Issue 30

Incalculable Experience

Edited by Lone Bertelsen

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FCJ-222 Introduction: Incalculable Experience

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We owe each other the indeterminate. We owe each other everything

(Harney and Moten, 2013: 20).

… What must remain incalculable is the very question of the being of relation. (Erin Manning, this issue)

The theme of the issue: *Incalculable Experience*, emerged in encounter with the work published here – articles and propositions by Erin Manning, Maria Hynes, Andrew Goodman, Susan Ballard, and Glen Fuller. That the theme wasn't preplanned but emerged from the experience of reading and listening isn't insignificant. Within this process there was an attempt to resist the pre-determining pretences of the neoliberal education system. Thought and research, reading and writing are activities whose value should never be determined in advance. Neither should their value be reduced to the post-determinations of metrics. In the words of Manning, their value must 'exceed the count'. The contributors to this issue, all with their differing concerns, engage with that which *exceeds the count* of neoliberalism and the individualism of a 'self-enclosed' humanism (da Silva in Desideri and da Silva, 2015: 5).

In 'Fugitively, Approximately' Erin Manning encounters the statement '*all black life is neurodiverse life*', made by Fred Moten in a manuscript review of her book *The Minor Gesture*. Manning suggests that '[w]hat is produced in the interstices is not an account of how black life *is* neurodiverse, or how neurodiversity *is* black'. Rather, it is 'the being of the relation itself that is prodded, not to create a count, but to better account for the incalculability at its core'. Manning emphasises that black life and neurodiverse life, as experiences of what Moten terms 'minor social life', are devalued and violently excluded when neurotypical whiteness – aligned with 'executive function'– is taken as *the* measure for what counts as human (Moten, 2018 in Manning). For Manning 'neurotypicality is nothing else than an articulation of whiteness at work'. In '*Fugitively, Approximately*', then, neurodiverse scholarship and black studies meet as Manning shows us the incalculable value of 'minor sociality'. For her minor sociality is 'a way of thinking' and living 'beyond rehabilitation, beyond a logic of reparations'.

In her departure from the calculated steps made by some of the major proponents of contemporary Design Thinking Maria Hynes also moves beyond 'a logic of reparation'. In 'Design Thinking, Design Activism, Design Study' Hynes suggests that the more major moves involved in the 'branding of Design Thinking as a form of social altruism' deny 'the diverse histories and trajectories of design and designers'. Pointing to histories of colonialism, slavery and poverty, Hynes uncovers how the 'popular image of Design Thinking as a form of altruistic intellectual labour rests on a debt/credit logic that' while 'claiming to remedy histories of social dispossession, inherits their logics and legacies'. Citing Harney and Moten (2013), she asks if the 'hyperinflated claims made by the brand of Design Thinking represent "the new way to steal from the stolen?"'. Hynes also emphasises that it 'is not that design interventions are without value'. The issue is that such interventions have to necessarily '*be* social', not simply involve 'interventions upon the social'. This must be acknowledged, writes Hynes, 'if they are to avoid the fundamentally asocial logic of debt and credit to which dominant social reality is oriented'. Following an uncovering of the problems – and at times cruelty – inherent in such logics, Hynes calls for a different approach. She terms this more social approach *Design Study*. For Harney, as for Moten, study is 'both a concept and a practice of determining what needs to be learned together, without objective or endpoint and without escaping the feeling that we are in a mutual debt to each other' (Harney, 2018 in Hynes). The value of this mutual debt, which Harney and Moten also term 'bad debt', is 'incalculable' (2013: 61).

By way of providing a contemporary example of 'what it would mean to appropriate the idea of design toward collective practices of being differently indebted' Hynes looks to the Boston based Design Studio for Social Intervention (DS4SI). Hynes is drawn to the Design Studio's 'experiments of living otherwise'. She writes that these could be understood to 'approximate study not simply through a new form of sharing but by actively and performatively refusing the logic of credit amongst others, through the deep sociality of bad debt', which is *study*.

As I understand it, study, in Harney and Moten's terms, involves a mode of living that is immanently social. Study doesn't conceive of sociality in terms of relations between *self-enclosed* subjects. Study is an activity that lives in the sociality of 'in-separable difference' (da Silva in Moten and Tsang 2016: 45). Its value cannot be calculated.

With Andrew Goodman we move from a focus on design to sound. By way of Alfred North Whitehead's notion of 'the one definite note' Goodman takes us to the incalculable quality of the experience of audition. In 'One Definite Note and the Anarchic Share of Listening' Goodman investigates the experience of listening in the light of Whitehead's process philosophy. According to Whitehead 'the note itself and the act of listening to this note are, while related, independent events'.

Goodman's process oriented approach could be characterized as ecological rather than representational. This approach does not conceive of data (the note, for example) as passively perceived but as *actively prehended*. 'What you listen to or what you're reading is still moving and still living. It's still forming' (Harney and Moten, 2013: 107). The performance of a note never simply repeats – it only repeats with a difference and thus for Goodman 'audition is itself an ecological act'. He also argues that the audition of the note cannot really be archived. Rather, the 'simple audition is an act of anarchiving in that it selects from a complex history and reactivates some of the data within new events'. This kind of activation involves 'an adventure into the unknown, into' the future novelty of the world. Goodman gives an account of how such novelty emerges in Alvin Lucier's 2016 performance, *SO YOU (Hermes, Orpheus, Eurydice).* Here the ancient wine jars, which are a part of the performance, play an active role. Goodman writes:

> the jars might be thought of as decidedly non-human auditors as much as they are
> musicians, actively listening to and anarchiving the vibrations present in the room. The

jars tell us that we should not suppose that audition is, in some senses at least, an activity reserved for human or even animal ears, even if that very small fraction of listening that is most literally conscious perception might be found only in the animal kingdom.

Susan Ballard also engages with the non-human. In '"And they are like wild beasts": Violent Things in the Anthropocene' she considers how we might think about violence in relation to the status and effects of objects and art in the age of the Anthropocene. Ballard raises the question of the responsibility of objects and suggests that their effects cannot really be accounted for within the realm of humanist frameworks. Ballard considers the incalculable violence done to the planet by way of a consideration of several artworks. She also looks to the little known and fascinating 'common law of deodand that existed in England from 1066 until 1846'. On a more philosophical level, Ballard draws on Anne Conway's philosophy. She cites Carol Wayne White (2008) on Conway:

> [I]n every creature, whether the same be a spirit or a body, there is an infinity of creatures, each whereof contains an infinity, and again each of these, and so ad infinitum)'. (in Ballard, this issue)

Ballard explains that in Conway's philosophy the 'nonhuman is not reducible to what the human can know about it. Rather the understanding of matter that was central to Conway's development of the notion of the monad was not about enfolding (as it was to be with Leibniz)'. It was about 'the "aliveness" of matter'. Ballard also engages Spinoza's *Ethics*, Jane Bennett's vital materialism, and Deleuze and Guattari's philosophies of affect. Her poetic writing takes the form of a speculative essay – she calls it 'a critical melodrama'. Resisting any one definite answer to the questions involved, Ballard instead offers us a variety of ways of thinking about the material vitality of things in their relation with other things. The hope is that this may prompts us to think seriously about how to act and become in the contemporary world. It seems more pressing now than ever to fully acknowledge that agency and the vitality of life and matter do not belong to the experiences of the human alone. Thus in '"And they are like wild beasts": Violent Things in the Anthropocene' Ballard situates the artworks and object under consideration within their material networks of relation. She suggests that they do things: 'actively generate' and 'change behaviours'. Ballard refers to her approach as

genealogical. Hers is the kind of transdisciplinary art history and study that involve a tending to the larger 'political ecology of' the art, objects, and relations under consideration.

The two shorter propositional pieces – one by Glen Fuller the other by Erin Manning – raise different concerns regarding the neoliberal university.

> To contend with the contemporary university is to engage on two fronts: to consider how to address the deep inequities for thought and economic survival brought about by the corporatization of the university, and to consider how the foundational exclusionary model of the university is prolonged and exacerbated by its neoliberal turn. What forms of resistance does the corporate university quell? What modes of thought does it silence? (Manning, this issue)

In 'Survey and Project: On the (Im)possibility of Scholarship in an Era of Networked Knowledge', Glen Fuller focuses on scholarly research in the networked era of abundant publishing. His concern is that the contemporary 'focus on producing something that can be measured (and managed) has transformed the character of the scholarly activity of publishing'. He writes that even though 'The journal article may not be the best way of disseminating research…it is the best way for big publishers to measure the impact of journal articles in ways that reproduce social hierarchies of so-called "impact"'. Fuller objects to the obsession with impact, measure, citation, hierarchy, 'ranking systems', and 'disciplinary clusters'. These too often form the basis for how the value of scholarly work is perceived.

Fuller's particular concern here is for the contemporary research student – in particular the PhD project, which in Australia now has to be completed in 3-4 years. Not only is there such an abundance of published material that it becomes almost impossible to adequately perform a literature review of one's topic, Fuller argues that the 'neoliberal model' also seeks to encourage the production of 'passive affections' in regard to the actual research. He writes that '[d]isciplinarity becomes a solution, but one that enables scholarly production by, at a minimum, hobbling curiosity'. Fuller proposes that

> [r]ather than the coordinates of the project being determined by the administrative burden of measurement and correlative productivity according to maximum gradients of anxiety (the neoliberal academic model), what if the 'project' was configured as an

instrument for suspending practices of discovery according to the maximum gradients of curiosity (the post-neoliberal academic model)?

Fuller's approach aims to foster 'active affections'. With it the value of 'scholarly activity' could *escape the count* of neoliberal measure. I think that it would also foster *study*.

In 'University, *Universitas*' – with which this issue of the *Fibreculture Journal* closes, Manning explains that

> [w]hen study happens, when an undercommons of thought reveals itself, it is not because the university has fostered it. It's because an enclave has grown in resistance to all the university devalues.

Following a concise overview of the founding of the university, Manning shakes the very foundations upon which the contemporary corporate university rests.[1] These include: racism; classism; ableism; colonialism; sexism; and neurotypicality. Manning makes clear that '[t]he corporatization of the university under neoliberal capitalism exacerbates its exclusionary framework by integrating the university more firmly into the economy'. She asks how a 'shift from the enlightenment model' could happen 'without giving in to the market-driven one'. It couldn't happen within a 'corporate logic', according to Manning. And it is never a question of a simple inclusion of the excluded into the university. Although a paradigm based on inclusion may be well intended, Manning argues that it doesn't actually challenge 'the normative center' of that into which the excluded are supposed to be included and absorbed. This is because 'the neurotypical logic at the heart of the university's universalizing mandate actively excludes other ways of knowing'. Manning therefore calls for deschooling. Deschooling is different in that it involves 'a refusal of the universal'. Also, for Manning 'to deschool is to decouple thought from the market of knowledge'. Drawing on Ivan Illich (1970) she suggests that this decoupling 'requires a "deinstitutionalization of value"'. It requires study, and in closing Manning proposes that 'a redefining of the university could begin … in the interstices where the studying has already begun'.

Before finishing I want to thank the authors of this issue of the *Fibreculture Journal* for the incalculable value of their work. This is work that stays 'with the trouble' (Haraway, 2016) and shows us that

[t]here are things to do, places to go, and people to see in reading and writing – and it's about maybe even trying to figure out some kind of ethically responsible way to be in that world with other things. (Moten in Harney and Moten, 2013: 108).

Bibliographical Note

Lone Bertelsen works across the fields of social and feminist thought, photography, art and media studies, ecosophy and 'activist philosophy'. Her writing has been published in *The Affect Theory Reader*, the *Fibreculture Journal, Immediation: Art, Media, Event*, *Performance Paradigm*, and *Theory, Culture and Society*. She is one of the editors of the *Fibreculture Journal.*

Acknowledgement

Notes

[1] Where Fuller in part looks to Australia, Manning stays closer to the North American situation.

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FCJ-223 Fugitively, Approximately

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Two phrases haunt my thinking. The first comes from Fred Moten: *all black life is neurodiverse life.* It might also have been *black life is always neurodiverse life*. The second is *approximation of proximity*. The feeling is that the ambiguity of memory in the first has a connection to the approximation of the second. Moten's words, written in a manuscript review before the publication of *The Minor Gesture* in 2016 felt vitally important when I received them. But *The Minor Gesture* was already too close to completion to fully carry the force of the proposition, and so, while I did signal it in the book, I decided to make Moten's words the fugitive force of the thinking to follow. I say fugitive force both to carry forward Moten and Harney's concept of fugitivity, and to emphasize that this is how work comes into itself: with the quality of a reorientation moved by a spark that connects to an intensity already moving transversally across a work. This is what Moten's words did: their deep thinking-with exposed the stakes of what stirred as yet unthought in the thinking. This fugitivity at the heart of thought is what I

want to address here. For what Moten's words did at that singular moment of writing/thinking was create an opening for thought to travel in directions as yet in germ.

This kind of proximity is something else than citation. How can I properly cite Moten when I am no longer even certain which phrase it was that changed the path of my research? An approximation of proximity might be said to be an alliance with thought-in-the-making, an engagement with the edges of how thinking itself does its work. This is what I heard in Moten's gesture: that there was space for a thinking-alongside that could bring into relation the concept of black life and the claim that neurotypicality is nothing else than an articulation of whiteness at work. That there was in the work of *The Minor Gesture* an incipient potential for neurodiversity and black life to come into alliance in a way that would not reduce them one to the other but generate a complementarity. The generosity of the thinking-with extended by Moten in his engagement with *The Minor Gesture* is what lured the writing-to-come into the proximity of black life, an approximation since there can only be a speculative engagement with a question as complex as the one of black life, especially when written from outside the culture of its sociality.

The task was gargantuan. It involved acquainting myself with decades of Black Studies to explore within this rich literature openings toward the complementarity of black life and neurodiversity. It also involved returning to the field of neurodiversity to explore whether the terminology of the neurological was really where I wanted to situate the discussion. It had always been clear to me that the *neuro* in neurodiversity was not, for the most part, the site of my inquiry: my work has aimed to sidestep the neuroreductionism that I believe shuts down the political and social force of the movement for neurodiversity. While much of my work on autistic perception *does* emphasize neurological difference, and while I am certain that neurological difference *is* a formative effect in the variation designated by the term neurodiversity, my interest is in the diversity *in* diversity, locating the neurotypical not as the measure of an individual diametrically opposed to the neurodiverse but as the (unspoken) baseline of existence. I see neurotypicality as akin to structural racism – as the infusion of white supremacy in the governing definition of what counts as human. The assumption that neurotypicality is the neutral ground from which difference asserts itself (an assumption everywhere supported by the neuroscientific literature) suggests that there is still an urgent

conversation to be had about how the human, and knowledge as human category more broadly, is organized and deployed in the image of neurotypicality. The decision to continue to work with the neuro in neurodiversity is therefore less an alignment to the neurological per se than an engagement with the presuppositions of neurology as a science for and of the (neurotypical, white) human that far too rarely call into question the assumptions that underlie either its humanism or the categorical imperative to perform according to its normative expectations. To address this is to continue the work I began in *The Minor Gesture*, the work of questioning the volition-intentionality-agency triad at the heart of neurotypicality, that presupposition of (white) existence that places individual executive agency as the motivator of all experience. What of the *agencement* of forces that compose to facilitate an event's coming into expression? What of the being of relation? A deep commitment to the sociality of facilitation is at work in my refusal of neuroreductionism, pushing back against the neurotypical presupposition that to do it alone, to do it individually, is to be truly human.

Writing diagonally across this question, Moten addresses that most baseline of neurological apparatuses: executive function. If executive function, the site of planning in the brain, is altered by a neurological twist, must the assumption always be that this results in a lack of capacity simply because the work at hand requires facilitation? What value-system is at work here? What is formulated about the value of independence? 'Black Study', Moten writes, 'moves at the horizon of an event where certain instruments, insofar as they can no longer either calculate or be calculated, are bent toward the incalculable' (2018: 162). The incalculable here is the very question of value. 'The assignment of a specific value to the incalculable is a kind of terror. At the same time, the incalculable is the very instantiation of value' (2018: 169). Across the thought of value and the incalculable I hear: what might be learned from the fugitive planning of neurodiverse modes of sociality, and how is this sociality allied to Black Study? What is planning's approximation in that encounter? What are the consequences of even assuming that the form of planning we understand as executive function, that planning that defines human volition as lone contributor to existence, is a value (has a value) in itself? How does fugitive planning accommodate the kind of being of relation that not only supports facilitation but actively seeks it out?

Moten doesn't lay any of this out the way I am doing it here – a too-quick read of the powerful chapter from *Stolen Life* I am thinking-with would probably not reproduce, for most readers, the stakes I am outlining. The diagonality with which the issues are addressed is part of Moten's project, however. For to give in to an executive way of writing about executive function would be to support the value-system it depends on.

A diagonal approach allows the unanswerable to remain unanswerable: neither in my engagement with executive function nor in Moten's work is there the presumption that executive function does not have a vital place in existence. This not only because executive function really *is* affected in autism and in certain other neurodiverse forms of life (schizophrenia, ADD/ADHD, Tourette Syndrome, OCD),[1] but also because, after being treated for decades as cognitively deficient, it is often a relief for autistics to map their difference onto executive function. Nor does this engagement with executive function and Black Study mean to suggest in any way that black folks in general have impaired executive function – such a claim would be ludicrous. The aim is altogether elsewhere: to underscore the relation between executive function and whiteness through the prism of neurotypicality's adhesion to an unchecked narrative of superior functioning. To explore how neurotyicality, as a largely unspoken category of existence that nonetheless undergirds every decision made in the name of normopathy, performs a continual selection of who is valued, of who is recognized as truly human. The aim is this: to inquire into how black life, or black sociality – which is to say modes of life that include but also exceed epidermiality – practice a fugitive planning that is in alliance with neurodiverse sociality, and outline how this fugitivity upends the presuppositions executive function carries.

And so to write diagonally is, in a sense, the only way to write about this, and this is what I take to be Moten's ethos in tackling the assumptions that come with the positioning of executive function as that which makes us truly human. Continuing on the diagonal, I follow Moten's lead:

> *This is an enthusiasm. This is the new thing and a lot of what it's about is just trying to figure out how to say something. How to read. Not (or not only) how to offer a reading, or even an interpretation, but a performance of a text, in the face of its unintelligibility, as if one were forced/privileged to access some other other world where representation and unrepresentability were beside the point, so that the response to the terrors and chances of*

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history were not about calculation, not bound to replicate, even in a blunted and ethically responsible way, the horrors of speculation, where new materialities of imagination were already on the other side of the logic of equivalence.

[...]

I'm trying to talk about zones of miscommunication + areas of disaster + their affective ground and atmosphere and terrible beauty. They're the same but really close to one another but unbridgeably far from one another, connected by some inside stories we keep running from, the way people flee a broken park when the island is a shipwreck. The crumbled refuge is a hold and a language lab. (2018: 167-168)

The problem with neurotypicality as unspoken marker of how living and learning should be done is that there is no opportunity to ask the question of how the conditions for knowing are laid within its scaffold. Autistic Ryan Boren writes:

The hardest part to navigate is not so much the teeming ambiguity; it's the assumption. It's the self-centering, automatic and unaware, that reduces ambiguity to an ethnocentric 'right answer' or 'right behavior' and leaves little room for autistic sociality. Instead of 'foregrounding complexity as the baseline', we bury it with myths of normality that create structural barriers and exclude people. We pathologize and marginalize the minds and bodies that sense ambiguity and assumption the most deeply and feel their results the most acutely. So much is lost in the reduction. Acknowledging ambiguity, multiple literacies, and multiple socialities renders the terrain more passable rather than less. Ambiguity is actually something to be embraced rather than to be avoided. It is an inevitable feature of human discourse. Compassionately accepting our ambiguities and differing literacies means less masking and passing and burning out—and better communication.[2]

Autistic socialities are lost in the count, in the assumption that the planning that doesn't quite plan according to the presumptions of what comes first is simply the mark of a deficiency. A lack of function. This is what Moten means, I think, when he speaks of the incalculable as both a kind of terror *and* as the very instantiation of value. What is incalculable here is sociality itself:

sociality exceeds the count. It has no function. Its very existence depends on its never being valued in advance of its coming-to-be. Fugitive planning.

