, p.193.
- 9 Edward Burtynsky, Oil, Steidl, Göttingen, 2011, p.3.
- 10 Mitchell, op. cit., p.140.

Postindustrialisation in the Present Tense

Paolo Portoghesi's 1980 Venice Architecture Biennale may not exactly represent the genesis of postmodernism, but it certainly codifies its institutionalisation as an architectural paradigm. That year, which incidentally was the first in which there was an exclusively architectural section of the Venice Biennale, named as its theme the emancipatory condition from which architecture could flourish after modernism: 'la presenza del passato' (the presence of the past). In the case of Venice, postmodernism was imagined not only as a horizontalisation of an aesthetic history, but just as much as a wager on an alternative economic and social trajectory through the economic uncertainty of postindustrialisation in the wake of the quick death of the welfare state only a few years earlier. Critics on the left tend to plot the explicit neoliberalisation of the global economy somewhere between when Nixon took office in 1969 and the oil shocks in 1973 and 1975, which for some such as Antonio Negri, Michael Hardt and Maurizio Lazzarato, to name only a few - is shorthand for a radically new logic of global accumulation, and for others – such as David Harvey, Robert Brenner and Moishe Postone – marks an intensification of the capitalist value form at a larger scale. Of course, in a general sense it is not controversial to frame postmodernism and neoliberalism as contemporaneous with one another. That relationship has been well traced at this point and needs no reiteration here. My interest is instead in forwarding an argument about two fairly benign, though as I shall suggest later, central features of the relationship between culture and economics as it unfolded then and to a large extent is unfolding today.

My argument puts the Biennale at the center of exchanges between the social world of cultural capital and the urban world of economic capital at a moment and in spaces of postindustrial transition. After the occupations that took place in Milan during the 1968 Triennale, the Biennale reorganised itself, serialising what was at first a political struggle over the relationship between the aesthetics and politics of economic development. By 1980, and with an autonomous section dedicated to architecture in Venice, its regularity overlapped with successive waves of reinvestment into the cultural capacity of the city. The exhibition's current capacity to frame cultural exchange came as a consequence not of its geographical reproducibility, however, but of its commitment to public works and cultural-economic stimulation during the years that have now become synonymous with the exhaustion of modernism and the euphoria of postindustrial forms of production.

Culture for the New Economy

Portoghesi's theme for the 1980 exhibition imagined an explicit synthesis with the disciplinary register of that earlier crisis of modernism, from which emerged, perhaps more interestingly for our purposes here, a thesis on the politics of postindustrial production in non-capital cities: 'Postindustrial society ... will no longer need great convulsive concentrations and villes tentaculaires, just as modern industry no longer needs cathedrals of work. Small cities will once again play a role not only in the consumption and passive reception of the culture of the metropolis, but also in autonomous creation and valid interlocution." In Portoghesi's account, 'a new synchronic vision of History that ultimately becomes an infinite warehouse for images and suggestions from which architects can freely draw shapes, styles and decorative elements' would give shape to this new geography of the postindustrial society. What marked the first Venice Biennale as postmodern, in other words, had as much to do with its internal content, a decisively synchronic aesthetic of historical styles, as it did with the city's decision to share its lease on key Venetian buildings with the Biennale, whose role had quickly shifted from staging the city to shaping it. In 1980, this came in the form of retrofitting the Corderie dell'Arsenale, 'the largest pre-industrial production centre of the world'³ originally built for nautical production in the fourteenth century, as the primary site for the architecture exhibition. A megastructure for an entirely different moment of collective use the production, that is, of merchant ships at the height of the Venetian empire – in 1980 the Arsenale materialized the new economic function of cultural centers in graduated economies. At the time, this meant utilising the husk of older modes of production for a post-Fordist economy driven by the fantasy that creativity and innovation, rather than production in the older sense, fuel growth, and that building for culture amounts to an investment in the future wealth of a city.

Inside the refurbished Arsenale, Portoghesi featured the transportable *Strada Novissima* (New Street) consisting of storefront-like facades on the other side of which were single-architect exhibitions. Portoghesi would explain in that year's Biennale catalogue that the motivation for the

street was to contain any and all architectural styles in one continuous space. On a material level, 'the street is built in temporary materials using refined artisan techniques that the world of cinema has miraculously saved'. On a conceptual level, the wager is that 'in a city reinterpreted in function of the new collective needs, the temporary space can reacquire its importance and become an instrument for the socialization of urban space and the continual creative reinterpretation of its appearance.' The new street is meant to prefigure, in other words, a world where culture is the organizing principle of the city, and not an economy of exploitation.

In two early sections of that book, Portoghesi offers a diagnostic of the 'sick metropolis' to which postmodernism is the cure. Postindustrial society, according to his account, would combine architectural archipelagos of an earlier urban system with the new 'science of habitation, built on the ruins of the separate disciplines of urban and regional planning, geography and architecture.' This latter stance towards the crumbling edifice of industrial urbanism is one premised on an understanding of finite resources outlined in his book of two years earlier – the same year as the first Biennale – *After Modern Architecture*. Modern cities, he claimed, grew in the image of the bourgeoisie, and the value form that its mode of accumulation implied was, by the time of his writing, reaching its own limit.

Culture for Accountants

Postmodernism is the answer to Portoghesi's question, 'what comes after the perpetual motion of capital when its natural alibi gives up the ghost?' Here, then, we have precisely the dialectic of economics and culture, or what Fredric Jameson would only a few years later call the cultural logic of late capitalism, except with the cultural frame of postmodernism understood as capable of supplanting its economic other. It is worth recalling that the oil crisis in the 1970s sparked a rapid reorientation of industrial resources in Italy's North, most visibly in the closure of FIAT Lingotto, which by the time of Portoghesi's writing was in the midst of Renzo Piano's cultural retrofit. Creative forms of labour were quickly being reshaped in the image of capital by the time of the 1980 exhibition. Retraining the skilled portion of the workforce was part of Progetto 80, the so-called project to move Italy's northern networks of production into the new economy. More important for our interests here, however, are the new accounting practices designed by Progetto Quadro (a subsidiary policy group to Progetto 80) to support the representation and appropriation of intangible assets and social wealth upon which the new economy was building itself.

Unlike other types of buildings, such as the manufacturing plant or warehouse, the cultural centre has no fixed trajectory of devaluation on its owner's balance-sheet. Its current cost replacement – the value that it contributes to the production process as a component of a firm's total fixed capital – is hypothetically inexhaustible, whereas keeping up with competition in other sectors (and thus with other types of buildings) is a much less certain investment. Progetto 80 set out a multi-tiered integration of the total economy with the unique invention of separately regulated cultural zones. The International Accounting Standards Committee had already abandoned the historical cost principle (the value of the building at construction minus the value it contributed to production over a set timeline), and others, including Italian accountants, had begun to follow suit by the late 1970s.

So while Portoghesi's version of postmodernism imagined a resolution to the energy crisis – a resolution that sought to replace the finite relation between capital and energy with the inexhaustible relationship between culture and the economy – investors and business owners responded by putting culture to work in the valorisation of fixed capital assets. Understood in this way, postmodernism and postindustrialisation answered two sides of the same question, with results-based management of the economy and an aesthetic regime of the inexhaustible as two idioms of that answer.

Though in recent years the discourses of postindustrial development, cultural capitalism, and creative industries have receded to the background of austerity and its discontents, the latter is still frequently cited as an exit from the former. In Liverpool, for example, (a city whose mercantile and postindustrial histories overlap with Venice's time and time again) the odd non-contradiction between austerity and creativity looks more like a tendency and a counter-tendency, where the falling rate of industrial profit and increases in fixed forms of capital gutted its working-class core in the 1970s and 80s, while the pressure to postindustrialise has put social, or more specifically,

cultural energies at the core of new growth. The challenge moving forward for those still interested in what the ghosts of postmodernism offered to the project of postindustrialisation is to reframe the relation as a struggle, not over the maintenance of creativity amidst austerity, but as an exit point from that contradiction altogether.

- Paolo Portoghesi, 'The Crisis of the City' in Postmodern: The Architecture of the Postindustrial Society, Rizzoli, New York, 1982, p.68.
- 2 labiennale.org, *La Biennale de Venezia La Presenza del Passato*, http://www.labiennale.org/en/architecture/history/1.html?back=true, accessed 23 August 2013.
- 3 Ibid.
- 4 As Vittorio Gregotti explains in Lea-Catherine Szacka, 'A Conversation with Vittorio Gregotti,' the two architectural exhibitions hosted by the Biennale preceding Portoghesi's first Venice Architecture Biennale also utilized the occasion to retrofit long abandoned Venetian sites of industry. By 1980, however, the practice of combining staging and retrofitting had become the norm, rather than an exception. Lea-Catherine Szacka, 'A Conversation with Vittorio Gregotti,' in Log 20, Fall 2010, p.39–43.
- Paolo Portoghesi, Postmodernism, La Biennale di Venezia, Venice, 1980, p.29.
- 6 Ibid
- 7 Paolo Portoghesi, After Modern Architecture, Rizzoli, New York, 1980, p.19.