Executive function could be described as that singular capacity for subtraction those on the neurotyical edge of the spectrum take for granted. This includes a task like picking up a glass off the table. In order for planning to occur, there must be a subtraction from the environment, a backgrounding of all else: executive functions 'share the need to disengage from the immediate environment to guide actions' (Hill, 2004: 2). To pick up that glass involves actively unseeing all else. Zeroing in is not easy when the ray of light is catching the mirror and the smell of pancakes is luring a body toward the stove. But none of this means the glass can't be picked up. It just means that the process is felt as a process, whereas for more neurotypically-spectrummed folks, everything else just doesn't appear. The richness of what is lost in the subtraction is what interests me here. What is at work in the belief that proper subtraction is the key to experience?

My aim here is not to dispute that many neurodiverse folks have affected executive function. Nor is it to suggest that the tasks that require solid executive function – reading and following a recipe, tying your shoes, crossing the street – are unimportant. And, because much of my recent work has been on autistic perception – that capacity for fielding the ray of sunlight and the smell of pancakes in the very act of orienting toward the glass – I won't dwell on that here either, though I do want to sidle the more-than that gesture carries with the notion of black sociality. What I want to emphasize is how the narrative around planning foregrounded in executive function and its unbreakable tie to neurotypicality excludes the more-than of experience in the making. That is to say, I want to ask how neurotypicality, in its alignment to executive function, demands of existence that it conform to an existing map of procedural orientation that is, by its very operation, incapable of seeing other modes of existence. And I want to suggest that these other modes of existence, what might be called autistic sociality, or black sociality, or simply black life, are excluded from the neurotypical precisely because of its need to plan, count, to organize, to select-out, to value. Neurodiversity's power is to feel the blur, the ambiguity, the fugitivity. What I am arguing for is the anexact: approximation of proximity.

Neurodiverse sociality is an approximation of proximity. Its mode of planning is oblique. This is what I hear in Boren's words. It is clear that the assumption of commonality played out in the choreography of neurotypicality excludes neurodiverse sociality and all the slanted forces that come with it. There is in fact a forceful negation of any kind of sociality in neurodiversity. Haven't we all heard that autistics are asocial? '[A]utism is frequently storied as an epic in asociality, in nonintention. It represents the edges and boundaries of humanity, a queerly crip kind of isolationism' (Yergeau, 2018: 11). Neurodiverse sociality doesn't even register on the plane of neurotypicality: its mode of listening is too askew, its glance furtively avoiding that frontal faciality that presupposes the common, or at least pretends to. This is where I want to go with the words *all black life is neurodiverse life*, toward the undercommonness of sociality.

Approximation of proximity is a way of attuning to the fugitivity heard in the otherwise coming-into-sociality across black life and neurodiverse life. Approximation of proximity is a way of speaking about two divergent planes not converging as though they could become one, but meeting at the differential of their potential for proximity. For isn't sociality precisely that which sidles proximity differently, that which asks how else a coming-together-in-difference can be felt? Or, in Denise Ferreira da Silva's words, difference without separability?[3]

How, in the differential of black sociality, or what Laura Harris calls the 'aesthetic sociality of blackness', are aesthetic propositions for living otherwise crafted, and carried. For Harris, '[t]he aesthetic sociality of blackness is an improvised political assemblage that resides in the heart of the polity but operates under its ground and on its edge' (2012: 53). In the operation 'under ground and on edge', black sociality *invents* sites of collective expression rather than simply inhabiting them.

> *Its resources, which can never be fully accessed by the structures and authorities of legitimate political economy, are taken up by the politically and economically illegitimate in their insistence on living otherwise, in ways that resist repression, denigration, and exclusion and violate brutally imposed laws of property and propriety. (Harris, 2012: 53)*

Black sociality grows in the between of ad-hoc constructions for a life in the making.

There are of course as many definitions of black sociality as there are of actualizations of the fugitive undercommons they seed. I think here of Terrion L. Williamson's account of her

grandmother and the black sociality of a feminist non-academic environment that taught her to live and love differently. 'To speak of black social life is to speak of this radical capacity to live – to live deeply righteous lives even in the midst of all that brings death close or, as Lucille Clifton puts it, to celebrate "everyday / something has tried to kill me / and has failed"' (2017: 9). I think also of Rizvana Bradley's curated days of black study, two of which I attended in 2018 – one in Amsterdam as part of a collaboration between the Rietveld and the Stedelijk,[4] the other in Paris, a collaboration between the University of the Arts and the Centre National de la Danse.[5] Neither of these gatherings could be reduced to the quality of the academic conference or round table. What was curated in each was the gesture of sociality itself. This was activated less through the actual articulation of what an aesthetics of black sociality might be than through a dramaturgy that foregrounded an ethos of coming into relation, and an engagement with how the forces of relation could carry difference. A site for thinking-together was generated that truly allowed a coming-into-itself of thought. This kind of emergent sociality is incalculably valuable.

Jared Sexton's uncountable account of black sociality also moves through these pages. Echoing Nahum Chandler, he asks:

> *What is the nature of a form of being that presents a problem for the thought of being itself? [...] How might it be thought that there exists a being about which the question of its particular being is the condition of possibility and the condition of impossibility for any thought about being whatsoever? (2011: 6)*

Alongside, I hear the halting words of autistic DJ Savarese, then in eighth grade, in *Estimating Harriet Tubman Respectfully*: 'Pedestals rest on hurt, great, estimated dressed not great human beings deserted by frees'.[6] I remember these words not only because they haunt me, but also because it struck me then how intuitive it was for Savarese, still uneasily coming to language through facilitated communication, to connect to a figure like Harriet Tubman, and to see her as a hero for neurodiversity.

The echo of Sexton's painful words – 'What can be said about such a being, and how, if at stake in the question is the very possibility of human being and perhaps even possibility as such? What is the being of a problem?' (2011: 7) – is heard in Savarese's grasping toward freedom:

If we're breaking the barriers, great freedom fearfully awaits. Harriet realized until freedom treated her people with respect, her intestines seemed unsettled, her heart beat resentfully, and her fear never disappeared. The challenges she faced each day were far greater than anything you and your people have ever endured; breathing resentful air, great very hard breaths, undermines heartfelt feeling and deeply effects the western world.[7]

Hearing Savarese across Sexton makes felt what is often missed in autistic accounts: the ache of a sociality so deeply different from neurotypical interaction, or what Savarese calls easy-breathing. Although he would later recognize that easy-breathing – living beyond anxiety – was not all it was cut out to be – what Savarese already intuited at age 12 or 13 was that what was called freedom leaned in too closely toward neurotypicality.

In autism, so much weight is placed on independence – independence the only real marker for intellectual capacity.[8] A decade into the future, Savarese now writes:

For too long I have dreamed of independence. Again and Again, I have spoken of getting free. I have envied the ease with which the non-disabled can walk on the moon or tie their shoes underwater. They are circus performers, talented chimpanzees. Tonight I will dream of being dependent, dependable.[9]

Refuting the status of 'self-made plant', Savarese opts for the symbiotic vine, that abundant ecology that '[goes] deep and thus [does] not compete with the broader and shallower root systems of trees'.[10] Lest the reader see the vine as innocuous, however, Savarese is quick to emphasize:

I had to learn to live with a vine that encircled my heart, at times nearly choking it. I had to think of the vine as needing help, wanting a relationship. The climbing rose uses its thorns to ascent. Like a rash, it breaks into blossom. Make room for everything, I told myself.[11]

Freedom, Savarese learns, does not come with independence. It comes like a vine, attached to all that brings the suffering of an allegiance to modes of living deeply in contestation with neurotypicality's obsession with individualist independence. The vine is a reminder: the being of relation is created in the undercommons of an existence deeply dependent on the ecologies

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that shape it. Perhaps this is also a definition of an aesthetic of black sociality. To quote Moten again:

> *Does black life, in its irreducible and impossible sociality and precisely in what might be understood as its refusal of the status of social life that is refused it, constitute a fundamental danger—an excluded but immanent disruption—to social life? What will it have meant to embrace this matrix of im/possibility, to have spoken of and out of this suspension? What would it mean to dwell on or in minor social life? This set of questions is the position, which is also to say the problem, of blackness. (Moten, 2008: 188)*

What kind of differential is created here, in the interstices of minor social life that bring black life and neurodiversity into relation?

It is the incalculability of black sociality, of minor social life, that has resonated most in my engagement with Black Study, and it is this quality of resistance to the count that I cull from the refrain *all black life is neurodiverse life*, an approximation I also hear in Williamson when she emphasizes the 'irreducible sociality of black life', an 'eschewal and critique of the affliction of privilege that resides in the preoccupation with the individual self' (2017: 19). What is lived, what is carried over, in the gesture that refutes the standing-out of the individual as executive purveyor of existence? The violence is in the exclusion of black life, of neurodiverse life, from neurotypicality and the category it upholds at all costs, the human. The joy, the power, is how minor social life cuts through the very register of the neurotypical. How it refuses it by claiming value otherwise. How it skews it by perceiving the more-than. How it queers it through fugitive planning.

In *What is Philosophy*, Deleuze and Guattari propose the conceptual persona as the philosophical figure that directs, names and dates a concept. The conceptual persona is a way of gesturing toward the sociality of the concept, reminding us that despite the orientation that comes with a name and a date, the concept is never borne of an individual. Concepts are gathered in the sociality of existence: they are brought forth by a multiplicity. This multiplicity connects to a mode of existence already in germ. This is why concepts can never be considered 'ready-made' (Deleuze and Guattari, 1994: 5). Concepts are made in the activation of the ecology they gather forth.

Concepts are in and of a fugitive elsewhere. Whoever is named in the creation of a concept is a carrier. Their role is not to claim it but to see how its carrying into the world alters the place from which thinking moves. A concept shifts the conditions of existence by affecting everything around it, including the one who is named in relation to it. This is why Deleuze and Guattari emphasize that 'a particular conceptual persona, who perhaps did not exist before us, thinks in us' (1994: 69). Spoken always in the voice of a third, the conceptual persona 'is not formed but posits itself in itself – it is a self-positing' (1994: 11).

A concept is not a general category. It does not claim to encapsulate. It is not a metaphor. It cannot be debated. A concept is an intensive feature, an intercessor into thought.

> *The conceptual persona is not the philosopher's representative but, rather, the reverse: the philosopher is only the envelope of his principal conceptual persona and of all the other personae who are the intercessors, the real subjects of the philosophy. (Deleuze and Guattari, 1994: 64, translation modified)*

In the writing, the philosopher is taken over, oriented by the forces of an intensity that calls forth a certain urgency of precision – *this* way, under *these* conditions – learning with the concept as it unfolds how to modulate what comes into contact with it. To find a concept is to touch on a nerve of experience, to catch the necessity of its naming. What is formed in this gesture is an operative proposition, an intercessor capable of catching in a word, in a phrase, experience moved. None of this is an individual's work. The writing, the thinking-with, the collaborating is what brings the concept to expression. A concept is oriented by the path it draws forth. The concept is less ours to claim than ours to follow.

Moving-with the concept of black sociality, a concept always moved by a crowd, a concept already too social to be carried by any one thinker, we come into an approximation of proximity with the question of value, the question of how black life is neurodiverse life is asked *in practice*: what is captured, what is cut, what is deviated and detoured in the coming into relation of minor sociality? What is created? What is left behind? *How else* is always a question.

To return to executive function once more before closing:

I want to suggest that it is something other than anti-intellectualism to think that what the executive excludes is a vast range of extrarational relations for which we cannot, strictly speaking, account; relations, which is to say things, that cannot be accounted for because they cut and augment inference; things like whatever occurs when believing P and believing Q is more or less and/or more and less than P and Q. All the things we are are more and less than selves. (Moten, 2018: 164)

A writing-with an aesthetics of black sociality returns in a continuous refrain to 'the vast range of extrarational relations for which we cannot, strictly speaking, account; relations, which is to say things, that cannot be accounted for because they cut and augment inference'. What remains incalculable for Moten is value itself, a value for modes of knowing unstratified, anexecutive. What must remain incalculable is the very question of the being of relation. What is produced in the interstices is not an account of how black life *is* neurodiverse, or how neurodiversity *is* black. It is the being of the relation itself that is prodded, not to create a count, but to better account for the incalculability at its core.

In 'Executive dysfunction in autism', Elisabeth Hill writes: 'Poor mental flexibility is illustrated by perseverative, stereotyped behaviour and difficulties in the regulation and modulation of motor acts. This indicates problems in the ability to shift to a different thought or action according to changes in a situation' (2004: 4). What is this mental flexibility bestowed so easily onto neurotypicals? Or, to put it differently, what is it that neurotypicals can't see about the exquisite mental flexibility in an account of vines that at once strangle a heart and feed the ecologies they sustain? The deficit here is not one of executive function. The deficit is in the attunement to what else circulates across and beneath and around those strangling, proprietary structures that uphold the horror of violent exclusion.

If black life is 'an exorbitance for thought', as Chandler suggests, 'the negro [...] an instance outside of all forms of being that truly matter', what is called for can never simply be a question of rehabilitation (2014: 607-608). What is called for is not, as Harris might say, an inhabiting, but a continual remaking, an inventing from the edges, an undercommoning. This is what I learn from Black Study: that minor sociality is a way of thinking beyond rehabilitation, beyond a logic of reparations, beyond any account that would represent black life as adjacent to, or simply against whiteness. That would be to take on the structural weight of a racism that has

shaped the very concept of whiteness: neurotypicality. Minor sociality does not compose existence according to the pathology of its planning. Black life is exorbitant thought, lived beyond the shape it knows how to take, lived through a living both flexible and fugitive, in approximation of proximity.

Biographical Note

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Notes

[1] Pathologizing only takes us so far, so I would always be careful with accounts of impaired executive function. Nonetheless, there seems to be a consensus that there are marked differences in the use of planning amongst those who are aligned to these categories, including those whose frontal lobes are damages through stroke. Hill writes: 'Executive functions are typically impaired in patients with acquired damage to the frontal lobes as well as in a range of neurodevelopmental disorders that are likely to involve congenital deficits in the frontal lobes. Such clinical disorders include attention deficit hyperactivity disorder (ADHD), obsessive compulsive disorder, Tourette syndrome, phenylketonuria, schizophrenia and autism spectrum disorder' (2004: 2).

[2] Boren, 2018.

[3] See Denise Ferreira da Silva 'On Difference Without Separability' in the catalogue for the 32a Sao Paolo Biennale, Incerteza Viva (Living Uncertainty). Sao Paolo Fundacao Biennal de

Sao Paolo, 2016.

[4] https://www.stedelijk.nl/en/events/studium-generale-rietveld-academie-4

[5] https://www.uarts.edu/node/41511.

[6] http://www.ralphsavarese.com/category/djs-writings/

[7] http://www.ralphsavarese.com/category/djs-writings/

[8] For an important piece on facilitated communication and the question of independence, see Ralph Savarese 'Anna Stubblefield and Facilitated Communication', in Steve Kuusisto. *Planet of the Blind.*

[9] https://iowareview.org/from-the-issue/volume-47-issue-1-—-spring-2017/passive-plants.

[10] https://iowareview.org/from-the-issue/volume-47-issue-1-—-spring-2017/passive-plants.

[11] https://iowareview.org/from-the-issue/volume-47-issue-1-—-spring-2017/passive-plants.

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FCJ-224 Design Thinking, Design Activism, Design Study

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> *But we won't stand corrected. Moreover, incorrect as we are there's nothing wrong with*
>
> *us. (Harney and Moten, 2013: 20)*

In their consideration of the contribution of academic labour to what they call the 'social reproduction of conquest denial', Stefano Harney and Fred Moten isolate a number of factors. They examine modes of intellectual practice that deny: the 'incessant and irreversible intellectuality' that was already there; political practices that, claiming to engage in just redistribution, wish to think away the division of private and public and, with it, the unpayable debts at the heart of the social; and forms of criticality that deny the underlabour that makes the social being of critical academics possible. To these characteristic forms of labour practiced in the university they oppose a somewhat idiosyncratic sense of 'study': 'study is what you do with other people. It's talking and walking around with other people, working, dancing, suffering, some irreducible convergence of all three, held under the name of speculative

practice' (2013: 110). In speaking of study in this sense, Harney and Moten are concerned with how to enable – in the face of the privatisation of intellectuality, its regulation and governance – the kind of 'common intellectual practice' represented by these mundane collective activities (2013: 110). Amidst the more sanguine openings to that 'something else' that incessantly goes on in the social, there is anger in their book, *The Undercommons*. This relates in part to Harney and Moten's refiguring of the question of the political; no longer a question of 'protecting nothing but an illusory right to what we do not have, which the settler takes for and as the commons' (2013: 18), the first right is now the right to 'refuse that which was first refused to us' (Halberstam, 2013: 12). Among other things, this means refuting the seeming innocence of those claims to speak as and for the common, which ultimately hide the 'rendering and hoarding of social wealth' that is their condition of possibility (Harney and Moten, 2013: 53). Vital here are the debt of the settler to blackness, the divvying up of the public and private on which History and State depend and the refusal of the common intellectual practice that is study through the ennoblement of whiteness. In short, the ongoing dispossession and governance of the undercommons.

Harney and Moten have much to say about the academic labour performed in universities and its relation to 'a whole, varied, alternative history of thought' to which their notion of study commits (2013: 110). Yet, much of what is called intellectual labour today actually goes on outside the university, as the disciplinary specialisation model of the liberal arts is announced as redundant in the wake of the complexity of contemporary problems. In the recent decades that this narrative of the demise of disciplinary expertise has been rehearsed, the idea that more 'integrative disciplines of understanding' are coming into their own has become familiar (Buchanan, 1992: 6). Of these more integrative and ostensibly more relevant modes of thinking, the model known as Design Thinking is paradigmatic. In its claims to public nowness, Design Thinking promises to make good the ambitions of earlier practices of social design that, until formulated as a teachable, transferable model of thinking, are considered well motivated but not yet effective. If the rather inflated claims of Design Thinking's champions are to be believed, Design Thinking is the answer to today's questions, the solution to today's problems. In any event, in the history of altruistic efforts to correct the ills of the social body, Design Thinking is certainly enjoying its time in the limelight. If Richard Buchanan's announcement of this mode of thinking as 'a new liberal art of technological culture' anticipated contemporary

rhetoric (1992: 5), it did not yet figure Design Thinking as the moral realisation of design's plural histories. In enthusiastic tones, contemporary advocates of Design Thinking's social potentials paint a picture of a world awaiting the social conscience of design: '...In an area outside Hyderabad, India, between the suburbs and the countryside, a young woman—we'll call her Shanti—fetches water daily from the always-open local borehole that is about 300 feet from her home....' (Brown and Wyatt, 2010).

This article offers a brief analysis of the contemporary status of the Design Thinking brand and, specifically, its increasingly popular deployment in new forms of design for social change. I consider the claim that Design Thinking offers 'one of the most powerful tools at our disposal to create a fairer, more productive society' (Rawsthorn, 2013), suggesting that to celebrate this mode of thinking, or indeed to merely unveil its neoliberal tendencies, is to miss much of what is essential about its widening appeal. I argue that Design Thinking is a peculiar form of immaterial labour that seems increasingly to involve an elaboration of a *debt to design*, as a way of mitigating the problem of the potentially non-productive privatisation of the commons. In making this argument, my aim is not to underscore the connection between Design Thinking's supposedly moral claims and economically motivated ones; other critics have effectively demonstrated, for instance, the way in which ambitious uses of design for contemporary problem solving have failed, in part because of the economic growth they have promoted (see Tonkinwise, 2015). Rather, my aim is to consider the creation of value involved in this specific mode of immaterial labour, and especially the role played by the supposed benefactors of Design Thinking in this process of value creation.

To be clear, my concern is not with design as such, nor with the kind of thinking that designers do. It is, rather, with the branding and marketing of a model of thinking that, denying the diverse histories and trajectories of design and designers, announces itself as the realisation of design's moral destiny, the most effective and ethical way to 'make a difference'. My concern is that the popular image of Design Thinking as a form of altruistic intellectual labour rests on a debt/credit logic that, claiming to remedy histories of social dispossession, inherits their logics and legacies.

The article is motivated, then, by a nagging, perhaps slightly melodramatic question, though I think it is not an unwarranted one in the light of Harney and Moten's provocation; namely, do

the hyperinflated claims made by the brand of Design Thinking represent 'the new way to steal from the stolen?' (2013: 53). In asking this question, I have some sympathy with design activists' efforts over the last decades to reappropriate Design Thinking toward a 'designerly way' (Markussen, 2013) of affecting social change, whilst working against some of its more economically instrumental and conservative tendencies. Yet the notion of design activism is itself being reappropriated within today's popularised models of design for social change (see Heller, 2015; Anderson, 2017; Rawsthorn, 2018). The idea that Design Thinking has found its moral destiny in endeavours to utilise 'design for good' is today standard fare for its TED-talk champions, where the image of designers as activists represents the ethical face of the Design Thinking brand. Given the appropriation of the sign of activism by an increasingly entrepreneurial model of Design Thinking, which seeks precisely to underscore the debt of the dispossessed to design, the final section of the article considers whether design might still have a role to play in experimenting differently with our indebtedness to one another.

What I am calling design study takes inspiration from Harney and Moten in refusing the seeming innocence of commonsense images of the common and the debt/credit logic on which they rest. In speaking of design study, my interest is not in the status of Design Studies – which is to say, the institutionalised study of design. My concern is to apprehend design as something other than a model of solving problems or even a form of activism, but rather as lending itself to study in the sense in which Harney and Moten use that term. Far from venturing to fix that which has been deemed broken, study is that which makes 'common cause with the brokenness of being' (Halberstam, 2013: 5). Far from the politics of redemption, study refuses those forms of intellectuality which ultimately place some lives 'under the sign and weight of a closed question' (Harney and Moten, 2013: 48).

In gesturing towards something that looks more like study, I indicate the importance of those practices that involve the performative refusal of the dominant logic of debt and credit, as a step toward a more open experimentation with our mutual indebtedness.

The Debt to Design

While many designers have relegated it to a passing phase in the history of Design Studies, Design Thinking continues to gain popular purchase in the broader public sphere, where it is

credited as a mode of problem solving more suited to contemporary reality than disciplinary expertise. Where earlier advocates of 'design for social change' pressed for the provision of design services to community groups, the notion of design for good extends today beyond service provision, to the innovation of responses to complex social problems such as poverty, health, and education. Since its earliest uses, the concept of Design Thinking has been surrounded by hyperbole and paradox. Celebrated for its cutting-edge approach to problem solving, it is a form of thinking whose mantra is 'Don't Overthink! Act!'. Hailed as a democratising force and a tool of the everyman, its method is nonetheless formalised and taught in specialised degrees at elite universities. And deploying a brand of critical thinking to disrupt dominant paradigms, Design Thinking has been fêted as a radical challenge to accepted wisdoms, whilst framed in the discourse of entrepreneurialism. To its champions, Design Thinking represents the realisation of a revolutionary transformation in society and culture early in the 21st century and the evolution of design's diverse trajectories into a socially responsible form.

A few essential features of Design Thinking are today celebrated. Consistent with the global rise of what Richard Florida (2002) has famously referred to as the 'creative class', the creativity of Design Thinking is established in opposition to analytical thinking; the former is said to build ideas up, the latter to break them down (Baeck and Gremmett, 2011). Relative to earlier versions of participatory design, Design Thinking's emphasis on collective creativity is said to involve a growing focus on 'the big picture of socially innovative design' and a 'hands-on' exploration of design possibilities' by 'diverse participating stakeholders and competences' (Bjögvinsson et al, 2012: 101; Dorst, 2011). Proponents of design thinking characteristically celebrate its democratising potentials, arguing that the hierarchy of expertise that once privileged designers has given way to the sense that, with respect to creative capacity, 'everyone is a designer' (Brown, 2014). As a form of research activity, Design Thinking is credited with the capacity to challenge the assumptions held within traditional forms of expertise. According to Don Norman (jnd.org), Design Thinking asks 'stupid questions', by which he means that it questions the obvious; this, he suggests, 'is where breakthroughs come from'. In the face of such radical questioning, what orients Design Thinking to genuinely meaningful solutions, its advocates suggest, is its 'human-centric' conception of use, from the

early stages of building empathy, through to the sharing of prototypes and innovative solutions

(Brown, 2009). Finally, and despite its claim to actualise innate human capacities, it is
increasingly regarded as a specialised form of thinking, as the veritable explosion of Design
Thinking courses in the online space and at prestigious institutions demonstrates.
Of course, this branding of Design Thinking as a form of social altruism is reflective of broader
economic and social conditions, including the decline of the welfare state, which has 'created
markets for semi-public activities', as well as the growth of design education, which has
'pushed many young designers to seek new markets... in complex societal challenges' (Chen et
al, 2016: 1). In any case, and 'whatever the reasons, design is not what it was in 1990', but 'faces
a new type of late modernity in which social activities interwoven with things and services
create value' (Chen et al, 2016: 1). It is interesting to note the challenges here for capitalist
development within this economy of immaterial labour (Lazzarato, 1996) and the biopolitical
production of 'ideas, information, images, knowledges, code, languages, social relationships,
affects and the like' (Hardt, 2011). As Michael Hardt (2011) has argued, in an era in which the
reproducibility of property is so crucial to the reproduction of capital, the real struggle is
'between exclusive versus shared property', a struggle in which 'the immaterial trumps over the
material, the reproducible over the unreproducible, and the shared over the exclusive'. As Hardt
(2011) also suggests, the emerging dominance of this immaterial form of property is significant
because of the curious manner through which the conflict between the common and property
plays out, when the commons refers not simply to the earth and its material resources but also,
and perhaps more importantly, to 'the results of human labour and creativity, such as ideas,
languages, affects and so forth'. Hardt (2011) notes that there is a tension internal to this stage
of immaterial capitalism, insofar as 'the more the common is subject to property relations... the
less productive it is; and yet capitalist valorization processes require private accumulation'. The
challenge is to appropriate the common and transform it into property, without losing its
productivity in the privatisation process.

In the face of this appropriation of the common, *design activists* in recent decades have sought
to reappropriate the surplus value of human creativity produced in design culture, a project that
often involves 'a kinship with anti-establishment movements of various sorts (eg., anti-
capitalism, anti-globalization, etc.)' (Markussen, 2012: 38). Such activism, growing as it has out

of instrumental design culture, recalls Hardt's (2011) claim that biopolitical production invariably 'exceeds the bounds of capitalist relations', granting labour increasing autonomy with respect to the commons. Indeed, and as Guy Julier (2013) suggests, design activists are 'no longer willing to lend their "ethical surplus" out', but aim to politicise the precarious conditions under which they labour and their origins in the political-economic conditions of wider society. Yet, while the more anti-establishment versions of design activism stress the limits of contemporary capitalism to address the challenges of the day, this orientation all but disappears in the new brand of activism. Today, it seems, one need look no further than Design Thinking's inherently activist capacity to 'build power' by 'providing compelling visions of a better society that people are then able to bargain for'. In calling on designers to use their talents to 'build a better world' and 'to create positive change in traditionally underserved communities', champions of Design Thinking do not shy from the moral challenge 'of seeking solutions to acute problems for vulnerable people with scant resources' (Rawsthorn, 2013). As such hyperbolic claims for Design Thinking proliferate, the destiny of design appears as a kind of lodestar for the future, as designers 'finally' face up to the ethical decision of 'whether we will simply do good design or we will do good with design' (Berman, 2012).

Yet while Design Thinking is thus announced as the solution to the present and the harbinger of the future, on the question of the past, popular articulations of Design Thinking are less attentive, and indeed the distinctly colonial overtones of many of its claims should not be overlooked. According to Ezio Manzini's popular formulation of 'design for social innovation', for instance, design represents a special modality of the 'essentially human' capacity for creativity. Yet, the 'design modality' differs sharply from a 'conventional modality', insofar as the former involves the sense of designing one's own biography and thus shaping one's future, while the latter involves the acceptance of a traditional way of life (Manzini, 2006). The assumption here, of course, is that the distinctly entrepreneurial notion of the life project can be considered a universal aspiration, to the extent that one is prepared to eschew 'traditionalism' and the kind of unrealisable or unprogressive ideas that Manzini refers to as dreaming. With an enthusiasm for geopolitical metaphors that a more cautious thinker would have left alone, Manzini announces the 'new role' for design at a point in history in which a 'new continent of sustainable civilization' is trying to come into being (2006: 2). Likening this

moment to 'the passage in Europe from feudal civilization to industrial urban society', Manzini suggests that we are today undergoing a 'great transition': a 'process of change in which humanity is beginning to come to terms with the limits of the planet, and which is also leading us to make better use of the connectivity that is available to us' (2006: 2). If the classical intellectual was crucial to the imaginary of a counter-industrial revolution, it is the Design Thinker who is here credited as the kind of post-materialist visionary who can help to bring this 'new civilization' into being, producing 'concrete, practical answers to difficult problems, such as those of an aging population, treatment for chronic diseases, the cultural integration of immigrants, and the requalification of cities and the informal settlements surrounding them' (Manzini, 2006: 4).

The naivety of this vision aside, there is in all this a cruelly misplaced sense of debt. Those whose fortunes have historically been deleteriously tied to capitalist development are now positioned as indebted to its latest form. More than this, they are recruited as immaterial labourers in the reproduction of the Design Thinking brand, as repeated images and narratives of local peoples in poor and developing contexts participating in the 'co-design' of solutions to 'their' problems seek to demonstrate. The elaboration of a debt to design thus serves as a way of mitigating the problem of the potentially non-productive privatisation of the commons, insofar as the realisation of the destiny of design involves the actualisation of 'everyone's' creative capacities in a happily inclusive form of labour. Design Thinking is thus engaged in a kind of prospecting of the common, undertaken with the sincerity of, and in the name of, socially responsible immaterial labour. In the production of value from this socially responsible labour, the work that the bearers of social problems do to support the immaterial labour arising from design's ethical destiny is far from insignificant. [1] No longer merely the weight on the back of European man in 19th century cartoons of the 'White Man's Burden', the non-European is now an active co-participant in glossy flesh-and-blood images and narratives of co-design!

Harney and Moten's idea of 'conquest denial' offers an apt term for the process by which histories of debt and credit become monstrously distorted in visions of the just society (2013: 40-1). To imagine a form of work – a kind of thinking or activism – that, in the name of justice, would solve the problems of social and economic dispossession is, for Harney and Moten, to claim an ethical dimension to such work that is strictly unjustifiable. Insofar as one accepts

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uncritically 'the foundation of public administrationist thought', with its 'positivistic and normative' categories of 'state', 'economy' and 'civil society', one partakes in a kind of 'conquest denial' of 'the labor that goes on behind the backs of these categories' (Harney and Moten, 2013: 36). Conversely, in order to grasp the commons in anything other than the dominant terms defined by white history it is necessary to acknowledge that there are debts that cannot be repaid within the logic and institutions of capitalism: the debt that lies at the heart of its founding to the stolen labour of slavery, but also the ongoing labour of the undercommons that enables its reproduction.

It is not insignificant that one of the often-cited examples of the evolution of design trajectories into contemporary Design Thinking concerns anti-slavery politics. In her copious publications and public lectures on the activist potentials of Design Thinking, OBE recipient Alice Rawsthorn demonstrates the credentials of Design Thinking as 'an agent of change' by highlighting exemplary historical instances of design interventions, including the role played in the anti-slavery cause by an 1823 engraved design of a French slave ship:

> *The anti-slavery lobby used John Hawksworth's 1823 engraving of the layout of The Vigilante, a French slave ship captured by the British navy off the coast of Africa the previous year, to expose the heinous conditions in which African slaves were transported to North America. Nearly three hundred and fifty slaves were crammed into the hold of the ship in shackles, while the spacious captain's cabin occupied roughly the same amount of room as several dozen seated women. By depicting the ship in the dispassionate style of an architectural drawing, Hawksworth demonstrated the merciless brutality of the slave trade. (Rawsthorn, 2013)*

Lest our gratitude to Design Thinking not be sufficiently invoked by this example of how a designer 'brilliantly demonstrated the brutality of the slave trade', Rawsthorn characteristically goes on to cite another historical instance of design's achievements. Here she details the role played by the wealthy politician, Charles Booth, in raising awareness of the extent of poverty in London, through a series of maps he produced between 1886 and 1903. Without irony, Rawsthorn highlights the debt that history owes to Booth, who assembled 'a team of volunteers to visit every street in London to assess the income and social class of its residents' and then graphically demonstrated the data on maps, which distinguished seven categories of

inhabitants – ranging from 'the lowest class, vicious and semi-criminal', to the 'very poor' who suffered 'chronic want', through various gradations up to the wealthy or, as Rawsthorn puts it, 'the luckiest Londoners, like Booth himself who lived in plush and leafy Kensington'. Rawsthorn is keen to emphasise the 'rigour of the research', which, combined with 'the design decision to colour code each street', meant that 'the information relayed by the maps was readily understood by a far wider audience than the few people who'd have plowed through an academic tome on the subject'. As a result, this prototype of Design Thinking was rendered as design activism, as the problem of poverty was translated into the solution of government intervention into poverty (Rawsthorn, 2013).

Aside from the problematic attribution of wealth to mere good fortune or the celebration of the resultant governance of the deprived of the city, again it is the sense of history's indebtedness to the progressive foresight of early practitioners of Design Thinking that is remarkable here. How fortunate for slaves that an early form of Design Thinking brought to light the deprivations of their conditions of transportation! The public appeal and value of contemporary Design Thinking is deemed crucial in this, not atypical though very motivated, account of the history of design. Yet the very notion of the public is of course itself the result of a divvying up of the commons into the public and the private, which enables both the private accumulation of wealth and the public administration of poverty. As Harney and Moten put it, 'public administration is the competence to confront the socialisation thrown up continuously by capitalism and to take as much of that socialisation as possible and reduce it either to something called the public or something called the private...' (2013: 37).

Rawsthorn's uncritical account of the perceived link between deprivation and depravity (exemplified by Booth's identification of poverty with criminality in the black-coded area of his maps) is spot on in one sense. Social dispossession does, as Moten (2016) suggests, mark some lives as insurgent from the start. To walk down the street as a black man in the US today is, he notes, the act of an insurgent body, which leaves it vulnerable to harm. Against such insurgency, the professionalisation represented in contemporary Design Thinking appears as nothing short of a form of counterinsurgency, the goal of which is, like 'the ultimate goal of counterinsurgency everywhere: to turn the insurgents into state agents' (Harney and Moten, 2013: 38). Insofar as celebrated forms of Design Thinking engage in the collective reproduction

of intellectuality in the pursuit of problem solution, they frequently also become engaged in correctional institutions of the common, including diverse forms of governance and the deployment of policy towards those deemed in need of fixing. The point is certainly not that design is bereft of value, but that this characterisation of contemporary Design Thinking as the natural evolution and moral destiny of design's diverse trajectories reduces the forms of thought and practice of design to a naïve, even ugly, form of debt reparation. But this notion that the debts of the past can be made good is, as Harney and Moten insist, the call of victorious whiteness. The question, then, concerns what it would mean to engage in the practice of *bad debt*, 'which is to say real debt, the debt that cannot be repaid... debt broken from credit, debt as its own principle' (2013: 61).

Design Study, Bad Debt

The popular version of Design Thinking, I have been arguing, establishes its social, even activist, credentials in large part through the elaboration of the debt of the broken to design: the debt of 'those vulnerable people' with 'acute problems' and 'scarce resources' to the projects that many of the 'gutsiest, most dynamic designers of our time are working on' (Rawsthorn, frieze.com). But the innocence of this image of social change rests on a denial of the fact that the common wealth has never in fact been held in common. Far from effecting a just redistribution of the commons, to seek to fix that which has been deemed broken may be 'to fix another way of imagining the world, to literally fix it, to destroy it, to regulate it, to exclude it, to incarcerate it, but also at the same time to incorporate it, to capitalise upon it, to exploit it, to accumulate it' (Moten, 2014). It is not that design interventions are without value, but that they must be seen to be social, rather than interventions upon the social. Such an acknowledgment is crucial if they are to avoid the fundamentally asocial logic of debt and credit to which dominant social reality is oriented, which deems some lives broken and in need of fixing and which hopes, through social repair, to remain in credit into the future.

The question I want to briefly consider in closing is what it would mean to appropriate the idea of design toward collective practices of being differently indebted. Given that the very sign of activism has been contorted through its recruitment as the ethical face of Design Thinking, what forms of collective practice might intervene in the present, without claiming to fix it? Or,

to put it in Harney and Moten's terms, what would it mean to enable the practice, the study, of bad debt? Harney and Moten write:

> *They promise to match credit and debt again, debt and credit. But our debts stay bad. We keep buying another song, another round. It is not credit that we seek, nor even debt, but bad debt — which is to say real debt, the debt that cannot be repaid, the debt at a distance, the debt without creditor, the black debt, the queer debt, the criminal debt. Excessive debt, incalculable debt, debt for no reason, debt broken from credit, debt as its own principle. (2013: 61)*

Eschewing Design Thinking's efforts to redeem debt as credit, then, what I am calling design study works toward debt as a 'principal of elaboration', through which the word 'owe' becomes 'a more generative word' (Harney and Moten, 2013: 150). As Harney and Moten (2013) insist, what is truly injust is the forgetting, through prescriptions for repair, of the undercommons. Because of course the commons is not a substance laid out underneath a general humanity, but is an undercommons: a 'general and generative antagonism', which, though it certainly involves dispossession, is a 'space and time that is always here', rather than a problem demanding repair. Promises of reparation refuse the reality of this fundamentally unpayable and uncreditable debt. In their cruel positing of the commons as the fertile space of human creativity or the source of a common wealth that could be equitably shared, prescriptions for repair deny the 'brokenness of being' that the notion of the undercommons seeks to affirm, with an eye to inhabiting it differently (Halberstam, 2013: 5).

'We cannot represent ourselves. We can't be represented' (Harney and Moten, 2013: 20); if the undercommons had a voice, this is what it would say. Though of course the very image of voice is already too tied to representation and its peculiar distribution of debt and credit. Better, perhaps, to speak of the noise of the undercommons. The noise of refusal; for if there was a right that could be said to be 'proper' to the undercommons, it is the right to refuse, the 'refusal of what has been refused' (Harney and Moten, 2013: 96). Denied the innocence of the social from the moment of its dispossession and appropriation as labour, the undercommons refuses the very promise of making bad debts good, engaging instead in a 'game-changing kind of refusal', which 'signals the refusal of the choices as offered' (Halberstam, 2013: 8). If that which

is dispossessed cannot be brought into credit and does not want to be fixed, what does the undercommons 'want'? Jack Halberstam writes:

> *If you want to know what the undercommons wants… it is this – we cannot be satisfied with the recognition and acknowledgment generated by the very system that denies a) that anything was ever broken and b) that we deserved to be the broken part; so we refuse to ask for recognition and instead we want to take apart, dismantle, tear down the structure that, right now, limits our ability to find each other, to see beyond it and to access the places that we know lie outside its walls. (2013: 6)*

I have suggested that celebrated versions of Design Thinking represent a guise in which the deployment of governance and policy against the socially dispossessed appears in the name of socially responsible labour. Sure, Design Thinking's champions stress that design thought and practice should always be a talking to, rather than a talking for, the other. But this too is to impose on the undercommons the requirement of a 'reasoned or meaningful self-generated utterance' (Harney and Moten, 2013: 50). The point is not that all forms of doing with and for another are corrupt from the outset, but that if one opposes the existing forms and structures of life, it must be via the acknowledgement that 'they are not only bad for some of us, they are bad for all of us' (Halberstam, 2013: 10). The indebtedness that champions of Design Thinking seek to impose upon the dispossessed 'presumes a kind of individualized relation to a naturalized economy', which is, in fact, 'predicated upon exploitation' (Halberstam, 2013: 5). The credit that such forms of thought and 'activism' then seek to generate through their altruism is a fundamentally asocial relation, in which the appearance of mutuality disguises the very real mutuality of bad debt: debt that cannot be redeemed by credit, 'excessive debt, incalculable debt, debt for no reason, debt broken from credit, debt as its own principle' (Harney and Moten, 2013: 61).