Using Strategies as Tactics: Liverpool Waters and Irrationality in Banff

Michel DeCerteau's articulation of everyday life revolves around what he calls 'strategies', as opposed to tactics. Strategies are outlined in his volume *The Practice of Everyday Life* as the calculation and establishment of power relationships over space by an individual, group or organisation.¹ Strategies 'pin their hopes on the resistance that the establishment of a place offers to the erosion of time'.² In Liverpool, this erosion of time is being enabled by the establishment of an irrational place – Liverpool Waters – which proposes a massive, long-term development programme that seeks to build private office and condo towers in a city that has seen consecutive decades of depopulation – a situation that can be articulated as an urban crisis. Strategically, this project is being justified in relation to history, drawing on the nostalgia of the city's past while disregarding its relationship to the city's present and future.

This use of nostalgia is anticipated by DeCerteau, who explains, 'Narrated history creates a fictional space. It moves away from the "real" – or rather, it pretends to escape present circumstances.' Official marketing for the development clearly narrates this escape from the present circumstances of the city: 'The Liverpool Waters proposals are bold and ambitious. They reflect the essential characteristics of Liverpool which are associated with the *Outstanding Universal Value* of its World Heritage Site such as the city's historic vision and determination, its commercial astuteness, and its spirit of internationalism.' ⁴

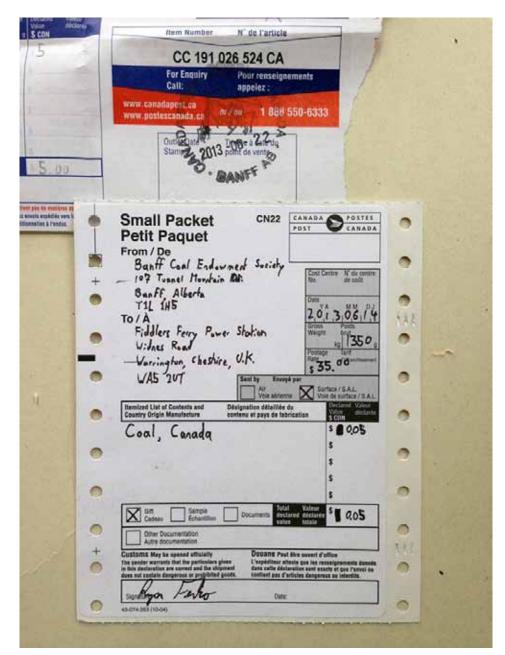
For DeCerteau, tactics, inversely, oppose and subvert strategies of power as 'an art of the weak'. While strategies homogenise space and establish power, tactics momentarily appear as ephemeral, everyday and often playful forms of opposition: 'Because it does not have a place, a tactic depends on time – it is always on the watch for opportunities that must be seized "on the wing". Whatever it wins, it does not keep.' In an attempt to consider the strategies utilised by Liverpool Waters, two projects were initiated as part of the Banff Centre's Research in Culture Residency (BRiC) 2013. These projects, critical (and satirical) in their origin, operate as tactics, though they appropriate the strategies of Liverpool Waters in an attempt to isolate and subvert the development's escape from the present through its narration of history.



Ryan Ferko, Display of BCES coal shipment at the Banff Centre, 14 June 2013. Photo: Matilda Aslizadeh

The Banff Coal Endowment Society

The Banff Coal Endowment Society (BCES) was founded on 14 June 2013 in order for the Bankhead Coal Mine, which closed in 1922, to emulate the nostalgia of Liverpool Waters. The BCES has independently (and temporarily) revived the mine, sifting through its coal remainders in order to offer a contribution to an irrational development in the form of combustibles. Just as coal historically powered the 'essential characteristics' with which Liverpool Waters associates itself, the BCES aims to revive the essential characteristics of the Bankhead Mine and its history, while linking the two organisations through strategies of nostalgia. The coal shipment was displayed at the Banff Centre, along with a press release and information package, before being sent to the Fiddlers Ferry Power Station on 22 June 2013. The progress of this shipment can be tracked at http://banffcoal.info.



Canada Post shipment label for BCES

FOR IMMEDIATE RELEASE

June 14, 2013

Banff Coal Endowment Society http://banffcoal.info banffcoal.info@gmail.com

BANFF, AB - On **Monday**, **June 22**, **2013**, the Banff Coal Endowment Society (BCES) will make its first coal export to the Fiddlers Ferry Power Station in Cheshire, UK, 25 kilometres to the east of downtown Liverpool.

The coal shipment will be sent via the surface option offered by Canada Post, at a cost of \$35 (CAD).

The shipment will travel across Canada by rail, and cross the Atlantic Ocean on a yet to be determined commercial shipping vessel, bound for the docks of the United Kingdom.

The shipment has an estimated travel time of 2.5 months, and should arrive by early **September 2013**. Upon reaching its destination, the BCES will be formally dissolved.

Banff Coal Endowment Society Press Release

"A high-octane stride through the heart of Liverpool's world heritage site" The Guardian 2010



- Starting at St George's Hall, walk through St John's Gardens and turn left into William Brown Street.
- 2. Turn left into Whitechapel.
- I turn right into Stanley Street and then left at Matthew Street.
 Turn right on to North John Street then left on to Dale Street. Walk to the other end of Castle Street, to the Queen Victoria monument on Derby
- Square.

 5. Turn right down James Street and follow the road down to Albion House.

 Return along James Street and turn left on to Fenwick Street. Continue on to Rumford Street.
- 6. Turn left into Chanel Street to reach St Nicholas church and sardens
- 6. Turn left into Chapel Street to reach St Nacholas church and gardens. Walk to the opposite side of the Strand.
 7. Continue walking along the Strand, past the new Liverpool One shopping and leisure complex on your left. Turn right into the Albert Dock.
 8. Take a stroll around Albert Dock and walk back on to Wapping, continuing through Liverpool One bus station into Hanover Street and turn right at Duke Street. Continue and turn left on to Slater Street. Turn left on to Bold Street.
- Section 2. At Central station, turn right on to Ranelagh Street, cross at the pedestrian crossing and turn left on to Lime Street. Continue past the train station and finish back at St George's Hall.

"A highly structured mediation through the outlying area of Banff" Ryan Ferko, BRiC 2013



- walk 4 min east (crossing train tracks)
 2. Turn 90 degrees left, walk 2 min (crossing train tracks), until
- reaching highway 3. At highway turn 90 degrees right, walk 3 min (crossing tra

- tracks)
 4. Turn 60 degrees right, almost perpendicular to train tracks, walk 5 min into woods
 5. Turn left, parallel to train tracks, walk 2.5 min
 6. Turn 90 degrees left, walk 3 min into wood train tracks
 7. Turn 60 degrees right, walk 3 min into woods
 8. Turn 90 degrees right, walk 4 min
 9. Turn 90 degrees right, walk 4 min
 10. Turn 90 degrees right, walk 2 min, at slight angle toward highway
 11. Turn 90 degrees right, walk 2 min, at slight angle toward highway
 12. Walk 1 min in a half circle arto face the highway
 13. Turn 90 degrees right, walk parallel to highway, 5 min
 14. Turn 90 degrees right, walk 1 min
 15. Turn 60 degrees right, walk 1 min
 15. Turn 60 degrees left, walk 2 min

- 15. Turn 60 degrees left, walk 2 min 16. Turn 60 degrees right, walk 2 min 17. Turn 90 degrees left, walk 2 min

- 18. Turn 90 degrees left, walk 2 min
 19. Turn 90 degrees right, walk 30 sec
 20. Turn 90 degrees right, walk 4 min
 21. Turn 90 degrees left, walk 1 min
 22. Turn 90 degrees left, walk 20 sec, turn 90 degrees right, walk 20 sec,
- turn 90 degrees left, walk 20 sec, 23. Turn 90 degrees right, walk 2 min 24. Turn 90 degrees left, walk 3 min 25. Turn 90 degrees left, walk 3 min

- 22. 1 um 30 degrees sight, walk 3 min 26. Turn 60 degrees right, walk 2.5 min toward highway 27. Turn 60 degrees right, walk 20 paces 28. Walk perpendicular to highway, 3 min 29. Turn 90 degrees right, walk in a half circle through woods for 1 min, until facing highway
- 30. Walk pendicular to highway, crossing highway, walk until crossing Banff Industrial Park side road 31. Turn left and walk to intersection at Banff Industrial Park side road and
- Hawk Ave

^{&#}x27;Proposal for a Walk,' as sent out to the residents at the Banff Centre



Map of the proposed walk (white), and the resulting walk on 12 June 2013, after failing to cross Trans Canada Highway (red)



Proposal for an impossible walk for visitors to the 2014 Liverpool Biennial

Proposal for a Walk

On 12 June 2013, a walk was proposed to the residents of the Banff Centre. A reversal of the freedom sought by the Situationists' *derive*, the walk imposed Liverpool's world-heritage site on an open area just outside of the Town of Banff. Generated from *The Guardian's* directions for a tourist walk, the proposal put faith in the narrated history of Liverpool while engaging Liverpool Waters' abstract space of *Outstanding Universal Values*. However, the universality of the space proved misleading, with the route failing when it brought its participants to a fenced section of the Trans-Canada Highway, which in turn backed onto a secured area surrounding the Banff Regional Airport. Future visitors to Banff are encouraged to attempt the walk. Conversely, visitors to the 2014 Liverpool Biennial are encouraged to attempt the failed version of the Banff walk.