It is the elaboration of debt as its own principle that I suggest 'design study' makes its own. Far from insisting upon our debt to design, design study is a speculative practice that engages in a performative refusal of the idea of creditable debt. In this, the contemporary status of the idea of design may serve as a resource of sorts, much as the university's resources (financial, literary and social), may enable 'study' where study seems increasingly improbable (Harney and Moten, 2013). Unlike the kind of research upon which celebrated Design Thinking embarks, study is

'both a concept and a practice of determining what needs to be learned together, without objective or endpoint and without escaping the feeling that we are in a mutual debt to each other' (Harney, 2018). Study disengages itself from the individual discreditation that identifies those who are falling behind and surrenders the instrumentalism of completion and solution, engaging, rather, in ongoing experimentation with the performative refusal of the dominant debt/credit logic.

Harney and Moten stress that study is a gathering of intensities and that its enablement will likely also involve a gathering of resources. Given that the thought and practice of design today attracts such a gathering of resources, in part due to the popular appeal of Design Thinking, the language of design might be useful to the extent that it can be deployed towards study and the 'development of ways of being together that cannot be shared as a model but as an instance' (Harney and Moten, 2013: 105). In this respect, the work of the Design Studio for Social Intervention (DS4SI) in Boston provides an interesting instance of experimentation with ways of doing debt differently. Representing itself as an 'artistic research and development outfit for the improvement of civil society and everyday life', the Design Studio exploits the idea of the studio as a place of invention in which the pragmatics of reconsidering problems and solutions play out:

> *Situated at the intersections of design thinking and practice, social justice and activism, public art and social practice and civic / popular engagement, we design and test social interventions with and on behalf of marginalized populations, controversies and ways of life. (https://www.ds4si.org)*

Self-representations aside, it is the practical aspects of the Design Studio that interest me here, insofar as they provide a sense in which design might orient a more open experimentation with bad debt and with the intellectuality of study prior to its ennoblement as a model of thinking.

It is no accident that the practices of DS4SI are deeply implicated in the US politics of race. If the undercommons is inextricably linked to notions of blackness, it is because there is an unpayable debt to slavery at the heart of the structures we inhabit, though Harney and Moten insist on distinguishing the idea of blackness from the 'psycho-politico-pathology of populations'. As they say, 'blackness…must be understood in its ontological difference from

black people who are, nevertheless, (under)privileged insofar as they are given (to) an understanding of it' (Harney and Moten, 2013: 47). In any event, it strikes me that many of the collective practices of DS4SI go some way in productively engaging the incessant and irreversible intellectuality of study.

To cite an early, but much cited and important intervention, the 2012 installation, 'Public Kitchen', set up in one of the largest and most ethnically diverse neighbourhoods of Boston, was a 10 day experiment in reimagining public infrastructure. In the face of the increasing privatisation of formerly public services and functions, this pop-up kitchen and its associated events used the medium of food to reimagine the public space, at a time when café society individualises our relationship to food and privatises space. More precisely and importantly, the experiment elaborates a new relation to debt that, without disavowing our indebtedness to one another, nonetheless answers the question '"how much do I owe you?" with the answer '"nothin"' (Harney and Moten, 2013: 156), in this way deepening, rather than refusing, that bad debt that is both 'unpaid and unpayable' (Harney, 2018). The point is not to hold this experiment up as exemplary, and there is no doubt that the Design Studio engages in a treacherous game in which thought, speech and practice must constantly be directed away from their capitalist appropriation and toward their more improprietous use. In fact, no empirical instance will get it right, since there is no right. But, in their experiments of living otherwise, these practices might approximate study in their style or manner of elaboration, not simply through a new form of sharing but by actively and performatively refusing the logic of credit amongst others, through the deep sociality of bad debt.

Immaterial labour is loquacious (Hardt and Negri, 2001), and certainly the labour that is today associated with the notion of Design Thinking is of the noisy, talkative type. While the discourse of Design Thinking announces its arrival on the scene, iterating the debt that will be owed to this mode of solving the problems of the day, it stakes its claims to activism on the image of itself as a motivated intervention into contemporary social experience. In any case, the dominant paradigm of social reality – we could, following Harney and Moten (2013), call it whiteness – announces itself as the means of addressing and correcting. Amidst the din of these triumphant voices, however, the undercommons has its own cry: 'But we won't stand corrected. Moreover, incorrect as we are there's nothing wrong with us. We don't want to be

correct and we won't be corrected. Politics proposes to make us better, but we were already good in the mutual debt that can never be made good' (Harney and Moten, 2013: 20).

Biographical Note

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Notes

[1] The highly celebrated global design and innovation firm IDEO's partnership with the William and Flora Hewlett Foundation and the Stanford d.school for the 'School Retool' project is exemplary in this respect. Recognising the need to provide school students with 'skills like critical thinking, collaboration, and communication, to prepare them for a global, innovation-driven economy' in the face of the redundancy of existing models of learning, School Retool 'empowers' school students 'to bring this much-needed change to their schools', through a four-month professional development fellowship, which 'trains principals to take a do-it-yourself approach to school change by conducting small, scrappy experiments called "hacks"' (ideo.com). School Retool is celebrated as an especially significant social innovation in schools with a high proportion of low-income students; 'the best part' of this initiative, its proponents argue, is that 'they use the resources they already have available to address their schools' needs now, without waiting for external funding or assistance' (ideo.com). Read: without any extra funding, students in poor schools can provide their immaterial labour to design DIY solutions to the problem of their impoverished schooling opportunities, whilst reshaping school culture in the direction of design culture and the innovation economy.

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FCJ-225 One Definite Note and the Anarchic Share of Listening

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What you listen to or what you're reading is still moving and still living. It's still forming. (Harney and Moten, 2013: 107)

Music charms us, even though its beauty consists only in the harmonics of numbers and in a calculation that we are not aware of, but which the soul nevertheless carries out, a calculation concerned with the beats or vibrations of sounding bodies, which are encountered at certain intervals. (Leibniz, 1994: 212)

Every room has its own melody, hiding there until it is made audible. (Lucier & Simon, 2012: 31)

Introduction: A Sonic Can of Worms

Alfred North Whitehead's opus *Process and Reality* devotes slightly more than one page to the question of the audition of sound (1978: 233-5).[1] Whitehead slyly defines this as a 'simple' example that avoids any 'unnecessary complexity'. In fact he opens a can of (vibratory) worms. Whitehead is, I think, well aware that he is opening this can of worms. The example hints at the fact that to attempt to follow all the threads of the events that go to make up a particular event of audition is to embark on an unending task. It is to confront the 'social effort' of the whole universe that has gone into the event's makeup (1978: 233). That is, the closer one begins to look at the audition of a particular note the more complex, vague and entangled it will become (the deeper the rabbit hole, to mix metaphors). One will become less sure about the existence of any stable entity or event that might be safely called a 'note'.

As Whitehead briefly examines this audition of 'one definite note', it becomes clear that any such audition is entirely singular ('a particular fact not to be torn away from any of its elements') (1978: 234). It is also endlessly complex. This 'subjective' complexity is, he argues, synthesised from three patterns of contrasts: those of the data; the 'emotional quality'; and 'the pattern of emotional intensity' (1978: 234).[2] The listener composes one complex feeling from a series of feelings that in themselves are divisible into infinitely complex data (of which only those differentials between tone and overtones are defined by Whitehead). This complexity arises from their mediated relationship to all the spatial and sonic qualities of the environment in which the note sounds, and from personal 'qualities of joy and distaste, of adversion and aversion' (1978: 234). In the patterning and valuation of contrasting feelings to compose the note, the auditor grasps, though largely not in a conscious way, a whole world or ecology of relations in-composition. The event of audition is not that of a passive listening to the already resolved sound, but is entirely active. There is not a resolution of difference but a sustained resonant and productive difference across many registers whose intensity is held in the beauty, if not always the harmony, of the definite note.

In his example of audition, Whitehead emphasises the necessary intertwining of material and conceptual data. Each have their own sets of held contrasts but they are never really separable. Both are important elements of the becoming or concrescence of an entity (Whitehead, 1978: 233). As throughout *Process and Reality*, Whitehead also thinks through the way in which an

event can be both extensively relational and self motivated in its becoming. That is, an event is connected to that which has come before and on which it draws, and at the same time intensively autonomous. It has its own motivations or will to become. Although a musician might commonly think of the act of listening to a note as a secondary event dependent on the production of that note, Whitehead's philosophy suggests that we must find a way to think audition as a primary event unto itself.[3]

I want to propose that the act of listening or audition is an *autonomous act of composition* not reception (and thus not inexorably linked to hermeneutics as Roland Barthes claims) (1991: 249). In this it does not preserve or archive the sound event, but instead anarchives the one simple note, resonating with the traces of previous events but freeing itself from their bonds. We might define the act of 'archiving' as one of collecting and preserving the already-formed, so that it might be represented or repeated. To 'anarchive' might instead be to take existing material or events and reinvigorate (rather than re-live) them – reinvigorate through acts of re-composition that take this data and incorporate them into new events. The anarchival might therefore exist or be activated within the archive, as an act of immediation that resonates with the event.

To think of the autonomy of audition from the sound in-the-world is not at all to imply a return to a system of primary and secondary qualities as per Descartes or Locke. In their thinking sounds are merely an effect produced by hearing, not an independent event, and this conception therefore triggers a return to an 'idealist [and] phenomenalist conception of sound' (Cox, 2011: 155-6). Nor is it to argue, as John Cage has, that the audition is a mere 'curation' (cited in Cox, 2011: 155), or that it is a symbolic representation shielding one from the 'real' of the cacophony of the asignifying world. With Aden Evens we might rather think of the relationship of the noise of the world to the sound perceived as a productive and necessary relationship (2002: 177-8). Thinking with Whitehead, we must argue that audition and sounding can be understood as two series or societies of resonating events.[4] Within such a system there is no passive reception or mere interpretation. Rather, audition is an autonomous activity that draws on but is not defined by the independent sound event. This involves a resonance with a difference, indeed a resonance *defined* by difference, whose beauty lies in the intensity of this difference.[5]

In this article I propose to break open the intensive and extensive differential relationships involved in the event of one definite note and examine them in greater depth. I will first examine more of the complexity of the definite note, and secondly propose that the audition or perception of definite notes might be considered an act of *anarchiving* in that it makes felt or values qualities of the experience and ecology that do not register individually and which might be considered an 'anarchic share' of the audition (Manning, 2016: 64). I will apply these concepts to the particular use of resonance in composer Alvin Lucier's *SO YOU (Hermes, Orpheus, Eurydice)* (2017), as performed at the Athens Conservatoire in June 2017 during documenta 14. This performance for voice, cello, clarinet, sine waves and nine amplified wine jars brought to attention the complex intertwining of aspects of the sound waves generated. In particular, through the additions of the jars' resonating with the other instruments, the work emphasised the ecological and differential aspects of sound that might often be subsumed by melodic and performative aspects of composition.[6]

Pandora's Boombox

What is this 'one definite note'? There is no doubt that it is 'definite' in Whitehead's sense of the word, in that it is a distinct patterning of data, clearly cut from the greater potential field. However this 'thing' that appears to us as one note is by any definition no one thing, but a truly complex and *emergent* event that defies easy definition and crosses any arbitrary boundaries that we might try to impose. Although it is, I think, impossible to fully capture all the complex differentials involved in making the event of the note, here I want to begin, with some trepidation, to open 'Pandora's Boombox' and explore some of the ways that the note is let loose to actualise. In doing so I will also consider the audition in relation to Whitehead's concept of prehension.

I want to propose that an event of audition or listening is 'felt' or prehended in a Whiteheadian sense. Whitehead's use of the somewhat awkward term 'audition' rather than listening or hearing is pointed, I think, as it has much more of the sense of an event in its own right without the legacy of false conceptions of perception as a passive reception of data.[7] In audition,

Whitehead argues, there is a process of subjective selection (prehension) of vibrational data from the field that occurs, rather than a straight transference of vibration, and therefore always the potential for creative divergence. Thus the hearing event is a creative event in itself, separate from, though influenced by, the sound event. There is never simply a passive ingression of data, but rather a co-constituted event, a novel use of some of the potential for audition that the sound waves provide (Whitehead, 1978: 232).

For Whitehead an entity or event is precisely and entirely its act of concrescence or becoming. It becomes through selecting certain aspects of the actualised world to incorporate (and this selection includes the active non-selection of negative prehension of all the other data): this is a physical prehension. This is modified through conceptual prehension: a valuation of the data in relation to various relevant eternal or pure potential qualities. Most importantly, this data is not then homogenised to produce the event, but rather held in patterns of contrast to create intensities whose complexity creates the richness or depth of the experience. The prehensions then create novelty in this new 'subjective form' – though the same data may have been incorporated into other acts of becoming (the audition of the note by the person in the next seat, for example) (Whitehead, 1978: 232). Once it has reached its 'satisfaction' or the end-point of this process it ceases to be as an event, although it can be utilised by other entities as data in their becomings. The process of prehension becomes clearer in actual example. Here the audition of sound provides an exemplary case to study, as any sound itself is so evidently composed of differentials, both internal to the sound itself, and in relation to its larger ecology.

The basis of all the components of sounds are events of vibrational difference (Roads, 2001: 55, 73). These in turn are a question of speed and interval of oscillation. Here rhythms of contrast both form and disrupt any continuum, and the definite note is itself then an expression of the modulating differences involved. Sound, as it can be perceived, is necessarily made of contrasts. This can be deduced from the fact that a single particle of sound (a 'pulsar') is in fact inaudible. We might surmise, from a Whiteheadian perspective, that this is because the pulsar lacks the requisite contrasts to provide sufficient intensity of experience to be understood as sound by the auditor.[8] That is, sound is a series of waves of air pressure through space and time, and each wave has differentials that go to make up its character: pitch, timbre, volume, and so on. As Aden Evens outlines, sound vibrations (air waves) consist of variation in pressure

over time – frequency, amplitude, phase, shape (each 'a motion, change over time') each being an aspect of this wave that has its own set of contrasts (2002: 171).

The seemingly simple aspects of Whitehead's one definite note of pitch and volume turn out not to be qualities of the note itself, but qualities of the prehensive activities of the audition. The amplitude of the wave event (perceived as the volume), for example, consists of the differential relationship between the peak and trough of the wave. The absolute height of the wave is perceptively meaningless except in comparison with the depth. In Whiteheadian terms we might postulate that it is the 'valuation' and 'patterning' of this felt peak in relation to the felt trough that begins to give the auditor a complex feeling of sufficient depth to constitute an event of perception.[9] Here, as Evens says, 'one does not hear the up and down, but a quality of a note, high or low' (2002: 171).[10] I say 'begins' to indicate, as I will discuss below, that the patterning is much more complex than this, both in terms of the number of physical feelings that will necessarily be involved and in terms of the 'eternal qualities' that might also work to qualify the prehension of the physical data.[11] This necessarily also involves temporal contrasts: the trough that is immediate in comparison to the peak that has just been or will be.[12] Thus the volume/amplitude is an expression of the note over time, as the act of audition must also be a prehensive act, grasping data over real time. The note is also necessarily an expression through space, since the wave has an actual length that travels the room at the fixed speed of sound. Through all this, that which is consciously perceived is 'a variable uncertain element which flickers uncertainly on the surface of experience' (Whitehead, 1967: 253).[13]

Similarly, the frequency of the wave is composed of the relationship between the one wave to the next (that is, the distance from one peak to the next or the number of cycles in a given time, expressed as Hertz). The prehension of these individual waves can only give the auditor the perception of pitch when the waves are held in relation to one another in the intensity of a contrast.[14] Sufficient intensity of contrast is needed in order for the event of pitch to be perceived in all its richness. If insufficient data is grasped to create this then the note will be either imperceptible in relation to the field of noise, or at least vague and indistinct and therefore less integral to the event of audition of which it will still form some part. (As a proviso to this, the note might also be distinct in perception by the very fact of its *absence* or lack of ingression: for example, a note missed in a familiar melody will be all the more apparent to the

listener singing along, or a melody that fails to resolve to the tonic will make this absence keenly felt to the trained ear.)

So far I have considered this definite note as if it were a sine wave composed of only one frequency and therefore existing as one pure tone.[15] Audio oscillators can generate such simple sounds (though this is clearly not what Whitehead has in mind in his example as he specifically mentions the presence of overtones).[16] However, as I will argue below, regardless of the source of the sound, there can never be any *perception* of a pure tone due to the diffractions in space that will inevitably complicate the initial wave. Before considering these extensive complications of our note, I want to briefly examine further intensive differentials that help to make up what would, in music, be termed the 'timbre'. Whitehead refers to this also in his outline of subjective form (1978: 234). The timbre or 'colour' of a note emanating from an instrument is the set of harmonics and overtones that give it its particular quality. This allows the auditor to very easily distinguish, for example, between the same pitch played on a clarinet and a saxophone, despite the general similarity in their mechanics.[17] The note consists of the fundamental tone and a 'selection of overtones' (Whitehead, 1978: 234) that distort the wave form and provide a more complex sound. For example, a common wave shape is a triangle wave.[18] Unlike a pure sine wave a triangle wave is additive, in that it adds to the base note a series of higher notes that colour the primary tone. A triangle wave consists of the fundamental note or tonic, plus the odd harmonics: the integers of the 3rd, 5th, 7th intervals and so on (plus to a lesser degree various overtones that are not part of the harmonic range and might therefore be negatively prehended or edited out by the auditor). The various higher waves generally diminish in volume the further they sit from the tonic.[19] The one note is therefore composed from its own intensive tonal contrasts. These contrasts are available as data to the auditor, prehended both individually (in the distinct overtones and harmonics that might be heard), and grasped collectively as the one note, so that the patterning of elements that constitute the note's concrescence can be incorporated into the experience of audition.

We must also include in this the non-audible range of overtones – 'unsounds' – that will distort the wave shape further and affect the audition despite not being prehended individually via the ears. These unsounds may have further effect on the note through the play of diffractions in the space (Roads, 2001: 33).[20] A vibration is of course only an unsound from a *subjective*

perspective – a frequency that is unheard by a particular ear in that the frequency does not cause sympathetic vibration in the eardrum. Thus a vibration that is an unsound for the assumed-to-be human ears of the auditor may be vividly present to her companion dog, as it is the auditor who cuts and defines sound from unsound.

Even with the consideration of all these complications in the emergent qualities of the note, we have only just begun to delve into the physical contrasts that make up the experience of the audition. For one thing, we must consider that the sound wave is prehended in differential relation to the surrounding air pressure. Of course we do not 'hear' the surrounding air as such, yet the act of audition would be impossible without this contrast. This is the simplest of the note's extensive differentials and additions. Another is that the note reflects off the various surfaces of the space. It reflects and forms diffractive patterns with the original waves. This diffraction creates new wave patterns (as waves on the surface of water reflect and intermingle[21]). These wave patterns are themselves prehended, adding their contrasts – whether distinct or vague – to the final, complex prehension of the note in audition. Other bodies and objects add to this gathering cacophony as they resonate in sympathy with certain tones and harmonics, amplifying and relaying or dampening aspects of the timbre, again to become their own events (held and patterned contrasts). These events are felt both in themselves and in relation to the note through the new differentials they produce. These must be prehended and added to the patterning of the note by the auditor (at the very least as noise to be backgrounded). Thus the one note, even if it originates as a pure sine wave, is a distinctly different being in every space in which it is emitted, though it may begin its life as ostensibly the same pitch, volume and duration.[22] In sum, there is no note that can be replayed or received in any passive sense. Each definite note must be remade anew in each act of audition in the concert hall, bedroom, headphones, computer and so on. With each act of audition the relation of the note to the universe is also reinvented.

If these aspects of the event seem inconsequential, we have only to think of the very distinct qualities of individual concert halls that amplify certain tones and muffle others, or the various accounts of the strangeness of sounds experienced in anechoic chambers.[23] As John Cage writes on his formative experience in one such chamber, despite the design he heard two sounds, one being the high-pitched sound of his nervous system, the other being the low sound

of his blood circulating (1961: 115). We must therefore remember to include the very bodily presence of the auditor in our factoring of the audition. Rhythms of the pulse create syncopations with the frequency of the note, pitch intervals are created between the noise of the body and note, and the resonance chambers within the head and body not only amplify bodily sounds but vibrate subtly in sympathy with the external world, each body in its own particular manner.

Through this playing out of the resonances and diffractions, the whole space (including the presence of one's own body) is 'grasped systematically in this feeling' (Whitehead, 1978: 234). Included in this is an at least vague grasping of the spatial configurations, as the auditor's particular distance from any object or surface is an integral factor in the timing and order in which the various diffractions and resonances reach her. The particular orientation of the body creates contrasts between the timing of the sound waves reaching each ear and the tones that are more or less emphatic in prehension. As Isabelle Stengers warns though, this is not to say that the note establishes a simple relative relation between 'the "there" where it is emitted and the "here" of the percipient, a two term relation'. The sound has a 'sonorous quality' that cannot be fixed in such simple terms (2011: 85). The richness of the note, it must be emphasized, is not only in the actualized differentiations, but also lies qualitatively in the always-present *potential for further differentiation* across all these registers. It is this that keeps the event at the point of being other or more than what has already been actualised.

The complex patterning involved occurs firstly as the concrescent process of the initial production of the note, and secondly, as the independent process of patterning in the audition's grasp of elements from the former. The patterning that takes place during the event of audition is also able to distinguish the note from the surrounding noise and music, foregrounding the melodic note with clarity against the vagueness of the chord or triviality of the 'non-musical' sounds of the space and body – a subjective patterning of relevance (Jones, 1998: 38). Here perhaps the composer or trained musician is able to identify each tone and instrument clearly as well as the key (an eternal object or virtual quality) while the general audience is gripped more by the overall affective tone (though we all also involuntarily place importance on the accidental or bum note and the coughs and snores from the audience).

There are of course many other more abstract (though still real) qualities that come into play for the auditor: cultural, historical, instinctual, emotional, and so on. This is true even if we narrow our auditor down to a human body and therefore ignore the myriad, if unknowable, affectual qualities that a particular sound might evoke for a dog with its supersensitive range of pitch and volume perception and hunter's sensibility, or a snake hearing through its whole body resonating with the vibrations of the surface on which it lies, to take two examples. A particular note or key has potential abstract qualities associated with it for the auditor – the melancholy of E flat, or the brightness and joy of A major, for example. Such qualities of melancholy or joy are, for Whitehead, examples of 'eternal objects': conceptual qualities that further qualify the 'bare audition' of the prehension of the physical qualities of the note (1978: 234).

In the incorporation of abstract qualities we hear not only the notes themselves, but also the absurdity and distaste of national anthems, the nostalgic joy of television theme music from one's childhood, the disappointment with this particular performance of a favourite song, and so on. All these provide a higher or more complex and nuanced synthesis of feeling. In the integration of such conceptual factors 'the audition gains complexity of subjective form' (Whitehead, 1978: 234), further qualifying the subjectively prehended qualities from the physical data to create the final pattern of emotional intensity.[24] In addition, as we may all have experienced, the pleasure in the musical event can be coloured not only by such abstract factors that are clearly related to the sounds themselves (our personal and cultural tastes and distastes, evolving as they may be and in themselves complex feelings with long histories), but also by incidental emotions and conceptual qualities: residual anxiety or happiness brought from the day's events; pleasure in the company of friends at the concert; expectations of the music and so on; and the feeling we have of these feelings affecting our mood and general reception of the sound. Each of these is in itself a complex feeling that is then felt through the audition to some degree. Thus again the experience of the ostensibly same note on several occasions must necessarily, by some degree, grasp different eternal qualities that colour and change the audition, whether this shift is subtle or vividly and consciously perceived.

Now on reflection we see that our note is *anarchic*. Its continued emergence through these complex inter- and extra-relationships that are not in themselves consciously registered are the very event itself. The one definite note, when examined, opens up to a whole universe of

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relations felt by the auditor through prehension – whether directly, such as the resonance of a hard surface, or indirectly through prehension of the note's own patterning of intensive and extensive contrasts. This is not a static field from which to grasp data, but a lively, immanent network or ecology, from which neither the note nor the auditor can be separated.

If to archive is to preserve, to attempt to hold or freeze an event, then this is to discard or detach its potential activity, its anarchic share, the unrealised potential or un-individuated remainder that tendentialises or lures the 'now' towards the novelty of the future (Manning, 2016: 64). To archive is to quiet difference in-the-making, the very basis, I have argued, of the audition of the note. The act of audition is not exactly the *preservation* of difference that contrasts with the archive's collapsing of difference; rather it is the immanent construction of differentials (as an open set). That is, audition is the singular event through which the contrasts are patterned (or composed) as its becoming.

In positioning listening in this manner two things might become apparent. Firstly, the audition is actively composing from potential and actual data (a 'self-realising' act, as Whitehead states) (1978: 222). Secondly, this composition necessarily retains (and in fact builds on or reconstructs from its own subjective viewpoint) the differentials of the independent sound-event of the definite note. In this the act of audition draws on the 'anarchic share' of sound: that which cannot and need not be obviously perceived. Yet despite not necessarily rising to conscious perception, the anarchic share nevertheless provides the depth and richness of the experience to the audition of the note and is 'effervescently felt' through its traces (Manning, 2016: 64). This is qualitative and emergent – not to be categorised and contained. Its richness lies as much in the unactualized and the never-to-be actualised (at least at a perceptive level) potential differentiations that are necessarily part of the patterns of the data, and of the subjective form and emotional intensity that make up the experience.

Adventures down the Anarchival rabbit hole

It would be a mistake to think of a wine jar, whether a modern bottle or ancient Greek jar as in Alvin Lucier's *SO YOU*, as an archive for the wine it holds, passively containing and preserving its contents. The jar or wine barrel is an active component in the fermentation process, as each container's particular shape, volume, mineral composition, ecological microclimate and

position in the cellar differentiate it from its neighbouring containers. The wine maker is not an archivist who harbours a death drive, with a 'fear of the new' (Murphie, 2016: 54), but one whose mission is the bringing together of potentials of grape, terroir, yeasts (both introduced and those inevitably filling the air of the cellar) and barrel and jar or bottle. The act of winemaking is forward-looking, one of optimism for the potentials of all these elements to differentiate and produce a novel vintage. As such it is an adventure, an anarchival act that seeks to preserve vigour in the form of 'real contrast between what has been and what may be...beyond the safeties of the past' (Whitehead, 1967: 279). What is the archive if not this 'safety' of (and in) the past, a collection robbed of its adventure in that it is detached from its efficacy in the ongoing novelty of the world?

In *SO YOU*, a vocalist, cellist and clarinettist sustain 'long tones against descending and ascending electronically generated pure waves. As they do so audible beats are produced determined by the distances between the players' tones and those of the continually sweeping pure waves'.[25] My discussion of this work is, for the most part, focussed on the nine large amplified wine jars that were placed in front of these musicians within the performance space, as it is these elements that make evident to the audience the acoustic phenomena that are always present in music but usually subsumed by other aspects. These jars, I will argue, act independently as instruments, transducing and resonating with the played notes to produce a slowly building, eerie composition.

Lucier's score for *SO YOU*, we might say, is propositional for vibrational interaction and sympathetic resonance between the various styles and resonant proclivities of the instruments and 'the variability of actual spaces' (Kahn, 2013: 105). Michael Roth argues that in Lucier's oeuvre 'the actions of the performer serve more to expose the sonic phenomenon that is the central focus of the piece than to enact an expressive gesture' (in Collins et al., 2011: 10). Thus what are foregrounded in *SO YOU* are the inherent *expressive capacities* of all the various components. These components are always present in music, but are usually subsumed to a large extent by the conscious *performance* of expression by the musicians and composer (as opposed to an 'expressivity rather than self-expression' as Lucier describes his work in general) (in Harder & Rusche, 2013). In performances of this work it is made evident to all in the room that the jars' role is never only as listener or echo chamber but is instead as much that of

composer-as-auditor. Here I want to propose – though perhaps it requires something of a leap of faith – that the jars might be thought of as decidedly non-human auditors as much as they are musicians, actively listening to and anarchiving the vibrations present in the room. The jars tell us that we should not suppose that audition is, in some senses at least, an activity reserved for human or even animal ears, even if that very small fraction of listening that is most literally conscious perception might be found only in the animal kingdom.[26]

Nor should we suppose that the instrument in the musician's hand or mouth is a mere conduit for the notes on the manuscript paper, delivering a clear message from composer to audience. In *SO YOU* for example, as each long note is played across the sweeping sine wave pattern, it creates an 'acoustic peaking' as the frequency of the instrument's note approaches that of a sine wave, and an event of beating vibration occurs (slowing as the two frequencies approach each other).[27] Perhaps we might think of this peaking as an example of the manner in which held contrasts, in Whitehead's sense, create a richness and depth to an event. These contrasts produce the tension between the frequencies of the waves – the *differentials* that were immanently produced – that could be prehended by the auditor. Through this holding of difference an event is composed independent from (though related to) the instrumental sounds.

These resonant vibrations create a third position, existing only as diffractive events or vibrational interference patterns in the duration of the performance. While the sine waves are pure notes without overtones (that is, they are sent into the world as such, though they of course bounce off surfaces and diffract, quickly losing such smoothness in the conversation with the spatial constraints), the same cannot be said of the notes from the clarinet, voice and cello (or of the notes emanating from the jars), which are rich in overtones. Thus we can suppose that, as each overtone goes on its own journey through space and time independent of the root note, it must also approach and retreat from the sweeping frequencies of the sine wave generator. Each overtone *anticipates* in its own, decidedly non-human manner, the creation of further beating vibrations. Here that complex timbre of the note that might be grasped as one by the auditor is again let loose, repotentialised in relation to new phenomena with which it may resonate. Such events of acoustic peaking are not mere echoes, but novel and anarchic: a 'tendency' perhaps within the composition on paper, but one that leaps beyond

the initial potentials and limit points of the notes and into a richness or depth of potential in conversation with the spatial elements of the actualisation. The 'integrity' of the note is not preserved (this preservation of integrity – origin-ality in its literal meaning – is what the archival urge would demand[28]). Rather, such phenomena suggest an anarchiving that positions each event as novel while intertwined and relational.[29]

SO YOU explores and layers the particular tendential overtones of each resonating chamber (such as the clarinet barrel, cello neck and body, the body of the singer and chambers of the jars), all within the larger context of the tendencies of the room itself. The piece is a meditation on the active and differential relationship of these chambers to the emergent vibratory ecology.[30] Thus any performance of the work is necessarily an improvisation. This is not meant in the commonly understood sense of the word in a genre such as jazz, where melodies are improvised in a relatively controlled manner over a set chord sequence and musicians seek to create interest through dynamics, melody and rhythm. Rather, the composer and musicians set loose a series of soundwaves into the space, inviting these to resonate productively into novel events well beyond the initial structure provided by the composer.[31] In this, as Douglas Kahn writes of Lucier's general compositional aims, the motivation might be to 'let some air in' and to 'excite and experience whatever space [a] performance took place in' (2013: 101, 104).

In this respect, although the jars in this iteration of *SO YOU* are clearly *responsive* to or with sounds from the musicians, the sounds they generate are not a simple bouncing-off or passive return of a sound (an echo).[32] Instead, they can be seen as a grasping of certain frequencies that are subjectively useful in the generation of their own expressions. The jars also reject (negatively prehend) vibrations that are not useable.[33] The jars then create their own subjective contrasts: high and low points of new frequencies; new or remodeled overtones; local micro-climates of air pressure (eddies); internal and external diffractions further complicating the sounding of the room; and new rhythms of acoustic beating and syncopation. Here each jar perhaps can be thought of as a non-human eardrum: with capacities to vibrate in sympathy with certain qualities of sound events whilst remaining unmoved by other vibrations (a negative prehension, in Whitehead's terms). That is, firstly, each jar subjectively selects which vibrations to respond to (to include reference to in its own corporeal becoming). Secondly, in Whitehead's schema we must insist that such responses are never simply the

incorporation of the original note. Rather, each jar composes its own complex performance within a relational field of potential.

Thus there is an audition of the data available to each jar as well. A positive and negative (but essentially *active*) selection, valuation and patterning remake the vibrational material of the original note into new events of sounding. Here the different auditions of the various jars in *SO YOU* depend of course on the complex physical prehensions relative to a jar's exact shape and thickness, spatial relationship to other instruments, position in relation to the length and amplitude of each sine wave as they traversed the space, and so on. Through such physical prehensions of vibratory material each jar not only grasps or auditions a subjective relation to the histories and complexities of its physical situation, but also *expresses* the differentials or contrasts of such grasping through its own subjectively orientated composition of relational vibration. Such expressions of final, definite patterns consist also of the mediation of the physical data through eternal qualities with which each jar engaged – qualities of shapes (roundness, tallness), pitch (harmony, disharmony, key), surface (smoothness, roughness) and so on. And, while the wine jars do not of course prehend such factors in any sentient manner, the qualities of their making (shape, size, chemical composition, colours, textures and so on, plus the particular preferences and physical traits of the potter), are always present. Also present is the history of their journey through cultures (from utilitarian object to precious artefact). Their vibrations are therefore a nexus or point of relational connection for many cultural, historical and personal qualities that lead to their individuation in the room as resonators, their expressions loaded with an emotional intensity that provides a richness grasped in audition.

The jars therefore, while carrying traces or ghosts of their many material and cultural pasts, are active, lively participants in the events. They reach into the future and potentialise vibrations rather than archive the sounds through an echoing. Thus, while *SO YOU* is listed as being for three musicians, oscillating sine waves and nine jars, in reality the jars deserve to be recognised as decidedly non-human musicians in their own right: active makers of the piece as much as the clarinet, voice and cello. The sine waves too are integral to the immanent composing that occurs. While perhaps we might say that composer Alvin Lucier shows a particular courage in embracing the musicianship of the wine jars. Such courage might be present in any

composition or performance that embraces the anarchic acts of audition and follows them, rather than seeking to dampen them. In this *SO YOU* begins to make felt *qualitatively* – as a 'liveliness' (Lucier in Harder & Rusche) – some of the complexity of the event that necessarily reaches beyond conscious perception and charges the event with potential, along with the impossibility of archival preservation of any note.

Any conception of an archiving of a note assumes, firstly, that there is 'a' note that can be archived, that can be managed and reproduced. Secondly, it assumes that the character of the archivist is not integral to the distinction and collection of that note. By character I mean here not just the taste in collecting, though this must be a factor, but all the particularities of bodying, thought, spatiality, and expressive capacities. Thirdly, the concept of archiving ignores the fact that what is being archived has, in Whitehead's terms, ceased to be, having reached the termination of its concrescence or 'satisfaction'. The note must therefore always be re-created. If perhaps the note does continue to exist, it is in the form of its inclusion as data into other events, which grasp and pattern aspects of the note in order to achieve their own becoming. Thus the note 'lives on' in the world as a component of the immanent coming together of other perspectives. In this thinking the original note is a lure, seed or invitation for other events of diffraction, resonance and audition (though again these events are concurrent with the note's differentiations). The note's ungraspable-in-their-entirety excesses charge the air with anarchic potential. Each audition is a subjectively composed topology of some of those potentials in a particular pattern as required to realise the reinvention of the original note from another's perspective.

Where is the vividness and/or the subtlety in the preserved and fixed notion of the archived note? If it is not lost then surely it is muted – robbed of a richness that is not necessarily heard in the note itself but that saturates the field as potential for future differentiation: an unheard share for and of the future. As Cox states, music – as in the case of *SO YOU* – perhaps here begins to make 'audible the dynamic, differential, discordant flux of becoming that precedes and exceeds empirical individuals' (2011: 153). It is in this sense that music is not a series of messages or sound bytes that float in the ether waiting to be received, but the propositional potential for audition that is entwined with the potential of the auditor, as the two co-compose. Thus for audition to be an adventure into listening and, I would argue, to be an anarchival act,

the 'vigour' of potential in the immediate present must be maintained. This is the anarchic share in the form of 'real contrast between what has been and what may be…beyond the safeties of the past' (Whitehead, 1967: 279.[34] What is the archive if not this 'safety' of (and in) the past, a collection robbed of its adventure in that it is detached from its efficacy in the ongoing novelty or differentiation of the world? The simple audition is an act of anarchiving in that it selects from a complex history and reactivates some of the data within new events. It is an adventure into the unknown, into novelty that cannot be contained within any concept of an archive.

Inconclusion: Anarchic Beauty

And yet despite all this activity, difference and complexity that I have just begun to explore, audition comes to us as one, in an instant, as 'one complex feeling'. This is indeed, as Whitehead has said of the note in question, 'definite'. In *SO YOU* I hear distinctly and recognise the high reedy sound of the third register 'D' on the clarinet and then the same note on the cello, even as I also feel their difference. Like a thought, this note is not there one second and then luminously present the next, an event in and of itself, and this is its beauty. It is resonant not only within but in emergence *with* all of the field of its individuation, bringing forth a qualitative richness of the ghostly whispers of this noise-field as pure feeling of intensity. Here

> the enjoyment of a composition (is) derived from the interconnectedness of its factors. There is one whole arising from the interplay of many details. The importance arises from the vivid grasp of the interdependence of the one and the many. (Whitehead, 1968: 60)

This is a sense of 'beauty', but not merely beauty in a minor form – that is, 'the absence of painful clash, the absence of vulgarity' (Whitehead, 1967: 252). Instead this might subscribe to what Whitehead terms 'major beauty'. This involves new 'conformal intensities of feeling' – where the parts contribute to a vital whole and the whole contributes to the 'intensity of feeling of the parts'. Here beauty is the perfection of the subjective form in detail and the final synthesis (Whitehead, 1967: 252). In this definition of beauty, music is perhaps freed from its loaded cultural connotations of certain styles of composition, a freedom that becomes evident in the beats of the acoustic peaking and spatial resonance that complicate *SO YOU*. This beauty and freedom are potentially there as much in the crackle of a John Lomax field recording, the

fuzz of a Stooges song or the strain and discord of a Morton Feldman sound cloud as in a Beethoven string quartet. All these are resonant with the histories of instruments, recording technologies and ad-hoc studios and rich social and sonic histories, alongside the many layers of wave vibrations with their potential contrasts that deny there necessarily being any simplicity in a three-chord song. The perfection of 'harmony' of beauty that Whitehead writes of is in the potential complexity of the contrasts that can be sustained in an event and not in the erasure of novel and difficult frequencies and resonances that produces only the anodyne experience of the archival.