- Michel de Certeau, The Practice of Everyday Life University of California, Press, Berkley, 1984, p.29–42.
- 2 Ibid., pp.38-9.
- 3 Ibid., p.79.
- 4 'How Liverpool Waters Will Safeguard and Present the Values of Liverpool's World Heritage Site', Peel Land & Property, http:// liverpoolwaters.co.uk/content/worldheritagesite.php, accessed June 2013.
- 5 De Certeau, op. cit., p. 37.
- 6 Ibid.
- 7 'Walking Route: Liverpool City Centre', The Guardian, http://www.guardian.co.uk/travel/2010/jan/11/walk-guide-liverpool-city-centre, accessed June 2013.
- 8 The walk is through an unregulated area of Banff National Park. It is possible that the route could bring one into an isolated encounter with wildlife, and it has also been proven to cross active train tracks and the Trans Canada Highway.

Inhabiting Histories

I. The past in the present



Kate Hoffman, untitled (hanging), photograph, 2012

To call up the past in the form of an image, we must be able to withdraw ourselves from the action of the moment, we must have the power to value the useless, we must have the will to dream. Man alone is capable of such an effort. But even in him, the past to which he returns is fugitive, ever on the point of escaping him, as though his backward turning memory were thwarted by the other, more natural, memory, of which the forward memory bears him on to action and to life.

-Henri Bergson¹

The past survives into the present, says Bergson. We inhabit the past, he explains in a claim that runs contrary to prevailing accounts of linear or chronological time. The past is not actually in the past but is embodied by dynamics and relations in the present, including those that give rise to our own movements. How, then, can we cultivate ways to call up the past, as Bergson puts it? And what are the two different forms of memory through which images of the past emerge?

One is the memory of contemplation and recollection. This memory slows us down and engages our consciousness. It opens up our normally distracted perceptions to what Bergson calls the unused or virtual resources of the past. This memory surprises us. It occurs, for example, when normally habitual movement is interrupted in some way, becoming conscious because it has failed to attain its anticipated end. As interruption and surprise, this memory generates the possibility of change and newness, of the unpredictable and of invention.

If we tune our awareness in the direction of these connections in and through the movements of time, what kinds of insights might emerge?



Kate Hoffman, Tarmac, painting, 2012

An epiphany: It was standing before me, right there on the tarmac, when I was struck by the realisation that these hunted whales have been living among us all along as reincarnated airplanes. Side by side, the bodies of the plane and whale run along the same lines as relationships with humans; their scale, the movement of bodies, fuelling and re-fuelling and the constant need to hit the surface of ground or air, to continue on their paths around the globe.

Bergson asks us to notice, however, that consciousness, including conscious memory, can only retain the smallest trace of the enormous and dynamic history of life, and that consciousness requires tremendous concentrated focus, energy and effort. We actually need to prepare ourselves, focusing our attention, in order to tune ourselves in to these memories.

With careful detail and in-depth reflection, though, we can remember specific events, located at definite moments in time. And, Bergson promises, such recollection will open us up the unused resources of the past.

What kinds of unused resources might these be? And how might they make new ways of moving and living possible in the present, especially through the conscious and careful memorywork that leads, in turn, to installations and reenactments?

While attentiveness to history enables us to foreground details and stories, the leaps that allow us to imagine the past are always ultimately unpredictable, perhaps even involuntary in some ways. Above all, such creative leaps do not arise simply by amassing historical facts or archival documents. As Søren Kierkegaard points out, 'A "more" cannot bring forth the leap, and no "easier" can in truth make the explanation easier.' When artists restage history, then, these material connections invite others to draw associations and forge analogies. Pulling together land, sea and air, for example, an art installation might call passersby to confront the relations between escaped slaves and sailors, whales and whalers, airplanes and evolution.



Kate Hoffman, Reflected Harpoon, photograph, 2012

In the action of a re-enactment there exist three levels of experience; what is understood about the past, what and how things are chosen to be re-created, and the unpredictability of that present moment to be achieved only within the site and space of that newly re-enacted history.

There is a different kind of memory from that of consciousness, according to Bergson. This is the bodily memory of habit, in which the past is retained and even prolonged through regular and repetitive movement. Habit is a rote kind of memory, in which memories are activated without effort or conscious intention. Our bodies actually accumulate and live memory through habits. We could say that the past is *present* in the life of living things because of habit: a living thing carries the accumulation of history in its body. Here, too, we can consider how our own embodied rhythms echo the rhythms of past lives. What might it look like to trace and capture such broad-based rhythms through drawings, cartography and sculpture?



Kate Hoffman, untitled (diptych), detail, painting, 2013

Within relations of exchange, bodies are interacting across space and time: bodies of individuals and bodies of larger systems of movement. We can draw parallels between whale migration, for example, the whalers in pursuit of whales as a fuel commodity, and the system of escape from slavery sometimes referred to as the 'Saltwater Underground': a network by which enslaved peoples escaped by sea. The body of the whale became a source of wealth as a commodity, intersecting with the mobility and displacement of people pursuing these creatures around the globe through the industry of whaling; in turn, the bodies of slaves could find means of escape in and among these shifting economies.

II. Land sea and air: changing definitions of life

Rather than individuals with discrete and bounded bodies, then, we can affirm living things as essentially connected in time; these connections emerge because of both habitual movements and the conscious recollection of the past. Commenting on Bergson's account of habit, Elizabeth Grosz explains, 'Where memory represents and imagines the past, habit acts and repeats it.' 3

And this philosophical accounting of memory points to a particular understanding of life itself.

We live in a world that is always changing, and so we need the anchor of habits to accommodate and coordinate with our environment. Without this kind of bodily repetition, we would lack the energy necessary for new and unexpected movements. Movements that are habitual and automatic allow us to conserve energy, making possible the very expression of free and unpredictable and new movements. Put simply, change is only possible because there is repetition in movement.

While we tend to repeat ourselves through habits, we can also change our movements and do things differently. And freedom emerges through these acts of innovation, acts that are unpredictable and creative, not because we have consciousness but because of the intelligence of life itself. All living beings are capable of opening up new movements and actions. Freedom and intelligence actually *inhabit* the body. We act out freedom; we don't possess it or have it.

In 1845, Frederick Douglass published a memoir that he titled *The Narrative of the Life of Frederick Douglass, An American Slave*. As Valerie Rohy points out, this title calls into question the chronological nature of the narrative itself. While 'Douglass' is a name only assumed in freedom, the text tells a story that anticipates the author that he will become. In other words, the title collapses the distinction between the *before* and *after* of the author's own position in time.⁴

The past to which we return is 'fugitive', according to Bergson, calling to view the figures of slave, whales and lost moments of history. While the backward-turning memory keeps us in the past, the memory of habit propels us forward. If we take the memory of the past and project it into the future in the ways that Bergson describes, we might start to see whales as airplanes, in an unpredictable and unanticipated analogy. Perhaps the important point here is that we can strive not to capture memory but to enliven it with this forward-movement of associations.

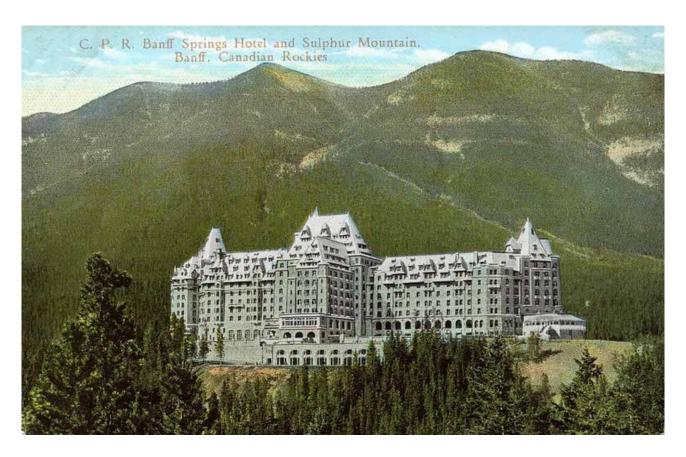


Kate Hoffman, Frederick Douglass, painted wood, 2012

This is a portrait made according to the proportions of the height and breadth of the orator Frederick Douglass. The photograph was taken from the exhibition Liquid Gold-Black Gold, the Golden Age of Whaling at the Greenleaf Gallery, Whittier College, Whittier, CA in 2012.

- Henri Bergson, Matter and Memory, trans. Nancy M. Paul and W. Scott Palmer, Zone Books, New York, 1988, p.82–3.
- Søren Kierkegaard, The Concept of Anxiety, ed. Reidar Thomte, Princeton University Press, Princeton, 1981, p.60.
- 3 Elizabeth Grosz, 'Habit Today: Ravaisson, Bergson, Deleuze and Us', Body and Society, Vol. 19, Issue 2 & 3, 2013, p.228.
- 4 Valerie Rohy, Anachronism and Its Others: Sexuality, Race, Temporality, SUNY Press, Albany, 2009, p.xiv.

A postcard from Banff



C.P.R. Banff Springs Hotel and Sulphur Mountain, Banff, Canadian Rockies. Coast Publishing Co., Vancouver, c. 1915. Courtesy of University of Alberta Libraries

Completed in 1928, the Banff Springs Hotel is one of the most iconic landmarks in the town. Almost every local souvenir shop sells a postcard of the building. At eleven storeys high, this alpine skyscraper can be seen to embody the relationship between the built and natural environments, between infrastructure and facade, and between commodities, images and the economies that sustain their production.