There is no beauty, in Whitehead's terms, in the archive, in the sorting and separating and *recognition* that remains resolutely at a conscious level – in the stilling of a thing's emergent relationship to its world. That is, the intensity – composed of these held contrasts – is lost or at least reduced in the archive, as it is in the simple sine wave whose frequency and amplitude is not (yet) coloured by its engagement with the complexity and variety of the world, but sits alien and lost on its own. How can we tune in to the anarchic share that is the beauty of the note, without, as Erin Manning says, capturing it in its entirety? (2016: 64). How do we allow these values to express and ingress without seeking to define them (for if we capture or over-define do we not archive)? This is the question that Lucier's compositional incursions insistently pose. It is a complex and unfolding question that finds its partial and subjective answer in the audition of his work, by both human and non-human auditor alike. It is perhaps a larger ethical question too, of how to live in a manner to maximise the expressivity of each event. The singular voice that, if it is not quietened too quickly, might reach beyond the habitual and historical to make a brave leap into novelty.

The definite note is resonant with the whole universe (with each sound a *contrast* within a universe of sound that carries with it the whole history of sound as 'cosmic vibration') (Evens, 2002: 177). Indeed, the sound waves of the big bang can still be identified reverberating throughout the universe in waves many kilometres in length. Thus audition is itself an ecological act, tapping into this web of relation in order to create: to individuate as a singular event. Here, as Whitehead points out, we must also consider that not only does the auditor compose the perceived sound; the act of listening also composes the auditor, who 'would not be the auditor he (sic) is apart from this feeling of his' (1978: 234). If we consider this listening as

an anarchiving, might we not then propose that as the anarchivist reactivates the archival note through listening, the anarchival note reactivates the archivist? That is, what the audition might offer is a chance to reconnect with the anarchic share not only of the note, but of ourselves: a sense of our own continuing individuation that is self-motivated but entangled with these vibratory events. Here the ancient jars not only audition and compose, but are, from the subjective position of the vibrations in the air, remade through these acts (made to 'live in space' and time) (Lucier & Simon: 100). They become anew in a held tension with their long histories and myriad potentials as the two mutually or collectively individuate, creating new beauty through this increase in complexity and potential complexity that folds and layers in the 'lively behaviour' (Lucier in Harder & Rusche) of the anarchive.

Biographical Note

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Notes

[1] My purpose here is somewhat tangential to Whitehead's discussion. The example is used by Whitehead to illustrate the intertwined factors of the subjective form, that of the qualitative pattern and the pattern of intensive quality (1978: 233).

[2] 'Subjectivity' and 'contrast' are complex terms that are key to Whitehead's philosophy. In Whitehead's use of the terms their meanings sit somewhat outside of their more general use. Whitehead points out that in his process based philosophy 'the subject emerges from the world' rather than situating the world as that which 'emerges from a subject' (1978: 88). The 'subject' is simply the unity emergent from the entity or event's own processes of becoming (1978: 233) – a subjective perspective on data grasped from the actual and virtual planes. This unity is not, however, one of homogenization, but of a series of 'contrasts' productively held in differential tension. The term 'relations' might more commonly be used, but Whitehead explains that relations are a higher order and are 'abstractions from contrasts' (1978: 228). The depth of complexity of an entity is 'subjective' since it is *from the particular perspective* of the entity that contrasting elements are brought into relation. This is, Judith Jones says, 'intensity' that compresses differences into a subjective unity (1998: 157).

[3] In Whitehead's philosophy strictly speaking there are no 'secondary' events: every event is an act of the creation of novelty.

 [4] A 'society' in Whitehead's terms is a series of closely related events. What we conventionally think of as a stable object would, for Whitehead, be better termed a society of micro events, with the seeming stability of the object over time due to the fact that the events share common conditions of becoming or feelings and therefore have a tendency to repeat similar patterns or concrescence.

[5] Nor should we mistake sounds for or conflate them with their sources. As Cox argues, sounds are not bound to their sources, but are distinct 'individuals', although in reality they are less individuals than emergent collectivities (2011: 156).

[6] Performed 23/6.17 at the Odion, Athens. See the documenta 14 website: https://www.documenta14.de/en/calendar/17031/so-you-hermes-orpheus-eurydice-

[7] In a similar vein, see, for example, J.J. Gibson's work to correct this fallacy in regard to the perception of vision (Gibson, 1986).

[8] See Roads on the pulsar (2001: 138). This is not to say that bodies cannot feel the pulsar affectively, as there is still a contrast between the pulsar event and the surrounding air pressure (Roads, 2001: 33) On unsounds, see also Goodman (2010).

[9] 'Valuation' determines how an eternal object ingresses into the physical feeling. That is, it is 'qualitative, determining how the eternal object is to be utilised'. It is 'also intensive, determining what importance that utilisation is to assume' (Whitehead, 1978: 241). 'Patterning' is the particular synthesis of contrasts performed by the entity in its act of becoming (ibid: 115).

[10] See also Bergson on the felt quality of pitch (1998: 46).

[11] Eternal qualities or 'eternal objects' are indefinite qualities that become specific in their actualization in an entity. Simple examples of this include colours and numbers, which are indefinite qualities (the number six, the colour blue), but become specific when applied to qualify objects (six blue notes).

[12] See Whitehead, 2014: II: 4.

[13] To understand this system or prehension as consistent with the seemingly constant modulation through space and time that is a soundwave, it is necessary to accept Whitehead's contention that each event is atomic. That is, the constant modulation is a series or 'society' of events that, in sharing similar conditions of emergence (relationships to key data and similar priorities in valuation of this data), obtain a consistency that might be mistaken for endurance. In the complex feeling that is the audition, each aspect of this event is also able to maintain its

own singularity, as the differences in these prehensions are not collapsed or resolved but remain as problematic and productive (of further difference or novelty in the world).

[14] This perception of pitch also involves, to some extent, the prehension of the amplitude of the waves. To be perceived as a distinct pitch the waves need to maintain a similar frequency. One might surmise that this must be maintained for enough time for sufficient data to be grasped to provide the necessary contrasts.

[15] In sound, a sine wave is the 'purest' sound – a single tone with a sinusoidal waveform. That is, it consists of one single frequency without added harmonics.

[16] Though it should be noted that such oscillators had in fact been invented in the Nineteenth Century.

[17] The clarinet owes at least part of its distinction in timbre from the saxophone to its cylindrical bore that reflects the waves generated so that they travel four times through the barrel. In the conical bore of the saxophone the wave is reflected only once and is therefore only doubled (Anon, n.d.). The clarinet has different overtones present to the saxophone, evident in that when the register key is used (eliminating the fundamental) the clarinet jumps an octave and a fifth due to its weak even overtones, whereas the saxophone with its dominant even overtones jumps an exact octave (Wolf, n.d.).

It is worth noting that not only is there a distinct difference between the timbre of different categories of instruments, but that there is a very distinct character to each clarinet, dependent on the qualities of the material used. The sound qualities will be affected by the density, age and patina of the wood, the age and thickness of the pads, and of the thickness and density of the reed chosen, for example. These qualities are also in conversation with the particular qualities of the musician, such as their embouchure (which is composed of the particular arrangement of muscles and their fitness to maintain pressure, the thickness of the lips and the air pressure that lungs and diaphragm exert). Similarly, the note sounded on the cello has a particular relationship to the singular gesture of the arm and shoulder of the cellist. Various instruments *and* musicians therefore develop a distinct sound – warmer, brighter or softer and so on than their colleagues.

[18] Other non-sinusoidal sound wave forms include square waves (also composed of harmonics of odd integers), and sawtooth waves (which are composed of both odd and even harmonic integers). The shapes that give these waves their names are related to the characteristic pulsation of the amplitude of the waveform that each type of wave has.

[19] These overtones do not necessarily last the same amount of time as the fundamental wave and they may fade or develop throughout the wave cycle. Again, this is part of the character of notes from a particular instrument.

[20] Which is not to say that such 'unsounds' are not prehended by the body. See Roads (2001); Goodman (2010).

[21] Diffraction is defined as the ways in which waves combine when they meet to create additional waves. For a clear discussion of diffraction see Barad (2007: 71-94).

[22] Although the note is in this sense a spatial event, it should not be thought of as a 'property' of the space (Whitehead, 1964: 149-50)

[23] The manner in which a space emphasizes certain tones while muffling others is the subject of Lucier's most famous work, *I Am Sitting in a Room* (1969), in which the repeated rerecording and replaying of the simple statement "I am sitting in a room" disintegrates, becoming less comprehensible as the words involved as, over time, certain tones disappear while others resonate more and more wildly.

[24] As with the division and layering of the physical prehensions of the note, these conceptual qualities are vastly complex and nuanced, though unlike the physical prehensions that must logically touch the whole history of the universe either positively or negatively through some degree of remove, only selected eternal objects need be incorporated into the experience.

[25] *documenta 14* website: https://www.documenta14.de/en/calendar/17031/so-you-hermes-orpheus-eurydice-

[26] On the role of consciousness in feeling see Whitehead (1978, 241-243).

[27] Such beating is only audible when the two frequencies are close – usually less than a semi-tone. This is useful when attempting to tune two strings together: as the notes approach perfect tuning the beating slows audibly, disappearing as perfect tuning is achieved.

[28] That is, originality demands faithfulness to the original source untainted by further iteration or interaction.

[29] Here one might say that Edison's first momentous recording of a sneeze is not that sneeze but an event in its own right. The viewer of the film, though they experience the sneeze through the mediation of the filmic event's prehension of the soundwaves and light of the sneeze, does not catch the cold, though they may connect the event with past or future illness. It would be absurd to think that one could preserve this activity of the sneeze (though it may creatively ingress into the becoming of future events), yet we persist in thinking that more overtly 'concrete' objects can be kept alive in the archive. The film of the sneeze is momentous, not only as a moment of concrescence of a scientific inquiry that it satisfies and for the future history of film recording towards which it leaps, but that at each playing it remakes the event – an act of novelty and becoming that is subjectively momentous for the sneeze itself as an act of coming into being anew.

[30] As Lucier states, much of his work 'explores the resonate properties of ordinary everyday objects' (in Harder & Rusche, 2013).

As in most of Lucier's work, there is a deliberate avoidance of the 'tricks' of composition and conducting that are used to add interest (that is, shifts in speed or dynamics to create drama), so that the already occurring differentials produced through resonance, diffraction and phase differentiation can be brought into focus as they emerge.

[31] This rethinks 'experimental music as actions rather than acting, as sounding rather than shaping.' Kuivila, (in Collins et al: 17).

[32] In this philosophical context the concept of the echo is perhaps false, as it does not represent the complex act of audition and expression that occurs. Sounds do not simply 'bounce back' unchanged from a reflective surface – it is a new note that sounds in riposte, born of an act of resonance by that surface.

[33] Perhaps in this we can also say that each jar in *SO YOU* has its own subjective unsounds: those frequencies that do not cause its shell or contained air to resonate.

[34] The most obvious objection to this argument would be that it seems to suggest that all recordings of music fall into the category of archiving, with the implication that such recordings are necessarily deadening. Perhaps the simplest response to this would be to argue that the playing of any such recording into a space (whether a room, headphones or as radio waves) unleashes a new set of diffractive potentials, remaking the original recording on some levels at least. One might also argue that there are recordings that seem to pulse with vitality, while other recordings of the same piece of music may seem flat and drained of life. Speaking from experience as a musician, there are days when the recording studio seems to resonate with potential and other times when the same combination of musicians, equipment and compositions fail to spark. This is, I think, as true for the playing of a laptop or programming of a drum machine as it is for singing or saxophone playing. This is not then, simply a matter of the recording technology (although the meeting of this technology and sounds is an event unto itself), as many field recordings attest to the liveliness recorded by rudimentary equipment. Such arguments are valid but perhaps inadequate to fully think through recorded music in relation to the concept of the anarchive, and there is not the space here to follow this thread to any great depth.

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FCJ-226 'And they are like wild beasts'[1]: Violent Things in the Anthropocene

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Figure 1: Francisco de Goya, *Y son fieras* (*And they are like wild beasts*) Plate 5 from *The Disasters of War* (*Los Desastres de la Guerra*) 1810 (published 1863). Etching, burnished aquatint and drypoint, 15.2 x 20.7cm. This reproduction sourced from Wikimedia Commons, and donated to Wikimedia Commons by the National Gallery of Art, Washington.

Disappearance

Figure 2: Ruth Buchanan, *Circular Facts* (2009/2010), coated MDF board, powder coated steel frames, brushed cotton, coated 35mm slide projector stand, audio and 35mm slide on synchronised loop on headphones, two chairs borrowed from Hotel Bad Toelz, dimensions and duration variable. Installation view: Monumentalism, Stedelijk Museum, Amsterdam. Image courtesy the artist and Hopkinson Mossman.

At the opening of the temporary Stedelijk Museum in Amsterdam in 2010 there was a room curtained off from all the others. Looking behind the curtain I found two chairs, headphones, a silently meditative voice, a highly-reflective dark blue leaning-yet-standing wooden panel, a rug, and a humming slide projection of an old ballroom. Of all the various objects somehow existing together for this moment, it was the chairs that held my attention. They were just chairs but they seemed important. The work was *Circular Facts* (2009, figure 2) by New Zealand artist Ruth Buchanan: an installation based on the script of a performance Buchanan staged after researching the strange and highly publicised disappearance of British writer Agatha Christie.[2]

In 1926 Christie vanished for eleven days until she 'was found staying in a hotel under a pseudonym after having suffered what she claimed to be a case of amnesia' (Bouwhuis, 2010: 202). Buchanan's fascination with the story lead her to spend a summer living in a hotel; the two chairs in the installation are from this hotel. The slide is an image taken in the ballroom of

the hotel where Christie stayed, it is projected onto the tilted dark blue panel, becoming simultaneously a reflection and a metaphorical rabbit hole. In this context the curtain also changes its nature, becoming a different kind of curtain; perhaps now a bedside privacy screen found in a hospital ward. Individually these things are not monumental, nor do they really narrate a fiction about Christie. They are however meaningful objects. Together their variations mark out an installation in an art gallery that makes us stop, wonder and begin to connect – things with other things, bodies with objects, violence with absence. Buchanan, like many contemporary artists, has an uncanny ability to imbue objects with what we used to call "aura", and now call "vitality". These choreographed objects seem to vibrate with life energy.

Can a chair have life energy?[3] Can it actively contribute to unravelling a mystery? Could it have actually participated in the perpetration of the mystery? Can it retain a vital force as it shifts form between countries, between bodies, and across time?

Later, I walk into another gallery and my child, exhausted with yet-another Biennale outing, flops into the closest chair and starts fiddling with a glass box on a table. Surrounding us hang strange virtual reality helmets: hoods with golden protuberances and layers of aluminium foil and PVA glue that seem to have been left behind by a recent school visit. I put one over my head and am overwhelmed by the odour of previous bodies. Inside I'm in the backseat of a car driving through desolation. There is a strange beeping, people in white Teflon overalls sit in the front seat and talk in hushed tones. We pull up in a small village, and everyone gets out of the car, they sweep their bodies with the blinking beeping devices, and we enter a room. On the floor is a glowing green cube. I recognise it. This is Trevor Paglen's *Trinity Cube* (2015), a cube of Trinitite (the new mineral created in the New Mexico desert with the explosion of the first nuclear device on July 16, 1945), encased in irradiated melted glass taken from the windows of a restaurant inside the Fukushima Exclusion Zone.[4] One radioactive body inside another. And here we are, more bodies inside other bodies and travelling around the site of an exhibition that we will never be able to visit until the radioactive contamination from the Fukushima Daiichi nuclear plant drops to a "safe" level (estimated to be anytime between 3 and 30,000 years from the present). And here are the tables and chairs. The same table and chairs that my daughter is currently sitting at. I find myself choking inside the helmet. I pull the helmet off and guide her

to the bathroom, we wash our hands and head out for ice-cream. VR always makes me nauseous.

Can a chair die? Could it kill me? My child? Could it carry contamination from one place to another? Can it retain a vital force as it shifts form between countries, between bodies, and across time?

In the Holocene, relationships between humans and chairs and art galleries were reasonably straightforward. After 11,500 years of planetary stability, humans had the measure of stuff, rules were in place to keep everything in its place, and laws enforced any abhorrent behaviours. So when in 1716 a clapper from a bell fell on a man's head, the judge could assert that as it was ringing at the time, the whole bell was forfeit to the crown. And when a flock of 58 sheep all moved to one end of a boat crossing a river and two men died, the law declared the boat (in this case – not the sheep) deodand because the boat was moving and had caused death (Sutton, 1997: 44-45).

In a passing discussion of what it might be to be a Latourian 'actant', Jane Bennett raises this historical figure of the 'deodand' (Bennett, 2010: 9). Enshrined in English Law for nearly six hundred years the deodand was an inanimate chattel (object or animal) that when in motion had caused the death of a human, and as a result must be legally forfeited to God via the 'King's almoner who would eventually apply them to some pious use' (Pervukhin, 2005: 237). The law of deodand replaced the laws of 'noxal surrender' (the payment of banes direct to the victim) in 1066. A twelfth century statute states: 'concerning horses, boats, cards and things belonging to a mill by which someone is killed, which things are properly called banes, they are to be arrested and, afterwards, handed over to the township' (cited in Pervukhin, 2005: 251). Historians highlight the active role of the deodand, for example: a vat of boiling water, carving knife, falling tree, horse, bundle of straw, fishing net, or a tram, rope, spoon, pig, ladder or brewery floor were all causes of misadventure, contributing to the accident and thus could be confiscated. Significantly, once it became established the common law of deodand distinguished between a thing in motion and a thing standing still. A cart in motion required the whole cart to be forfeited, whereas a fall from a stationary cart (a resting object) would require the forfeit of just the wheel. These guilty objects in motion were afforded agency by ancient

juries who apparently 'ascribed free will to horses, carriages, and spoons' (Pervukhin, 2005: 252).

Over time the nature and enforcement of deodand changed and the practice was abolished in 1846; not coincidentally after the exponential rise of railways. Too many accidents meant that the ongoing surrender of guilty things would remove most trains from the newly built tracks, and the substitution of cash levies was becoming unsustainable. William Pietz notes that the abolition of the law of deodand was part of a change to a raft of social institutions in the 1840s that 'established legal structures better suited to capitalist enterprise and liberal society' (1997: 98). Fault had to lie elsewhere — with humans not objects. Increasingly complex laws of compensation, cause and effect replaced the deodand, but the nonhuman objects and their crimes did not go away.

Let's for a minute return to the definition of the object offered in the 1846 'Act to Abolish Deodands'. The deodand was a nonhuman material object, an 'accursed thing' that when in motion had killed a person. For example, to remove the requirement for deodand when a person had been dragged to his death by the workings of a mill, the law had to prove that 'the accident which happened was a mere accident, and had not happened through any fault of the machinery' (Pietz, 1997: 91). By the time that the concept of deodand was overthrown objects were becoming stabilised by capital. For example, the deodand required for the Sonning Cutting railway disaster in 1841 of two trucks and the engine was considered impossible to pay, even if financially it would mean compensation for the families of those killed. Instead new laws regarding fatal accidents shifted blame away from the moving object and towards adjudication of the impact and severity of the injury. The nonhuman object in motion lost its place to a humanist rationale that turned its focus towards mitigating the impacts of increasing industrial and railroad accidents.

The rise of industrial capitalism meant that the agency of objects became reduced to one of exchange. The "death of the deodand" created money. Instead of the object becoming forfeit, compensation could be financial; another form of debt exchange. Slipping away were the objects themselves. Taking up the place of the deodand were objects of industrialisation that could be bought and sold within a monetary economy. This transformation also included art

objects, which due to the professionalisation of the art dealer were also becoming publicly exchangeable commodities.

Today the concept of deodand holds a place in legal history alongside sows charged with criminal offences, and cats hung to death in public spaces.[5] It offers a useful way to think of the way that nonhuman things remain potent objects, not for just what they mean to us, but for what they mean in relation to other objects.

Motion

In 1982 Korean-American artist Nam June Paik's robot *K-456* was removed from its pedestal at the Whitney Museum and guided by the artist down Madison Avenue where it walked out into the street and was hit by a passing car.[6] Paik said that *K-456* represented 'the catastrophe of technology in the twenty-first century. And we are learning how to cope with it' (cited in Hanhardt, 2006).

In 1996 Belgian artist Francis Alÿs made a film in which he kicked a bottle around a square in his home town of Mexico City. *If you are a Typical Spectator, What you are Really Doing is Waiting for the Accident to Happen* (1996) ended when Alÿs wandered into the road and got hit by a passing car.[7]

A trend begins to emerge.

An image now hailed as one of the touchstones of the Anthropocene is British artist JMW Turner's *Rain, Steam and Speed—The Great Western Railway* (1844). A black locomotive pulling a series of open-topped carriages is approaching at speed over a bridge from the top left of the image. Dense rain is being turned into steam by the metal against metal of the wheels and tracks, and the towering height of the bridge feels suddenly precarious as heavy industry bears down towards the green fields hidden in fog at the front of the image. The concept of deodand had not yet been overruled, and Turner like many others at the time had been witness to many train and automobile accidents.

In a review William Makepeace Thackeray described the painting for his readers:

He has made a picture with real rain, behind which is real sunshine, and you expect a rainbow every minute. Meanwhile, there comes a train down upon you, really moving at the rate of fifty miles an hour, and which the reader had best make haste to see, lest it should dash out of the picture, and be away up Charing Cross through the wall opposite. (Thackerary, 1844: 712-13)

But the viewer does not run, instead we are frozen in horror. There is a tiny hare on the tracks. An animal so insignificant that its death will not result in the extinction of its species; instead its networks of family and society will rebuild, and children's stories will be written about the day that Peter's father decided to cross the train tracks to see what was in the green fields over the line. None of this has happened yet. Right now, here in the painting the hare is stationary, and the train is a 'hunter in motion' (Thomas, 2016).

Turner said, 'Always take advantage of an accident' (cited in Thomas, 2016).

But why this image over any other as a marker of the Anthropocene? It is the Industrial Revolution. Britain is making the transition to an industrial society, and Turner is there to witness it. In one of the foundational documents of the Anthropocene, Paul Crutzen points to Boulton and Watts' new and improved harnessing of steam to drive extraction machines for coal mines in 1784 as the key moment when humans mastered geological control of their materials (Crutzen, 2006; see also Steffen, Grinevald et al, 2011: 842-867). Under pressure coal is converted into hydrogen and carbon monoxide in the heat of the steam compressors and ancient geologic carbon re-enters the contemporary carbon cycle (Ziolkowski, 2016, 35-40). First in machinery and then in transportation the power of steam replaced the motion of animals. It seemed to be an unstoppable ecological transformation. EA Wrigley called it an 'energy revolution' on an island nation (Wrigley, 2010; see also Moore, 2011: 108-47). Steam trains were the next logical step when the steam engines gained the power of motion and travelled to and from the abundant and accessible coal fields that contained an inexhaustible supply of cheap energy and cheap labour. Predictably, the transformation came with uneven social costs. Maybe the people in the carriages in Turner's painting are returning from a day out in the country, or maybe they are workers from one of the new industrial factories on the outskirts of London returning home to see their loved ones. Their labour is regulated, and their city is being reshaped.

The Sonning Cutting railway disaster on a section of the Great Western Railway happened on Christmas Eve in 1841, three years before Turner's painting was exhibited. The train was transporting two carriages of passengers at the front of the train, next to the tender, followed by a truck for the passengers' luggage and sixteen wagons of freight. The passengers were 'chiefly of the poorer classes', in this case, stonemasons returning home for Christmas. When a large rock from a slip above the track derailed the locomotive, the passengers were crushed by the motion of the freight. The trial was widely reported in the newspapers — 'Eight persons in an instant dashed to atoms, and twice as many grievously wounded!' (E.A.M., 1842: 5-8) — with blame laid on the rock. Because everything was in motion at the time, a deodand based on the value of the locomotive and the carriages was ordered payable by the owner of the railway to the lord of the manor on whose land the accident occurred. He was meant to then share the money amongst the families of the injured and killed. He never did, nor was the money ever paid, nor was the engine forfeited. The age of moving objects being at fault for causing death was over.

Dead matter

In another gallery, on another day, there is an elephant. The gallery is a white cube, every surface shines, reflecting the elephant's pitted grey skin. The elephant paces around the cube, its feet mirrored in the polished concrete. After a while the elephant slumps to the ground and rolls onto its side. Resting. Dead? In *Vibrant Matter* Jane Bennett identifies how in the years after the deodand we learnt to divide the world into dull matter (it/things) and vibrant life (us/beings). Her focus on vitality, movement, and circulation is not just about physical relationships, it is about a political ecology of things. Art, in this context, is the drawing of relationships between substances. The energy moving between the elephant in Douglas Gordon's *Play Dead: Real Time* (2003) and anyone that stands in this space before the three projection screens that record and watch the elephant, constantly shifts and moves.[8] This is not dead matter, we can all see it is a living elephant. What Gordon raises is a questioning of the way that we think about energy. Is what we see in *Play Dead* a revisitation of energy rather than the object as a material? Despite the possibilities that objects have to flow, to merge and meld with other objects, matter-energy can do things that objects can't. It can compose as well as destroy:

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we know nothing about a body until we know what it can do, in other words what its affects are, how they can or cannot enter into composition with other affects, with the affects of another body, either to destroy that body or to be destroyed by it, either to exchange actions and passions with it or join with it in composing a more powerful body. (Deleuze and Guattari, 1987: 257)

Bennett equates affect with materiality, and makes clear the extension of Deleuze and Guattari's ideas into the realms of what she terms not-quite-bodies (Bennett, 2010: 108). She stretches us to think about not only things and objects (nouns) as bodies, yet she doesn't quite suggest we return to the age of the deodand.

Alongside the deodand, some philosophies of matter already contained evidence of death. From 1640 to 1679 Anne Conway worked from her bedroom at Ragley Hall in Warwickshire, England. She was tutored "at a distance" by the Cambridge Platonist Henry More and visited by many other thinkers. Living in her home was the travelling scholar Francis Mercury van Helmont who would later carry her writing to Holland for publication and also introduce his friend Gotthold Leibniz to her notion of the monad, developed from her readings of the Kabbala (Hutton, 2015).

Conway was deeply informed by her religious beliefs and practices. Her concerns were with substance, time, essence and people. Her contemporary René Descartes had proposed a view of a mechanistic science where all natural phenomena could be explained in terms of simple observations of matter in motion. In her treatise *The Principles of the most Ancient and Modern Philosophy* published after her death in 1690, Conway explicitly counters Descartes with a concept of processual nature. Her aim was to challenge science as it was articulated by the mechanists. Descartes' mechanistic world was full of causality and death. Conway's world, on the other hand, is based in a logic of physics (movement) that is vitalist (specifically there is not a pre-existent matter that moved, but moving matter.) She argued that all substance is living, perceptive, and always in motion. As a result there is no such thing as a material body (for if it was inert it would contradict God—who is life itself).

Like Leibniz she argued that all of reality (both inorganic and organic) was made up of an infinite number of living atoms, each substance contains within itself infinitely many smaller substances. These substances she called monads. The monad contained attributes of internal energy and perception and no two were alike (Conway, 1996).

Arguing that her views were explicitly "anti-Cartesian", Conway stated that there was no such thing as dead matter, only matter in which the soul was transforming into a new material by continuously travelling up and down a dynamic, energetic and infinite staircase (Wayne White, 2008: 48, 52). By engaging an open definition of the body that included all forms of matter Conway demonstrated that if matter were dead it would not be able to be penetrated by other matter. Bodies are alive, self-moving, divisible, and capable of being penetrable. Her examples are abundant: although it may be true that iron cannot be penetrated by an 'equally coarse body', she writes, in-fact 'subtle bodies such as fire' can completely transform it. 'All things have life and really live in some degree or measure' (Conway, 1996: 45-46).

At the time statements like this were in line with scientific understandings of the geology of the earth. It was in 1659 that Nicolas Steno had begun to question the received scientific wisdom that fossils grew in the ground (Davidson, 2000: 329-44). The fundamental organic unity of nature was not yet in question. The living rocks of Lady Conway shifted the opposition of organic and inorganic matter into tonal flow and flux. The most fascinating part of her thesis is the changeability of species into each other at a material level. Wheat turns into barley, worms into flies (Wayne White, 2008: 53). It is a theory of spontaneous generation. And rocks can change into anything: 'stone and dust could eventually be transformed (logically) into human beings. The reverse was also true. An individual could become a stone or a horse could become a shrub' (Wayne White, 2008: 53). The marble that fascinated Conway is formed from the compression of ancient and once animate beings. It is a metamorphic rock; meaning that it is formed from other rocks such as limestone or dolomite. The changes in form occur due to extreme pressure and heat.

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One hundred and fifty years later, on the other side of the earth, new colonisers of a hot land began carving buildings out of sandstone. Until the 1890s sandstone — a sedimentary rock

consisting of compacted sand that is usually a majority of quartz grains — was the dominant building medium in Sydney, Australia. Mikala Dwyer's *The Apparition of a Subtraction* (2010, figure 3) is a collection of sandstone 'zeros' carved from blocks quarried from Cockatoo Island in the middle of Sydney harbour and left over in the construction of her parent's house.[9] The zeros stand in a circle with other domesticated objects. Circles are a way of shaping thoughts. Dwyer says there is also something about the circle that 'invokes a threshold' (Parker, 2015: 64). The circle is a tight form of geometry, a closed system that can hold together disparate objects. The work fuses sound, smoke and stone into a séance that proceeds via metamorphism to address the vitality of the rock.

Figure 3. Mikala Dwyer, *An Apparition of a Subtraction* (2010) audio, smoke machines, sandstone, plants, lights, acrylic, chair, wood, clay, plastic, ashes (grandmother), wood carving (father in law-Leslie Corben), table, electrical cord, dimensions variable. 17th Biennale of Sydney (2010) at Cockatoo Island curated by David Elliot. Reproduced with permission of the artist.

At unexpected moments the work produces a smoky apparition. At others the room is filled with the dense noise of chipping and scraping. Dwyer describes how she used sound to refill the rocks and manufacture a solid from air. The sound was recorded from within the stone as it was carved.

I had this idea, that I could create a sonic object from the negative space of the stone, by layering the sound of the chipping so many times that it became dense again. And that by directing the sound into one spot through speaker cones, it would be possible to form an object that the ghosts could manifest through; a sort of summoning through the sound becoming matter again. (in Byrt, 2011)

The work had a second part hidden at the end of one of the long tunnels that pierce the island (figure 4). Disguised within the arcane bowels of the Island the sound of chipping stone was only visible in passing. Red light glowed, bodies rustled and water dripped. Puffs of fog or smoke indicated life.

Figure 4. Mikala Dwyer, *An Apparition of a Subtraction* (2010) audio, smoke machines, sandstone, plants, lights, acrylic, chair, wood, clay, plastic, ashes (grandmother), wood carving (father in law-Leslie Corben), table, electrical cord, dimensions variable. 17th Biennale of Sydney (2010) at Cockatoo Island curated by David Elliot. Reproduced with permission of the artist.

By splitting the work across two locations, Dwyer includes the working practice as a live activity: stone and steam. Like Conway's water that breeds fish, these are rocks that can animate the ghosts of bodies that previously lived here and hewed the stone that now waits in

the circle. The fossils are growing in the rocks. It offers both a negative and a positive to the work itself. One is calm controlled visible, the other hidden, violent.

Conway and Dwyer speak of vitality and material in the same way: Dwyer says, 'Stone here, for example, is very loaded. It has its own consciousness but it's made up of particles and densities. It has its own memory, its own geological memory, and I'm working in dialogue with that' (Dwyer and Watts, 2010). For Conway every substance 'reacts' to the substances in its vicinity. It is a constant process of permeability and obstruction. 'Wood is potentially Fire, that is, can be turned into Fire; Water is potentially Air, that is, may be changed into Air' (Conway, 1996: 39). Obstruction is key, it is what enables movement. She describes the manner in which a sail instead of a net contains movement. Without the resistance of the sail there would be no wind. 'In every creature, whether the same be a spirit or a body, there is an infinity of creatures, each whereof contains an infinity, and again each of these, and so ad infinitum' (Wayne White, 2008: 52). The nonhuman is not reducible to what the human can know about it. Rather the understanding of matter that was central to Conway's development of the notion of the monad was not about enfolding (as it was to be with Leibniz) but the "aliveness" of matter.

The step between a rational system of vital matter and the potential irrationality of the supernatural is small. Conway's processual, organic life offers a vitalistic metaphysics that will be developed further by Leibniz. It is magical: 'Each part of matter can be thought of as a garden full of plants or a pond full of fish. But each branch of the plant, each member of the animal, each drop of its humours, is also such a garden or such a pond' (Merchant, 1979: 268).

When Anne Conway was writing the earth was much cooler than it is today. And Australia was a vibrant and living environment of people, plants, animals and rocks that had not yet been disseminated by colonial and industrial forces. During the eighteenth and nineteenth centuries many of the rocks on Cockatoo Island bore witness to unspeakable human atrocities. If there is to be infinite matter, that is a malleable and transformative living matter as Conway imagined, a level of care needs to be enacted. Like humans, rocks can be careless too, railway disasters are evidence of this. Leibniz wrote to Conway: 'Everywhere the subject swirls in the midst of forces they exert stress that defines the individual body, its elasticity, and its bending motions in volumes that produce movement in and of extension' (quoted in Merchant, 1979: 268; see also Conley in Deleuze, 1993: xvii). An equation emerges: beings in motion, rocks in motion,

bodies in motion, but motion is not always life. We listen to the chipping of the rocks in Dwyer's *Apparition of a Subtraction* and the pain of the rocks is somewhat different to our own. Although equally fragile, the rocks can withstand heat and can adapt at a molecular level. Dwyer reminds us that we are yet to see if humans can do the same.

Under cover of darkness

From 1814 to 1820 the ageing Spanish artist Francisco Goya began the process of engraving 83 copper plates with a series of images reflecting on the worst possible effects of human activity (figure 1). The Disasters of War contain an 'unstinting portrayal of rape, genocide, torture and ritual mutilation' (Shaw, 2003: 480). Together the plates make up what Philip Shaw has called 'the abject at its most insistent' (Shaw, 2003: 480; I follow Shaw's argument closely in what follows). Viewing the plates consecutively the horrors become overwhelming. Goya was responding to the Napoleonic occupation of Spain, its aftermath, and the atrocities committed during this time. The plates are full of humans, animals and violent objects of all kinds. The Disasters of War contain such horror it could not be published until 1863, 35 years after Goya's death.

Can we take a different angle? First there was war. And hate. Across the plates that make up the *Disasters of War* there is a movement towards the nonhuman: animals and objects commit crimes but they are also victims. The etchings tell a horrifying story of the Spanish nationalist insurrection that began in 1808. The works record a modernity that knew too much about the world and was now turning in on itself. Goya marks his harrowing complicity in his captions: plate 44: 'Yo lo vi' (I saw it), plate 45: 'Y esto tambien' (And this too). It is the last 16 plates that move the narrative on. No longer reporting objectively on the violence, Goya immerses us inside it as animals perform the allegorical role of suffering. In plate 76 'El buitre carnivoro' (The carnivorous vulture), is the "vulture" the giant bird who catches our eye? Or is it the crowds who are weak and sick with famine, or, the workers armed with pitchforks who are trying to oust the creature? Who is consuming who? On the right a huddle of cloaked and hatted figures turn their backs to us, planning a moment beyond the animal's pain. In Goya's ageing eyes we are bound together as creatures in a web of violence.

The images are neither rational nor ethical. In some situations humans use artworks as a means for narrative; a way to get a message across. In this context we might choose to read Goya's images as allegory, a means towards the truth. Yet, the *Disasters of War* are not just objects made by one human for other humans to look at, but objects that contain affective resonances of their own. They actively generate behaviours. This is why we continue to look at them today. The objects do not reflect on or represent, but contain the very taboos the artist sought to highlight. If we stop thinking of the plates as representations of humanist desire, and instead start to think about them as active nonhuman objects, the *Disasters of War* become participants in the telling of tales of brutality. Goya's prints are not mere tools for the telling of stories of war. They have contributed to and changed behaviours.

It is hard to know what models of survival or punishment Goya was using, but the figures in the etchings map a global warning system. In 1808 similar disasters were happening in New Zealand and Australia. Racially-driven Massacres and murder were a key part of the development of two prosperous and sovereign nations blessed with the potential to provide an endless supply of meat and grain for the Mother country. The development of a distributed south seas food bowl was accompanied by the ever accelerating disappearance of species from the land and sky. But that, is perhaps a tangent.

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In 2002 British artists Jake and Dinos Chapman purchased a historically significant edition of Goya's prints. Republished in 1937 as a reminder once again of the atrocities of war (this time of Fascism in Spain) the edition includes a frontispiece showing a photograph of bomb damage to the Goya Foundation. Dinos Chapman says that 'We had it sitting around for a couple of years, every so often taking it out and having a look at it'. Jake picks up the story: 'We always had the intention of rectifying it, to take that nice word from *The Shining*, when the butler's trying to encourage Jack Nicholson to kill his family – to rectify the situation' (Jones, 2003).

Working with pen ink and gouache across all 83 plates, the Chapman brothers replaced the heads of the victims in the images with grotesque and distorted nonhuman forms including clown and puppy faces. The Chapmans sought to draw a direct parallel 'between the "enlightened" annexation of Spain and the recent "humanitarian" interventions in Iraq' (Jones,

2003). As Jonathan Jones says 'The Chapmans have remade Goya's masterpiece for a century which has rediscovered evil' (Jones, 2003). The series was retitled *Insult to Injury*. In this process of defamiliarisation the artworks become stranger. Their tattooed and scarified surfaces result in a new energy.

Different ways of thinking vitality emerge when I think through the agency of the deodand amid these newly reworked images. Objects do things. The objects and bodies within the images don't just contain affective powers, but as actants (things in motion that relate to other things) they make things happen that are not just about and directed towards the human. Occasionally things go wrong, and this was the logic of the deodand. Take the knife from the man and the knife will not kill. Take the wheel from the cart and it cannot hurt again. Place the knife in the hand of a dog and it becomes a different knife. Full of potential.

The 'rectifying' of the *Disasters of War* was not the first time the Chapmans had reworked Goya. Another of their works forms the centre of a room at the Museum of Old and New Art (MONA) in Hobart. *Great Deeds against the Dead 2* (1994) is a simultaneously graphic and sanitised reworking of plate 39 *Grands Hazana! Con Muertos!* (Great deeds! Against the dead!) from the *Disasters of War*.[10] But this is not a reanimation. This object is dead. The Chapmans describe it as such: '[we] were interested in making a dead sculpture. Dead in content and dead – or inert — in materiality' (Jones, 2003). This is a nonhuman object with no agency. The violence committed is as standardised as the bodies, the 'plasticised wounds… nullify the gaze' (Chapmans quoted in Jones, 2003). Goya's tree that once had life — branches, buds and leaves —has been stripped and rendered in the same dead material as the human bodies impaled upon it.

A central part of Jane Bennett's discussion of vital materiality is about the liveness or vitality of nonhuman objects. In keeping these objects discrete and separate to ourselves, Bennett says:

> *the image of dead or thoroughly instrumentalised matter feeds human hubris and our earth-destroying fantasies of conquest and consumption. It does so by preventing us from detecting (seeing, hearing, smelling, tasting, feeling) a fuller range of the nonhuman powers circulating around and within human bodies. (Bennett, 2010: ix-x)*

Bennett's point is that we need to be able to recognise vitality in nonhuman objects as well as in human ones. A focus on vitality, motion, movement or circulation emphasises just how dead this particular object is.

Goya was working in Spain at the same time that moves were beginning to overturn the law of deodand in England. With the loss of the law of the deodand we no longer have a law protecting nonhuman objects. Where once they were able to take responsibility for the harm they have caused, now objects are just another group of silenced witnesses.