The building was designed by Walter Painter, chief architect of the Canadian Pacific Railway (CPR), and architect J.W. Orrock, who added extensions to Painter's original designs. While the structure of the building is made of reinforced concrete, it is clad in stone primarily quarried from Mount Rundle, which guests gaze upon from the hotel terrace.

The Banff Springs Hotel was one of a number of hotels built to develop tourism in the Rockies, in part to service the debt accrued from the construction of the nation-building CPR, the cost of which could not be supported by the transport of coal, timber and other freight alone. Soon after the development of the railway in the late nineteenth century, art was used to promote the region as a viable tourist destination. The CPR encouraged artists to produce imagery that would sell the landscape to potential tourists. It offered willing artists free rail travel, studios and accommodation – a type of artist's residency long before the Banff Centre. Many of the paintings produced incorporated the railway infrastructure into the visual language of the European landscape tradition; these images were largely aimed at attracting European visitors.

While the numerous postcards available in the town today may be examples of a cultural form in declining use, an online image search quickly reveals a multitude of amateur snapshots of the building that have an even greater global reach. CPR President Cornelius van Horne is frequently quoted as having said that, 'If we can't export the scenery, we'll import the tourists'; it is the very circulation of images of the scenery that continues to attract tourists.

In the 1900 guide book *Canadian Mountain Rockies* Betty Thornley wrote: 'When that great "thrust from the Pacific" that the geologists talk about crumpled the Rocky Mountains up from the nethermost deeps ... the first step was taken in making Canada the natural summer playground of North America.' Ignoring all other human settlement in the intervening millennia she identified the building of the CPR as the second step and the creation of the National Park as the third.

Language is frequently used to render historical events as natural occurrences. Not only is the Banff Springs Hotel's Scottish baronial style a hybridised import from another place, but Banff's very name is an echo of another settlement – a fishing port in the north east of Scotland (the CPR's first president George Stephen hailed from Banffshire). When placed on the map of Canada, the name erases previous histories. Banff's unexpected Scottish heritage continues to be performed at the Banff Springs Hotel, where kilted staff members greet guests – just as guides in 'Swiss' attire greet visitors to the nearby hotel, Chateau Lake Louise.

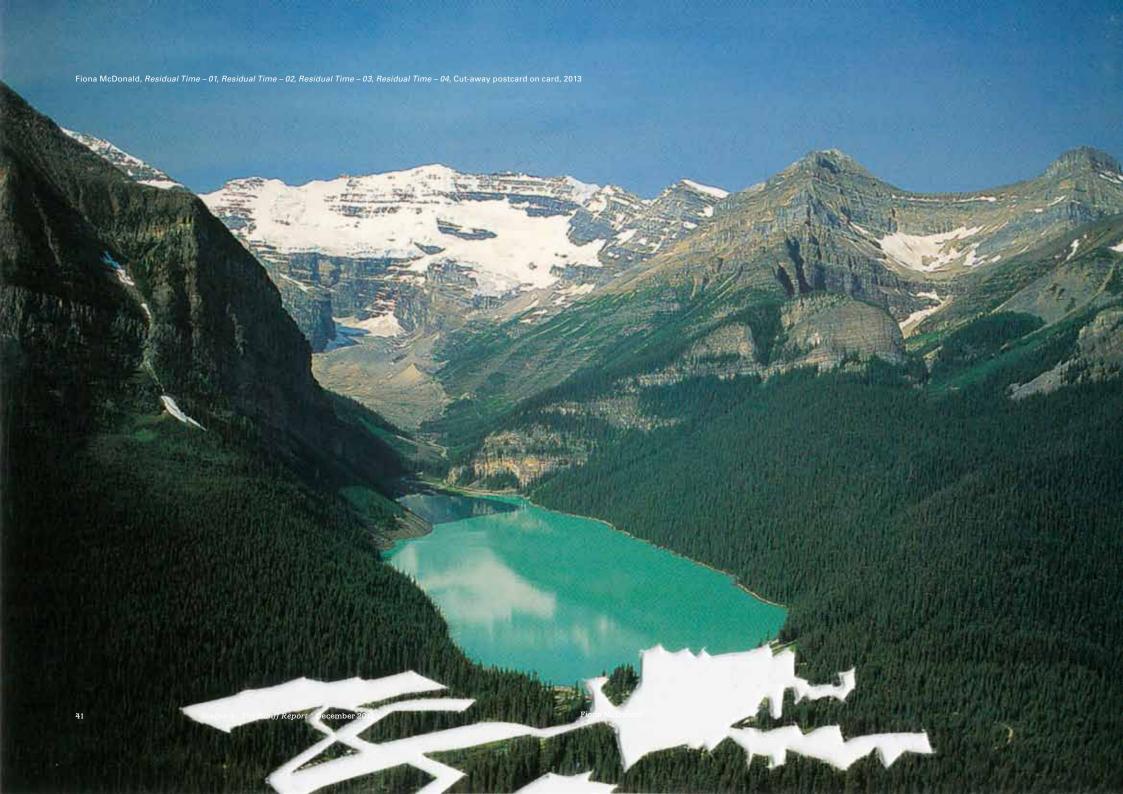
Though the railway no longer provides the means of access for most visitors to Banff, the commercial and architectural structures that the CPR put in place inform the dialogue between nature, commerce and industry in Banff today. Images of nature are frequently used as screens: photographs of trees mask construction sites and vacant retail premises, and images of wild animals cover the town's buses.

As the story of the Banff Springs Hotel demonstrates, the history of Banff – like that of Liverpool – is closely tied to the development of infrastructure that supports the movement of people and goods. From the CPR's support of artists, to the foundation of the Banff Centre, to the evolution of the Liverpool Biennial, art and the associated circulation of images has often played a part in the development of infrastructure that supports the movement of people and goods – validating and questioning the power of representation, colonisation and industrialisation.

Residual Time

Fiona McDonald, *Everything and Nothing*, 2013, Video Images sourced from Michael Stammers, *Liverpool Docks*

First published in 1999 by Tempus Publishing Reprinted in 2010 by The History Press









Natural Histories



 $'Lands at Look'\ image\ of\ Banff\ National\ Park,\ Friday\ 17\ February\ 2006,\ United\ States\ Geological\ Survey\ and\ NASA,\ Lands at\ 7$

"The same approaches must be applied to animals and to man. However, the human reaction to provocation by the milieu is diversified. Man can give several different solutions to a single problem posed by the milieu. The milieu proposes, without ever imposing, a solution. To be sure, in a given state of civilization and culture, the possibilities are not unlimited. But the fact of considering as an obstacle something that may later be seen as a means to action ultimately derives from the idea, the representation, that man (collective man, of course) builds himself out of his possibilities, his needs. In short, it results from what he represents to himself as desirable, which is inseparable from the ensemble of values."

-Georges Canguilhem 1

What do we name when we name 'infrastructure'? Most often, infrastructure is engaged with as a material substrate to transportation, communication and various other service-delivery systems that are largely structured around commercial exchange, human circulation and societal organisation.2 'Infrastructures' designate those sites of human making that are territorialised, that allow the human enterprise to evolve through various material and immaterial modes of connection and circulation. Yet thinking about infrastructure predominantly as an interconnected series of built and managed material components, from roads to shipping corridors and docks to transalpine tunnels, neglects the relational forms of analysis 'infrastructure' as a mode of engagement.3 What I would like to do here is speculate on the 'what if' that is starting to work against the predominant taken-for-granted invisibility of 'infrastructure' as a material organisational system grounded in and emerging out of

This speculative work entails going beyond the widely held materialist bias in ways of thinking about infrastructures that would not only affect the means by which scholars and artists can approach them as objects of inquiry, but could also go some way towards reframing societal debates surrounding large-scale ecological systems-as-relations. This 'materialist bias' is not only reflected in the majority of the scholarly literature on what could be thought of as 'conventional' infrastructure, ranging from civil engineering to law, but is also an important element in framing the structural conditions and eventual outcomes of governmental policy debates, in that its definition and delimitation determines what can count as infrastructure in broad, politicising terms. By dividing 'ecologies' from 'infrastructures' and vice versa, the 'nature-culture' divide is perpetuated in the name of our usual categorisations of 'materialist' critique.

What if infrastructures could be approached as natural historical phenomena? To some degree, this approach to questions raised by the infrastructure-as-material substrate premise can be described as post-humanist. It is one with both a variable and malleable genealogy in critical inquiry, with Donna Haraway's characterisation of 'naturalcultural' phenomena and the broader sorts of 'boundary projects' that feminist-empiricist perspectives can bring about and situate within non-reductionist accounts of the making of the 'real' world potentially offering one of its most comprehensive common grounds.4 Given environments, in this view, could then also produce modes of analysis that enact an 'infrastructural relationality' that brings questions of political ecology, biopolitics, environmental history and political economy to the fore in site-specific contexts of a naturalised infrastructure. This, in some obscure sense of cultural atmospherics ('it's in the air'), might in part address and account for the synchronic and diachronic approaches that are forging links across domains of infrastructural-relational inquiry. From the groundwork being laid in 'animal studies', 5 to the institutionalisation and recurrence of biomedia art, to even wider debates around ecological engineering and the question of climate science, all of these phenomena to some

extent signal how, following Gregory Bateson, '[w]hat can be studied is always a relationship or an infinite regress of relationships. Never a "thing"'. In this sense, 'infrastructure' is a relation that can be traced. As Star and Ruhleder contend, 'Infrastructure is something that emerges for people in practice, connected to activities and structures', and as such it holds its own temporality forward as a 'when' as well as a 'where'. It can emerge here or there, in both time and space.

Yet, the question remains, how to 'do' this analysis. How can we actually build the sorts of infrastructures that can sustain equitable relationships and knowledge in our co-emerging worlds? This in part relies on recasting what can count as materialist critique. While this recasting arguably began with the originary tensions in Marx's elaboration of practical materialism, it is one that has been brought forward in current debates that surround materialist conceptions of various human and non-human agencies and artefacts. Whether in its 'thing theory' incarnations, or Bruno Latour's iterations of actor-network-theory, or other more biopolitical projects of post-humanist subjectobject formations, the originally Marxist process of materialisation is today still both semantically unstable and critically changeable.8 John Frow remarks upon how 'Nature is now, for all intents and purposes, socialised, or at least Marx's whole interest is in the social world and its constant transformations of the natural: not matter in itself but matter transformed into the stuff of social interaction, and "known" to the extent that it is the object of human praxis.'9 It is with this 'new' nature in mind that Frow deems that a reorientation of conceptions of the material is in order, one that follows on a genealogy that originates with Foucault's understanding of the apparatus as an 'ontologically indifferent and open-ended' 10 structure that can incorporate a contingent system of relations that can be constantly renewed and reformed as its structuring conditions change. It is important here to specify that 'infrastructure' and 'relation' do not name synonymous processes. Rather, thinking through the current materialist bias of infrastructure is to also think into being its ways of being addressed as socio-political forms of materialisation. In other words, this entails thinking about infrastructures from the ground up, and sedimenting their territorial reach through approaches that take into account the always already 'there' presences of historic animal ecosystems, indigenous forms of spatio-temporal precedence, and geological timelines as only the most fundamental dimensions of an infrastructural treatment of 'natures' that are co-shaped by human and non-human actors.

The temporalities that in mundane natural historical terms make material (or non-relational) infrastructure visible are such commonplaces as ageing road networks, slow commuting times, waiting times at international hub airports. In all of these, with their different senses of time becoming manifest, the inadequacies of given infrastructural systems are presented. And yet instrumental as opposed to 'heritage' infrastructures are rarely approached as object-systems worthy of preservation, either for examination, education or analysis. Elizabeth Grosz specifies how time, 'the very substance and matter of history', is integral to 'the indeterminate, the unfolding and emergence of the new', with the latter implicating a future that is open to any number of enduring pasts that change and allow new perspectives and futures to emerge; 'what counts as history, what is regarded as constituting the past, is that which is deemed to be of relevance to concerns of the present'.¹¹ How does one make infrastructure count in that historical calculus? If there will always be another history to be written and rewritten, then perhaps it can follow that there are past infrastructures to be reassembled through relational forms of historiography. If 'History is made an inexhaustible enterprise',¹² as Grosz claims, then such 'natural' infrastructural histories could be taken as becoming ecological in their writing.

This relational, infrastructural analysis could render environmental and 'naturalcultural' narratives, such as those surrounding the 'conservationist' preserve of national parks or urban redevelopment plans of 'improvement' and futural change, into more complex stories. Such stories tell of the co-emergence of these contested spaces with ongoing instances of at once global and site-specific networked resource dependency, commercial regimes of industrial production, distribution and consumption, and an evolving complex of radically contextual practices ranging across mass tourism, post-industrial economic repurposing and the circulation of finance capital. Whether through a 'preservationist' state-sanctioned 'natural', or a 'futurist' and forward-looking 'urban', thinking about the natural histories, both spatial and temporal, of infrastructure can start to create relational forms of analysis that not only make infrastructures visible, but also render their interpretive power malleable by extra-commercial ideologies and actors.

In addition to this baseline of infrastructural knowledge production, the site-specific locales of infrastructural evolution have to ask, following Georges Canguilhem: 'Could man make a nest better than a bird, a web better than a spider?' 13 And if Frow goes on to argue that we '[n]eed to propose ways of thinking a relationality without ontological divisions, in which "material" and "immaterial" elements interact on the same plane to form structures and in this process are at once constrained and formed by those interactions',14 then it's up to us, scholars and artists alike, to build discursivematerialist modes of knowing that not only start from the ground up, in both the senses of renewal and indigeneity, but acknowledge the inevitable, evolutive infrastructural proximities between knowledge and life, doing and living.

- Georges Canquilhem, 'The Living and Its Milieu', Knowledge of Life: Georges Canguilhem, ed. Paola Marrati and Todd Meyers, trans. Stefanos Geroulanos and Daniela Ginsburg, Fordham University Press, New York, 2008, p.109.
- This understanding of 'infrastructure' predominantly crosses the domains of civil engineering, urban and regional planning, government policy and, increasingly, science and technology policy that looks to facilitate the expansion of communication networks; see Brett Frischmann, Infrastructure: The Social Value of Shared Resources. Oxford University Press, Oxford and New York, 2012.
- See Tom Jewett and Rob Kling, 'The Dynamics of Computerization in a Social Science Research Team: A Case Study of Infrastructure. Strategies, and Skills', in Social Science Computer Review, Issue 9, 1991, p.246-75; Geoffrey Bowker, 'Information Mythology and Infrastructure', Information Acumen: The Understanding and Use of Knowledge in Modern Business, ed. Lisa Bud-Frierman, Routledge, London, 1994, p.231–47; Susan Leigh Star and Karen Ruhleder, 'Steps Toward an Ecology of Infrastructure: Design and Access for Large-Scale Information Spaces', Information Systems Research, Vol. 7, No. 1, Information Technology and Organizational Transformation, March, 1996, p.111-34.
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- See Kari Weil, Thinking Animals: Why Animal Studies Now?, Columbia University Press, New York, 2012; Paul Waldau, Animal Studies: An Introduction, Oxford University Press, New York, 2013.
- Cited in Star and Ruhleder, op. cit., p.112.

- Ibid.
- See Henri Lefebvre, The Production of Space, trans. Donald Nicholson-Smith, Blackwell, Oxford and Cambridge, Mass.,1991; Arjun Appadurai, ed., The Social Life of Things: Commodities in Cultural Perspective, Cambridge University Press, Cambridge and New York, 1986; Bill Brown, 'Thing Theory', Critical Inquiry, Vol. 28, No. 1, Autumn, 2001, p.1-22; Dilip Gaonkar and Elizabeth Povinelli, 'Technologies of Public Forms: Circulation, Transfiguration, Recognition', Public Culture, 2003, Vol. 15, No. 3, p.385-97; Bill Brown, ed., Things, University of Chicago Press, Chicago, 2004; Bruno Latour and Peter Weibel, eds., Making Things Public: Atmospheres of Democracy, ZKM and MIT Press, Cambridge, 2005; Bruno Latour, Reassembling the Social: An Introduction to Actor-Network-Theory, Oxford University Press, Oxford and New York, 2005.
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- 10 Ibid., p.34.
- Elizabeth Grosz, 'Histories of a Feminist Future', Signs, Vol. 25, No. 4, Feminisms at a Millennium, Summer, 2000, p.1019.
- Ibid., p.1021.
- Canguilhem, op. cit., p.xviii.
- 14 Frow, op. cit., p.35.

Docking Infrastructures

All traffic, at one time or another, has to pass through a dock. A dock is a medium of exchange, not only as a passage of intersection, but also in its transformative impact on material forms and their distribution in time and space. All that leaves a dock has changed. Nonetheless, it guarantees connectivity. How this connectivity is produced is the topic of this short essay.

The following preliminary collection of ideas and remarks on docks and infrastructures of exchange circles around three aspects of, generally speaking, operations of containment: the temporality of docks as storage, the standards necessary to maintain them as media of distribution, and the logistics employed to control their contents. Historically, these three elements of containment cannot be separated. Containerisation has become an indispensable characteristic of globalised infrastructures. It ensures transfers, transportation and distribution, but has to be differentiated into separate operations. A closer look at these interrelations will give an idea of the current changes in docking triggered by new media of tracing and tracking.

In order for goods, humans or data to come and go, they must be stored at some point in the process of transportation. To be a site of storage, the dock has to be a place of exchange between different orders and modes of transport. Each dock necessarily has its own transportation system to deliver whatever arrives according to its models of distribution. Thus a dock is a place where objects are classified and categorised. It is, in other words, the unexchangable basis of exchange, because it connects and distributes by setting standards, storing and controlling. Modes of production may differ, travel may develop new forms, and data transmission may have new media, but they all rely on networks with nodes at which processes of docking take place. But a dock is more than a node: it is a place of identification, control, connection and separation. It might not be iconic, but the dock has become one of the central spaces of the late nineteenth and twentieth centuries. At a time of increasing global traffic, declining needs for long-term storage, and facing new technologies of control, its status in the twenty-first century still has to be determined.

As a port of exchange, a dock serves as a site of storage for goods, humans or data that are scheduled to be transmitted or transferred to another place, even if they pass through it in a few seconds. As such a place, a dock provides a temporary storage that is in itself continuous, since it is continuously on the run. It is continuous in its temporary character. Imagine a warehouse, imagine a port, imagine a library, imagine perhaps even a kitchen ... Storing involves more movement than the resting objects, containers or packages would suggest. Everything has to be controlled steadily. To have objects available, the docking operators need information to monitor their position. The position of every object has to be recorded constantly in order to be available at any given time. In its ideal form, since it is never omniscient, the dock should be the opposite of a black box.

In a wider sense, every transmission needs storage for processing, and thus docks are essential for all exchange. Because all transmissions happen in time and are never instantaneous, the object that is transmitted (a good, a person, or data) has to be stored somewhere because it cannot be in two places at the same time. In this sense, though they might *transmit* them, a cable stores electricity and a ship stores containers. A computer needs both a hard drive and memory, because it cannot deal with all bits at the same time. Consequently, a dock has a specific mediating and containing function in time.

A dock serves as a point of entry or exit, of arrival or departure. Every object that enters a dock must have special properties or attributes. The dock is a place of standards, norms and protocols. It needs gatekeepers. There have to be strict rules about what is allowed to enter or leave and about the forms that are compatible. Not everything can be contained in a dock in its natural form. For this reason, containers, passports and binary code are the most prominent standards of docking.

Furthermore, and in a historical perspective, in this function of distribution and standardisation docks are closely related to what James Beniger called the 'control revolution'.¹ In different forms they are bound to the birth of capitalism as a global circulation of goods and people. Nineteenth-century docks show how material wealth has become synonymous with the emergence of global transportation. In the late twentieth century, storing large amounts of goods became inefficient and the tendency was to free goods from the needs of storage in order to accelerate the rates of exchange. Consequently, production modes like *on-the-fly* or *just-in-time* used the dock as a short-term storage: the shorter the objects stay in the dock, the higher the economic benefits. Nonetheless, the process of docking is necessary for a functioning economy. Still today – maybe even more than ever considering the global interconnectedness of trade routes – the operating grade of docks is a

strong early indicator and symptom of the economic situation. As every good has to pass docks, they are one of the few places to observe and inscribe what circulates. They reflect the changing rhythms of capitalism, and while their importance as sites of storage decreases, they gain more influence as a site of passage due to new technologies of distribution and tracking.

A dock needs an inventory that registers the structure of ownership of all the objects stored, and it also needs a directory of the destinations of these goods. Since they circulate not only on their global routes, but also inside the dock, and since this circulation is unobservable in its temporal character, recording and inscribing become feasible solutions for emerging needs of control. Put another way, the history of docks remains shallow without taking into consideration the history of accounting and bookkeeping, as Swiss historian Monika Dommann has elaborated.² The repository needs a memory. Its scope reaches from inventory books and file cards over early computing flowcharts to barcodes, GPS-coordinates and RFID-tags (radio frequency identification) today. As these technologies became more and more sophisticated, it became more and more possible to follow the tracks of individual containers or even to trace individual packages equipped with a code or a tag. Today, no good is shipped without one of them, and each container has a unique RFID-tag that identifies its contents, destination, owner and other information. This tag can be read from a distance without actual access to the container.

When confronted with such technologies, we are witnessing a revolution in global and local distributions and circulations due to locative media, new trade routes and adaptive infrastructures. The space of the dock has to adapt to all these changes, while it also allows us to investigate these histories of distribution as a key element of globalisation. In this sense, the dock and its current transformations are both a sign and a symptom of the seemingly invisible circulations that are happening all around us, for us, and even with us. But despite the new developments of tracing and tracking, docks have been around for some time. Their history shows that while we may think that distributions and circulations are specific to twenty-first-century societies, docking is in fact deeply embedded in our self-understanding. It is, in other words, an elementary cultural technique.

James R. Beniger, The Control Revolution. Technological and Economic Origins of the Information Society, Harvard University Press, Cambridge, 1986.

² Monika Dommann, 'Wertspeicher. Epistemologien des Warenlagers', Zeitschrift für Medien- und Kulturforschung, No. 2, 2012, p.32–50.

Elevation and Cultural Theory

Cultural theorists and political scientists have emphasised a number of categorical ways of figuring specific social agonisms. In recent years, cultural theory has foregrounded general concepts such as mobility and space, or identity categories such as race and gender. The globe is sometimes divided into east and west, or the global north versus the global south. But little attention is given to elevation and the role it plays in generating or being co-constructed by the social. In this brief meditation, I will explore some possibilities for elevation and cultural theory. In particular, I foreground two case studies as exemplars for future research: elevation and sea-level rise resulting from global climate change; and elevation and its historical relationship to nonstate spaces or resistance to the state form.

The concept of elevation is often confused with terms such as 'altitude' and 'height', even in specialist publications.¹ Elevation refers to 'the vertical distance between a point on the land surface and a reference point, usually taken to be the mean sea level.' Altitude, on the other hand, refers to 'the vertical distance between an object ... and a reference point or stratum, where the object *is not in* direct contact with the reference point/stratum'; think of an airplane. Height measures the vertical distance between 'the top of an object ... and the land surface, where the object *is in* direct contact with the ground'; think of a building. So, unlike altitude, elevation refers to geographic locations on the surface of the earth; and unlike height, elevation is not measuring an object on the surface of the earth. Of course, this definition is strictly geographical and positivist.

Elevation has recently become a more significant concept for cultural analyses primarily because of anthropogenic global climate change and the concomitant rise in sea levels, which is primarily attributed to melting polar ice caps in Greenland and Antarctica. Over the past 140 years, global average sea levels have risen approximately 195mm.² Recent studies suggest that sea levels are rising about 60 percent faster than anticipated by the Intergovernmental Panel on Climate Change (IPCC) in 2007, or an annual increase of 3.2mm.³ Scientists from the British Antarctic Survey and University of Bristol recently declared that there is a 5 percent chance that melting ice could ultimately add 84cm to sea levels.⁴ Sea-level rise until at least 2050 has already been determined by historical greenhouse-gas emissions, setting aside, of course, any sudden accelerations of the process due to feedback loops; contemporary emissions will determine sea-level rise beyond 2050. In other words, the material tendencies related to anthropogenic warming and sea-level rise for the coming decades cannot be changed by human activity.

Cultural theorists should therefore be examining the power differentiations created by elevation. Sea-level rise is not a homogeneous phenomenon with universal consequences for all coastal regions; nor are its impacts limited to coastal regions. Parts of Asia and Africa, for example, will be much more affected by sea-level rise than other parts of the world. Therefore, in addition to factors such as imperialism, racism and capitalist globalisation, elevation is also a critical concept in understanding culture, as the sea levels rise and new forms of precariousness and migration emerge, and new infrastructure projects protect, connect or segregate populations. For example, Nicholas Stern, economist and Chair of the Grantham Research Institute on Climate Change and the Environment at the London School of Economics, predicts that climate change will make 'hundreds of millions homeless'. 5 Bangladesh faces a host of catastrophes as a result of sea-level rise, which include flooding, salinity and high tidal waters that could displace millions: 'Experts say a third of Bangladesh's coastline could be flooded if the sea rises one meter in the next 50 years, creating an additional 20 million Bangladeshis displaced from their homes and farms.'6 Elevation could be the difference between life and death, land on which to live or permanent displacement as a climate refugee. Huge coastal urban centres will have to decide whether to commit resources to infrastructure that may provide greater resilience for the existing city, or whether to abandon certain spaces as hereafter uninhabitable.

Another powerful example of the relevance of elevation to the project of cultural analysis is in James C. Scott's book *The Art of Not Being Governed*. Scott misuses the term 'altitude' synonymously with 'elevation' to describe the region known as Zomia, which encapsulates 2.5 million square kilometres of land sitting from 300 to 4,000 metres above sea level and bordering five Southeast Asian nations (Vietnam, Cambodia, Laos, Thailand and Burma), northeastern India and China. Approximately 100 million people live in Zomia.⁷ It 'is the largest remaining region of the world whose peoples have not yet fully been incorporated into nation-states'.⁸ Scott describes these 'hill peoples' as 'runaway, fugitive, maroon communities who have, over the course of two millennia, been fleeing

the oppressions of state-making projects in the valleys – slavery, conscription, taxes, corvée labor, epidemics, and warfare.' The relatively secluded region of Zomia forms part of what Scott calls a 'history of deliberate and reactive statelessness'.9 'The mountains as a refuge for state-fleeing people, including guerrillas', writes Scott, 'is an important geographical theme'.¹⁰ While he clearly establishes that there is no inherent relationship between high elevation and what he calls 'nonstate space' – for example, in the Andes the states are in the hills and the nonstate space is in the lowlands – in some instances high elevations combined with 'inaccessible terrain' provide 'havens of refuge for peoples resisting or fleeing the state'.¹¹

It is important to reiterate that elevation should be treated by cultural theorists not as a fixed topographic reality, but instead as a site of convergence for different discourses, objects, and practices. Port cities constructed on the flows of global capitalism, for example, played major roles in the economies of exchange that transformed the climate. Now, some port cities will become contested spaces for gentrification projects and the intensified commitment to ecocidal capitalism. The Port of Liverpool is building a £350 million Deepwater Container Terminal for completion in 2014, which will double the current cargo capacity of the port, despite the peak and decline of global oil supplies, and despite the fact that, according to a UK report on sea level, from 1920 to 2011 the sea level at Liverpool rose 515mm and continues to rise. 12 From 2007 to 2011 alone, the sea level at Liverpool rose 236mm. At an elevation of only 70m above sea level, Liverpool is particularly vulnerable to climate-induced sea-level rise. But as a postindustrial port city, it must also address a declining population and precarious economy. The decision to build an even bigger port terminal with expanded capacity seems to obscure elevation in favour of the priorities of global capitalist flows. If elevation were treated as a cultural concept and not simply as an economic one - in the sense that the economic dictates of Liverpool's place in world trade compel its industrial elites to expand its port terminal in defiance of resource depletion and climate change - the debate surrounding its future may have included more sustainable options.

- 1 Tim R. McVicar and Christian Körner, 'On the use of elevation, altitude, and height in the ecological and climatological literature', *Oecologia*, Vol. 171, No. 2, February, 2013, p.335.
- John A. Church and Neil J. White, 'A 20th century acceleration in global sea-level rise', Geographical Research Letters, Vol. 33, No. 1, January, 2006.
- 3 LiveScience Staff, 'Sea Levels Rising Faster Than Predicted' LiveScience.com, 28 November 2012, http://www.livescience. com/25097-sea-levels-rising-faster-ipcc.html, accessed 7 August 2013.
- 4 Louise Gray, 'Sea levels rise could mean floods in London', *The Telegraph*, 14 May 2013, http://www.telegraph.co.uk/earth/earthnews/10056941/Sea-levels-rise-could-mean-floods-in-London.html, accessed 7 August 2013.
- 5 Quoted in Robin McKie, 'Climate change "will make hundreds of millions homeless", The Guardian, 12 May 2013, http://www.guardian.co.uk/ environment/2013/may/12/climate-change-expert-stern-displacement, accessed 7 August 2013.

- 6 Masud Karim, 'Bangladesh faces climate change refugee nightmare', Reuters (14 April 2008), http://www.reuters.com/article/2008/04/14/us-bangladesh-climate-islands-idUSDHA23447920080414, accessed 7 August 2013.
- 7 James C. Scott, The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia, Yale University Press, New Haven, 2009, p.ix.
- 8 Ibid
- 9 Ibid., p.x.
- 10 Ibid., p.xi.
- 11 Ibid., p.13.
- 12 'UK Sea Level', UK Department of Energy & Climate Change, 26 June 2013, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48651/1719-summary-report-on-sea-level-rise.pdf, accessed 7 August 2013.

An Exercise in Understanding Distance

I was born and raised in the coastal city of Tianjin. My father is a harbour construction engineer. From when I was two, he worked away from home for long periods of time, only coming back once or twice a year, each time for a brief week or so. The rest of the time he lived on construction sites by the sea. As a child, my favourite pastime was to walk to the coastline a couple of blocks from home and watch the sea for hours on end. Water holds and embodies a distance that one can grow beguiled by, comfortable with, and dependent upon. From there I imagined his surroundings on the other side of the water: the rotational speed of concrete mixers, the way lumber was stacked, the distance between jetty poles, a grey land-sea-scape being slowly outlined into two definite spaces. During those years my father was away, the water united us as much as it separated us. I will always look at the ocean, knowing that many families like mine have worked for, with, and against it throughout their lives.

On 10 June 2013, I initiated a Skype interview with my father about his work. It was our first time talking on Skype, and by then I hadn't seen him for a year. The interview was conducted in Mandarin, which has been transcribed and translated into English.

XINRAN YUAN Last summer at home, I found this photo that you took in 2002. It caught my attention because this is the type of landscape I always imagined you working in: the intertidal zone, where the sea and the land become one – although I have to say, it looks as if it pre-dates technology. Why are the workers standing in muddy water, passing down stones to each other?

DESHUN YUAN This was during a land-reclamation project in Xiamen. In the photo, workers are clearing out rocks on what used to be an oyster farm. The rocks had to be picked out by hand before our cutter suction dredger could get in, so the blades wouldn't get damaged. The project was to create new land on which a high-end residential neighbourhood with an ocean view was to be built.

- xy Who are these people in the photo?
- They're actually the very farmers who worked on the oyster farms before. They were hired to remove the rocks.
 - xy That sounds laborious and sad at the same time: to leave a place their lives depended on and to abandon the very lifestyle while participating in the erasure of that place.
- As you can imagine, it was an extremely difficult negotiation, and there were a lot of politics involved, which wasn't rare for development projects like this. The residents in the fishing villages were given apartments in urban areas; some were given storefront spaces as well. Most of the fishermen made a good profit at the time. As a matter of fact, the type of fishing and farming they previously conducted was labour-intensive and lacked technology; they were only making enough to support their families. After the port was finished, the city quickly attracted businesses and factories, and a lot of jobs opened up.
 - xy How long did it take them to clear out the rocks?
- DY About two months.
 - xy Did you ever feel nostalgic about the landscape that was being altered, and about the disappearance of the types of labour dependent upon it?
- Well, that's a difficult question to answer. Many types of labour and lifestyles are dependent on the ocean; ports bring opportunities and development to places in a way fishing boats don't. Most of the families that were relocated still worked in related jobs. A former fisherman would open up a seafood store, for example.
 - xy What would you do if you no longer designed and built ports?



- DY I don't know! I've never thought about that. I really have no idea.
 - xy Can you list all the projects you've worked on over the years, and the timeline of each?
- Yes. I was in The Port of Yingkou, Liaoning, from 1984 to 85; Port of Tianjin from 86 to 92. From 92 to 97 I was in Zhuhai, Guangzhou, where I worked on Gaolan Port and its coal terminal, as well as the LPG terminal and the oil terminal of Shenzhen Port. For the five years afterwards I worked on the expansion of Port of Tianjin. And then from 2002 to 07 I was in Xiamen, designing and building the island's ring road and container port.
 - xy I want to know more about life on those construction sites.
- Well, it was perhaps not as fun as you imagine. Typically, when we arrived in each place, it was a bare, muddy coast. We built temporary dorms and offices, laid down electricity wires and water pipes, and in most cases built roads as well, so trucks and machines could come in. Everything was meant to be temporary, because no matter how many years we were to work on the site, we needed to remove everything when we left. And of course, nowadays living conditions on site have improved so much compared to when we first started working in the industry.
 - xy Have you been back to some of these ports since they were completed?
- Not to all of them, but some. I went back to Yingkou in 1997, nearly fifteen years after the port was completed, and the city was nothing like I remembered it. It was even more shocking to visit megacities like Shenzhen and Zhuhai, which by the time I left were still just small fishing towns with ports newly finished big, empty, concrete platforms waiting for machines and boats to come in. Nowadays, they're among the busiest ports in the world, and the cities themselves too.
 - xy Growing up in a coastal town and visiting you on harbour construction sites has definitely influenced my aesthetics and interests. Do you think your work environment has shaped your personality?
- Yes. Having worked in so many places has definitely made me see the world in a more open way, adapt to new environments more easily, and it's made me more adventurous.
 - xy What made you choose this career?
- DY I don't remember it being a difficult decision. I've always known that I wanted to work and live on the coast, because of what the sea brings: an open culture and economy, connections with the rest of the world.
 - Well, I'm glad you're finally enjoying living in a coastal city, after years of living in temporary houses on the coastlines of the cities you were helping to build.



Reading Infrastructure. Theme Park in Paradise

Riding my bike between Banff and Canmore allows me to appreciate the physical experience of crossing the border of the Banff National Park. Unlike Banff, Canmore is no longer part of the park; the 1930 National Park Act deemed the town's mining activities inappropriate and excluded the village from the park.

I follow the new bike path along the Trans Canada Highway, which runs parallel to the railway tracks. Large fences are installed to protect crossing wildlife from the traffic. Or, given that I'm now in a non-park zone, are the fences there to protect crossing traffic from the wildlife? In questioning such territories and their rules, these infrastructural interventions become surreal. The message is highly legible: humans have to protect nature against humans in order to protect their own species.





When the last coalmine was shut down in South Alberta's Cascade Basin in the late 1970s, the park's landscape was given a new look geared towards a large-scale, all-season sport and recreation site. Shopping malls, hotels and restaurants characterise the region as much as recreation parks and facilities. The landscape has been adjusted to the demands of modern leisure life. This conflicts with the original idea of the National Park, which was to protect the land and its ecosystems within a restricted area. This tipping of the balance towards controlling (for economic purposes) instead of protecting nature, contains an antagonism that seems, to some degree, rooted in the history of this area.

Cascade Basin has provided opportunities to exploit natural resources since the early 1880s, when the Canadian Pacific Railway (CPR) was built. This made a big impact on the environment that was consolidated in the 1860s, when miners invaded the region; the first coalmining operations opened in Canmore in 1887. The coalmines from Banff and Canmore fed the railway system and in addition fabricated briquettes for the growing population. Cheap labour was needed and was carried out mainly by migrant workers.

The CPR's general manager, William Cornelius Van Horne (1843–1915) declared: "If we can't export the scenery, we'll import the tourists." With the objective of financing the railroad, in 1887–8 CPR built the Banff Spring Hotel, which became, together with the Banff Hot Springs, a major tourist attraction. The founding of Banff National Park also boosted the establishment of the new tourism industry, designed to appeal to sportsmen and tourists. One result was that the Stoney Tribe was forced to leave the park and was moved to a reserve near Morley.







Back in Banff, these historical narratives are replicated in the village itself, which now resembles a theme park. I photograph its streets, bearing witness to the strange infrastructures that mirror the city's struggle to simultaneously expand and collapse, its attempt to broach the difficult relationship between Banff National Park and its principal industry: touring paradise.









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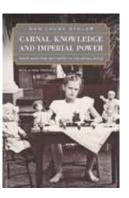
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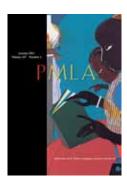


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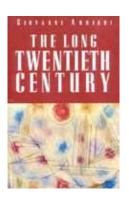


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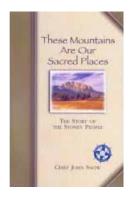
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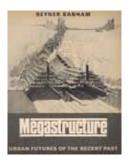


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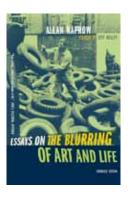


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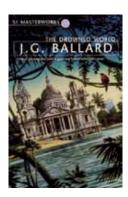
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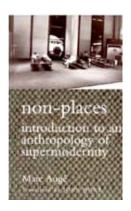


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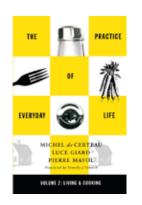


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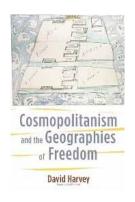


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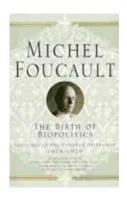


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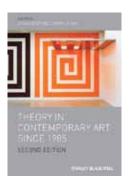


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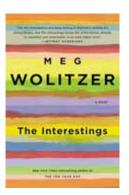
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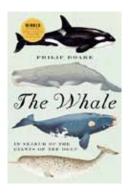


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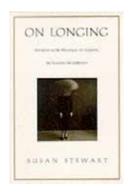


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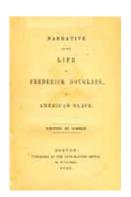
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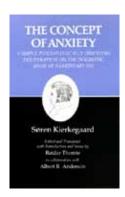


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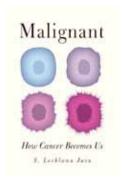
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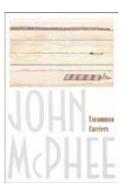
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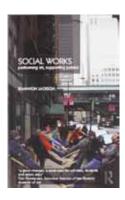


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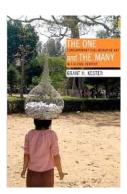


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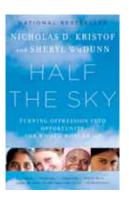
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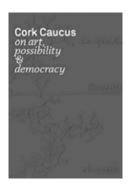


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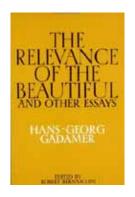


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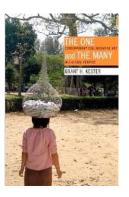


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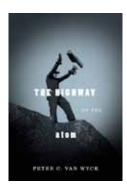


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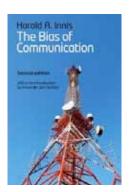
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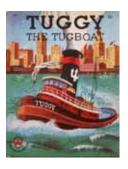


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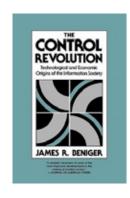


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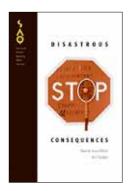
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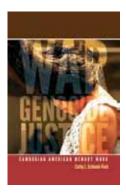


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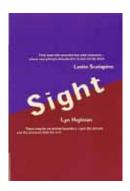


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As Assistant Professor of English and Cultural Studies at McMaster University, Nadine Attewell works in and across modernist literary and cultural studies; postcolonial, indigenous and settler studies; and gender and sexuality studies. She is the author of Better Britons: Reproduction, National Identity, and the Afterlife of Empire and is currently researching the experiences and identity projects of mixed-heritage people of Chinese descent in late imperial contexts, focusing on the port cities Hong Kong, Liverpool and London.

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Brent Bellamy is a PhD Candidate in English and Film Studies at the University of Alberta. His dissertation, Residues of Now: The Culture and Politics of Contemporary US Post-Apocalyptic Fiction, examines this fiction as a residual form of science fiction and as one that, rather than narrating the difference that difference makes, imagines the difference that makes no difference at all. He also authors notesfromaftertheend.blogspot. com and doesn't really like zombies.

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In her art Eva Castringius overlaps the painterly, cinematic and photographic views of landscapes today and produces new constellations of architecture and landscape. Her artistic work shows places whose natural vegetation and topography are reshaped and altered through the use of machines. These landscapes – resources for human need – exist in processes of permanent dissolution and re-formation that can be understood as scenarios of the future that are as threatening as they are fascinating.

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Morgan Charles is a PhD candidate in Communication Studies at McGill University. Her dissertation research focuses on the cultural history of concrete in Montreal, treating the material as a vector through which cultural forms, aspirational politics, desire and memory are constructed, negotiated and challenged.

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Jeff Diamanti studies the recent history of property and is a specialist in architectural theory, cultural theory and urban studies. His dissertation, entitled *How We Build Today: The Cultural Work of Architecture in the Age of Intangible Assets*, frames the emergence of postwar growth theory in political economy, urban development policies and international accounting practices in order to resituate the work of culture as a mediator of conflicting genres of value in transitioning and graduated economies.

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Ryan Ferko utilises video, sculpture, sound and installation as methods in his exploration of the urban environment. This work emerges as an extension of his training as a historian, his research and critical writing exploring the history of architecture, and how it relates to Canadian cities and identities. His current projects focus on Leslie Spit, the PATH Underground and Ontario Place as 'non-places' in Toronto where he is completing his MA in Interdisciplinary Art, Media & Design at OCAD University.

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Emilie St.Hilaire is a French Canadian intermedia artist and MFA candidate currently using video and installation work to explore the ways in which digital technology and social media influence interpersonal relationships and self-perception. She is interested in exploring the potential of art outside of institutional contexts. How can networking tools be utilised to deliver information and incite creative thinking that prompts action and collaboration?

Kate Hoffman

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Kate Hoffman makes paintings, sculptures and installations that explore the social impact of time, site and experience. Her current project examines the historical connection between the migration paths of whales, the Underground Railroad, abolitionists and the effects of the Quaker's whaling empire over these systems. In addition to the dock's role as a literal site of exchange within her current work, Hoffman is interested in expanding upon the idea and potential of the dock as a liminal space.

Ada Jaarsma

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Dr Ada Jaarsma is a feminist philosopher whose research focuses on the intersections of social theory and continental philosophy. She has become increasingly interested in the existential significance of risk, particularly for biopolitics and queer theory; her current project translates Søren Kierkegaard's nineteenth-century existentialism into post-secular critical theory.

Fiona McDonald

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Fiona McDonald situates her practice at the interface between art and architecture. Making site-specific architectural interventions, functional objects, works on paper and films, McDonald attempts to expand our awareness of socio-economic development associated with place, and explores the potential inherent in alternative considerations of space, materials and economic exchange. She has a Bachelor of Architecture degree from University College Dublin and an MA in Visual Arts Practices, Institute of Art, Design and Technology, Dublin.

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Rafico Ruiz is a PhD candidate in Communication Studies and the History & Theory of Architecture at McGill University, and holds a Bachelor of Arts in English Cultural Studies from McGill University, and a Master's degree in French Cultural Studies from Columbia University. His dissertation examines the Grenfell Mission of Newfoundland and Labrador as a project of social reform. He is also the co-editor and co-founder of Seachange, a journal of art, communication and technology (www.seachangejournal.ca).

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Logan Sisley is a New Zealand-born curator living in Dublin, Ireland. He currently works as Exhibitions Curator at Dublin City Gallery The Hugh Lane. He is currently researching the 1914 Civic Exhibition, which was inspired by the work of Scottish biologist and town-planner Patrick Geddes and which proposed strategies for urban renewal in Dublin at a time of considerable poverty and political instability.

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Florian Sprenger is Postdoctoral Researcher at the Digital Cultures Research Lab at the University of Lüneburg, Germany. He investigates the history and epistemology of electrical cables, switches and plugs in relation to architectural changes in domestic buildings around 1900. By taking into account these small and inconspicuous media of technical infrastructures, he seeks to develop a new perspective on the current technological condition of ubiquitous computing, smart media and intelligent environments.

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Imre Szeman is Canada Research Chair of Cultural Studies and Professor of English and Film Studies at the University of Alberta. Recent books include *After Globalization* (with Eric Cazdyn, Blackwell, Oxford, 2011), *Contemporary Literary and Cultural Theory* (Johns Hopkins University Press, Baltimore, 2012, co-ed), and the third edition of *Popular Culture: A User's Guide* (with Susie O'Brien, Nelson, Scarborough, 2012). His main areas of research are in social and cultural theory, globalisation and culture, and popular and visual culture.

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Dr Michael Truscello is an Assistant Professor in English and General Education at Mount Royal University in Calgary, Alberta. His research interests include post-anarchism, science and technology studies, and art and infrastructure. He is currently developing two book-length projects: one on technology and the anarchist tradition, from petromodernity to social media, and the other on art and infrastructure in the age of collapse.

Xinran Yuan

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Xinran Yuan's artistic inquiry focuses on the ocean, its space, stories and its industries: harbour construction, fishing, shipping, surveying. These days she is researching the North Atlantic herring crash during the 1950s and 60s, the ecological and geo-political issues that surfaced during the crash, and the deindustrialisation of former herring centres. She works closely with the fishermen of Skagaströnd, Iceland, making sculptures and videos in her studio at the University of Illinois, where she is pursuing her MFA.

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