The accident

I was visiting the Stedelijk museum in Amsterdam, it was opening day, the first reopening of the 'The Temporary Stedelijk'. The museum had been closed since 2004 and due to a continual and terrible process of transformation, they were temporarily re-occupying their own galleries. The opening of the temporary was my first day in Amsterdam. Quietly occupying myself in the exhibition I skirted around the edge of a large swirling sand mandala in the midst of the gallery floor. And then something happened. As I was walking around the work, suddenly and somehow, because I never quite saw how it happened, a small plastic "keep off" sign was kicked into the middle of the pattern. I started to film.

What I captured was a sense that something had happened, but only just. The video shows other gallery visitors walking into the room, and the guards fussing in a guard-like way. One mimes holding a large stick as he thinks through how to remove the sign, another person enters the room and nearly trips on a similar sign. The air is charged, something has happened that was not meant to happen. We were all in an art gallery, we were all looking at the work, but no one is really looking at the work anymore. Everyone is fixated on a small piece of plastic that is somewhere it shouldn't be, and the work is forever transformed.

The work, (*Nursery Piece*, 2010 by Job Koelewijn) is a sand drawing beneath which loose pages from Spinoza's *Ethics* are visible. Made up of vibrations of blue and green sand, the work has been painstakingly built up and swept together. The gallery catalogue says: 'The powerful optical effect of the drawing and the penetrating scent of eucalyptus massage the wisdom of

Spinoza into our minds'[11]. What was this moment that I was experiencing? It was an accident. Already in the text on the floor was a description of the experience.

In the *Ethics* Spinoza argues that the belief that something is accidental or spontaneous can be based only on an inadequate grasp of the thing's causal explanation, on a partial and 'mutilated' familiarity with it (Nadler, 2018). For Spinoza, thought involves grasping the causal connections between things. We understand things and objects as well as bodies as entities in relationship with other entities; a thing's causal connections reach not just to other objects but, more importantly, to the infinite modes that follow immediately from them. In this case, the object was more than present, it had things that it did to me, to the people around it, to other objects, ... and it misbehaved. The small plastic label had met with some kind of force and launched itself into the centre of the artwork, a sudden transformation from an object designed to protect an object; to one enmeshed deeply inside and potentially destroying the object. Who should pay the forfeit for the small piece of plastic in motion in the gallery, that caused irreparable damage, not to a human, but to another object?

The end of the world

It strikes me that the concept of deodand might return as we struggle to find ways to account for our ongoing behaviour in the Anthropocene. Timothy Morton: 'There you are, turning the ignition of your car ... And it creeps up on you.' Every time you fire up your engine you don't mean to harm the Earth, 'let alone cause the Sixth Mass Extinction Event in the four-and-a-half billion-year history of life on this planet'. But 'harm to Earth is precisely what is happening' (Morton, 2016: 9). Purchasing a flight online I am given the choice to offset my carbon emissions. A report from the Centre for Biological Diversity in 2015 tells me that air travel will have generated 43 Gigatonne of carbon pollution by 2050 (almost 5% of the remaining global climate budget) (Sullivan and Siegel, 2015). That is about 3 Gigatonne of carbon annually, but only one in ten of us choose to pay to offset the emissions by planting trees (although the futility of this action is not lost on us). Burning fossil fuels produces about 6.5 times as much carbon as the land can sequester, meaning we can never plant enough trees to offset the full environmental cost of a flight. Like deodand the payment of carbon emissions does not fully rectify the damage done. Martin Rice and Will Steffen explain that 'Burning fossil fuels and

releasing CO_2 to the atmosphere thus introduces new and additional carbon into the land-atmosphere-ocean cycle. It does not simply redistribute existing carbon in the cycle' (Rice and Steffen, 2016). I decide not to fly.

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An essay like this is written in ripples. I have taken on board Jane Bennett's challenge to employ a process of 'strategic anthropomorphizing': 'allowing yourself to relax into resemblances between your-body-and-its-operations and the bodies-of-things-outside' (Bennett in Gratton, 2010). For now it seems plausible to say that chairs, trees, airplanes, spoons, pigs, trains, millstones, and vats of boiling water do something, that they have agency. But we hold art and writing apart from these everyday relations. Art makes things behave differently. When we go into the charged space of the art gallery, we have an experience we can't have anywhere else. We have an experience of things behaving differently. Writing is the same, except it enters our bodies and forms networks. Words are experienced more than digested, they are immediate, complex and impossible. Carolyn Merchant writes that Conway's

> Vitalism in its monistic form was inherently anti-exploitative. Its emphasis on the life of all things as gradations of soul, its lack of a separate distinction between matter and spirit, its principle of an immanent activity permeating nature, and its reverence for the nurturing power of the earth endowed it with an ethic of the inherent worth of everything alive. (Merchant, 1983: 254)

Conway argued that there was no such thing as dead matter, only matter in which the soul was moving and transforming into a new material. The law of deodand was one way to account for the actions of this living matter. Over time objects have become strange again, not just as markers of war and violence but of a time where nonhuman things once again have agency, and their impacts can be taken seriously (even in a court of law). The Anthropocene has rearranged our material relationships: humans are a geological force ensnaring every object within reach into our diabolical plan to reconfigure the planet through increasing networks of violence. We could refuse to look, but the continual arrival of data across the networks means that more and more of these violent objects are uncovered, and more and more we are asked to account for their actions. The relationship between human and nonhuman things has been

enlarged to tragi-comic levels. There is nothing to forfeit, no sacrifice can be made that is greater than the violated and distorted planet. We are dead.

Biographical Note

Susan Ballard is the co-director of the C3P Research Centre at the University of Wollongong, Australia and leader of MECO, the Material Ecologies research network. Recent essays in *Energies in the Arts* (MIT) *The Anthropocene Review*, *Environmental Humanities*, and *Art and Australia* are concerned with the ways in which contemporary art and writing address big ideas about species extinction, energy, geology, and the politics of culture. She is one of the multi-authors of *100 Atmospheres: Studies in Scale and Wonder* (Open Humanities Press, 2019). With Christine Eriksen, Su is the co-author of *Alliances in the Anthropocene: Humans, Plants, and Fire* (Palgrave Pivot, 2020) and her monograph *Art and Nature in the Anthropocene: Planetary Aesthetics* will also be out with Routledge in 2020. Su teaches contemporary art history, and critical theory, and is Head of Postgraduate Studies in the School of the Arts, English and Media at the University of Wollongong. http://suballard.net.nz

Notes

[1] Francisco de Goya, *Y son fieras* (*And they are like wild beasts*) Plate 5 from *The Disasters of War* (*Los Desastres de la Guerra*) 1810 (published 1863) Etching, burnished aquatint and drypoint, 15.2 x 20.7cm. This reproduction sourced from Wikimedia Commons, and donated to Wikimedia Commons by the National Gallery of Art, Washington. https://commons.wikimedia.org/wiki/File:Goya_-_Y_son_fieras_(And_They_Are_Like_Wild_Beasts).jpg

[2] Ruth Buchanan, *Circular Facts* (2009/2010), coated MDF board, powder coated steel frames, brushed cotton, coated 35mm slide projector stand, audio and 35mm slide on synchronised loop on headphones, two chairs borrowed from Hotel Bad Toelz, dimensions and duration variable. Installation view: Monumentalism, Stedelijk Museum, Amsterdam. https://ocula.com/artists/ruth-buchanan/

[3] Sue Turnbull asked me this question during a panel presentation following a very early version of these thoughts at *Telling Truths: Crime Fiction and National Allegory* (UOW, December 2012). I hope the essay below begins to answer her misgivings. I thank Sue for the provocation, and also my co-authors in MECO, The Material Ecologies research network, and the Centre for Critical Creative Practice at UOW for ongoing conversations about what art and

writing can do.

[4] Trevor Paglen, *Trinity Cube*, (2015) Irradiated glass and Trinitite (purchased off the internet), 20 x 20 x 20cm. Installed as part of Chim↑Pom's Don't Follow the Wind, Fukushima exclusion zone, Japan 11 March 2015 – XX XX XXXX. *Don't Follow the Wind: A Walk in Fukushima*, 360 degree video, headsets, cafe furniture from Fukushima, Australian uranium, maps, installation commissioned by the 20th Biennale of Sydney, 20th Biennale of Sydney, Carriageworks, 18 March 2016 – 5 June 2016. *Don't Follow the Wind* is long term exhibition inside the inaccessible radioactive Fukushima exclusion zone formed after the nuclear disaster. Initiated by Chim↑Pom and co-developed with the curators Kenji Kubota, Eva and Franco Mattes, and Jason Waite. The project collaborates with displaced local residents and includes 12 artists developing new work inside the zone: Ai Weiwei, Aiko Miyanaga, Chim↑Pom, Grand Guignol Mirai, Nikolaus Hirsch and Jorge Otero-Pailos, Kota Takeuchi, Eva and Franco Mattes, Meiro Koizumi, Nobuaki Takekawa, Ahmet Öğüt, Trevor Paglen, and Taryn Simon. More details at dontfollowthewind.info

[5] See 'Trial of a Sow and Pigs at Lavegny' from Robert Chambers (ed) *The book of days, a miscellany of popular antiquities in connection with the calendar, including anecdote, biography, & history, curiosities of literature and oddities of human life and character*. https://archive.org/details/bookofdaysmiscelo1cham_1

[6] The entire event was staged, with the car driven by a friend of Paik's. http://www.medienkunstnetz.de/works/robot-k-456/

[7] Francis Alÿs, *If you are a Typical Spectator, What you are Really Doing is Waiting for the Accident to Happen* (1996) performance, Mexico City. http://francisalys.com/if-you-are-a-typical-spectator-what-you-are-really-doing-is-waiting-for-the-accident-to-happen-bottle/

[8] Douglas Gordon, *Play Dead: Real Time*, Three channel video (colour silent) two projectors, two screens, monitor, 19:11min. Collection of the Museum of Modern Art, New York. https://www.moma.org/collection/works/100620

[9] Mikala Dwyer, *An Apparition of a Subtraction* (2010) audio, smoke machines, sandstone, plants, lights, acrylic, chair, wood, clay, plastic, ashes (grandmother), wood carving (father in law- Leslie Corben), table, electrical cord, dimensions variable. 17th Biennale of Sydney (2010) at Cockatoo Island curated by David Elliot. http://www.mikaladwyer.com/an-apparition-of-a-subtraction-2010/

[10] Jake and Dinos Chapman, *Great Deeds Against the Dead 2* (1994) Disasters of War, Goya, Mannequin, Mixed Media, 277 x 244 x 152.5cm. MONA, Tasmania. http://jakeanddinoschapman.com/works/great-deeds-against-the-dead-2/

[11] Wall text, transcribed from exhibition room. See also: http://www.jobkoelewijn.nl/work/2009/the-nursery-piece/

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FCJ-227 Survey and Project: On the (Im)possibility of Scholarship in an Era of Networked Knowledge

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Researchers concerned with networks have engaged with a variety of conceptual and technical problems and areas of interest. *Fibreculture*'s key focus has been any and all manifestations of network culture, with a particular interest in media. Our interest in scholarly publishing – both this journal, books and experimental forms – has long been as advocates for open access. We have critically engaged with shifts in the technologies of editorial production, publishing and then storage and retrieval.

The changes to the systems of scholarly and intellectual publishing over the last 30 years mean that academics, scholars and intellectuals of all types now have access to a huge array of material either with open or closed (paid) access. Let's call it the Google Scholar Effect. (Of course, it is more than the effect of Google Scholar and Google Scholar has its own specificities.) Writing in the early 2000s, and therefore before the advent of Google Scholar, Liu framed the transformation thus:

> *Traditional scholarly publishing is experiencing tremendous pressure for change under the confluence of the following forces and trends: the exponential growth of information production, the dramatic increase in subscription fees, the increasing storage cost of*

printed documents, and the increasing power and availability of digital technology. (Liu, 2003: 889)

Much of the early research on this situation focused on the digitization of scholarship, particularly the status of the journal article (Clarke and Kingsley, 2008; Carey, 2013). Then most of the subsequent generation of scholarship has focused on bibliometrics, measuring the value or impact of this digitized scholarship, particularly in the context of commercial publishers. An excellent example of this focus on the journal article as the basic unit of scholarship and the focus on the qualitative metrics is Larivière, Haustein, and Mongeon's (2015) examination of 45 million documents indexed in the Web of Science over the period 1973-2013 (comparing across and within disciplinary groupings). They show that the big commercial publishers had increased their share of the total output of scholarly production. The journal article may not be the best way of disseminating research but it is the best way for big publishers to measure the impact of journal articles in ways that reproduce social hierarchies of so-called 'impact'.

From another direction, riffing off Nigel Thrift's notion of 'Fast Management', Rosalind Gill posits the notion of 'Fast Academia' in the context of academia as a permanent state of emergency. The focus on producing something that can be measured (and managed) has transformed the character of scholarly activity of publishing:

> *it is in relation to research that people feel most under pressure for it is here that our 'worth' is most harshly surveilled and assessed, and where we are subject to ever greater scrutiny. For it is not just a matter of whether you publish, but what you publish, where you publish it, how often it is cited, what 'impact factor' the journal has, and whether you are 'REF-ready'. (Gill, 2009: 238)*

Research students enrolled in a PhD nominally have four years to complete, with the expectation of actually only taking three years, and within the first year they need to complete a confirmation process. Similarly, academics need to find the time to keep up with developments in their field and ideally pursue new intellectual endeavours, all squeezed around other responsibilities, teaching, admin, continual 'innovation'. The social relations of publication and access once determined by gatekeepers of scholarly knowledge do not restrict the circulation of knowledge, but do restrict the circulation of value. Most university

administrators do not have a deep understanding of what academics actually do and instead rely on ranking systems of universities or even disciplinary clusters in a university as indicating the value of scholarly activity (Savat and Thompson, 2015; Murphie, 2014).

Hence there are at least two dimensions to the transformation in the character of scholarly publishing and the correlative shift in the networked conditions of production of scholarly work. The scope and scale of material available has radically increased and the mechanisms of judging scholarly value have been increasingly refined. Yet, we have not done enough to critically reflect on what these transformations have done to the experience of *producing* scholarly work. I don't mean work on research methodologies, which has seen an explosion of material. Plus there are certainly studies of the general transformation of the academic workplace. I am more referring to the simple way that everyday activities of scholarship have been transformed.

An obvious example is the practice of carrying out a literature review. The problem is particularly severe when it comes to higher degree research students tasked with developing and then demonstrating mastery over a given disciplinary area. This brief essay presents some notes on literature review preparation and abstract writing from the perspective of a mid-career academic who is committed to assisting their research students. It then argues there are two new meta-professional skills required of scholars to function in academia and in which our research students need to develop expertise.

Literature Reviewing in an Era of Networked Scholarship

Most research students need to carry out some sort of literature review. Even the most unstructured research experience normally involves a series of structured explorations of a scholarly field, discipline or body of work. This process involves refining a set of interests and concerns and developing them into research questions or at least a thesis statement. The standard for advice on how to carry out a literature review seems to be an article published by the editors of the journal MIS Quarterly, Jane Webster and Richard Watson, in 2002. It has been cited over 5000 times. They provide extremely useful practical advice that can be adapted for most contemporary research projects. The article sets out how to map a field by focusing on

generating lists of authors and concepts and then reading across all of this work to synthesise it. I tend to think about this process as one of finding your allies and then reading their work until saturation (i.e. stop when you only discover further repetition). The Webster and Watson piece is an engineering style approach to an intellectual problem that already anticipates being replaced by automation. There are a series of steps that are extremely practical and allow researchers to carry out an analysis of a field based on researchers and concepts. This could be adapted by computational linguists and natural language algorithms to automate the production of literature reviews.

For many research students there is a point at which you learn at an accelerated rate because you figure out how to learn for yourself. In a sense you become your own teacher as you cut through swathes of material to isolate and focus on the work relevant for your research problem. As well as carrying out research, research students are learning how to become researchers. It is often the responsibility of the supervisor – sometimes with or sometimes without institutional research training – to guide and support students though this process. There are at least three complications, depending on the nature of the project.

First, working in an area involving research on media, communications and technology means that there is often a very large amount of material on any given topic; this body of work is so expansive that it seems without end. This is the infinite scholarship problem. Contemporary platforms of scholarly convenience actively harm intellectual practice. For example, a fundamental practical problem for many new students is they are digital native scholars. They have not experienced the rhythms of analogue, mostly print-based knowledge production, circulation and importantly reflection or digestion. Their experience of scholarship has mostly enjoyed the convenience of Google Scholar and the like. The readerly culture of previous iterations of professional scholarship have been replaced by a screening and scanning culture of scholarship that circulates as networked knowledge. The resultant practice of fast-paced utility reading adopts some of the targeted hierarchising of algorithmic information systems. The problem here is not the convenience of Google Scholar but the way this convenience evaporates slower rhythms of thinking and intellectual work necessitated by non-digital scholarship. There is an entire movement assembled around slow scholarship and so on that emerges from this (O'Neill, 2014).

Second, needing to revise an existing literature review at a later stage of the research process (during analysis and publication) introduces critical problems to do with the ideals of scientific method and the production of knowledge. The state of knowledge in a given discipline can definitely shift in the two years of this process in a 'new' three-year PhD program or even in the one year or less of pilot programs. Part of this is because of the pace of contemporary scholarship. This is the continuously changing discipline problem. I'm sure everyone has reviewed work that feels like a grab bag of ideas lifted from various sources and included in a superficial way in the first 30% of a journal article. What are some workarounds? How can we approach this as supervisors, reviewers and researchers? The key problem is thinking about how to situate the literature review when there is a tension between the intellectual endeavour of engaging with existing work compared to satisfying the demands and constraints of disciplinarity.

Third, if we are encouraging students to engage with complex theories or philosophies, then the task becomes extremely challenging for student and supervisor alike. My example is encouraging students to read Deleuze; it feels almost negligent because of the extremely challenging character of the work and the time required to even read (let alone appropriately digest) in a critical way all the relevant literature. Established academics at least read Deleuze's work as it was published or translated. But Deleuze was writing for a specific French audience, so to read and understand Deleuze properly means reading at least Kant. Now there is a huge body of primary texts, and an everlasting production of commentaries. The actual problem gathers an almost slapstick dimension of impossibility.

Webster and Watson's approach is premised on mapping-based scholarly practice in fields where claims of relevance are self-evident. In other fields that are inherently inter-disciplinary, the practice of searching and mapping becomes a process of critical textual production. A case needs to be made for inclusion or exclusion, and then for how such a text is incorporated. In an era of neo-disciplinarity, Foucault's (1972) discussion of commentary is instructive for thinking about the ways texts can be included in a given discipline. He critically explores the various internal and external rules of reproducing 'disciplinarity' in both senses of the word. Contemporary masters of scholarly commentary frame disciplinary genealogies by using rhetoric to reduce the field of possible significance. The problem can be framed in terms of

narrow or broad contextualisation of scholarly perspectives on a given problem. What is the limit of this context? Disciplinarity becomes a solution, but one that enables scholarly production by, at a minimum, hobbling curiosity.

Toscano presents an alternative version of commentary in his preface to Eric Alliez's *Signature of the World*, which is itself a commentary that frames Deleuze and Guattari's *What is Philosophy?* Toscano presents a contextualisation of commentary as an intensive process of becoming attuned to the conceptual problems that serve to guide philosophical thought:

> *The crux of the matter is that pedagogy is not restricted to a set of operations aimed at facilitating access to a preexisting object, nor, conversely, is it a divining practice that coaxes, from a subject of teaching, some latent cognitive content. [...] As a truly transcendental exercise, learning (and the commentary as one of the guises learning takes) eschews the empirical actuality of a solution, endeavouring instead to link the subjectivity of the apprentice (or the commentator) to 'the singular points of the objective in order to form a problematic field.' Rather than as a mediator between the (ignorant) reader and the (final) text or doctrine, a commentary can thus be conceived as a novel problematisation of the ideal connections that define a particular philosophical object, a repetition of the text that does not seek to identify its theses as much as turn heterogeneity into consistency, uniting differences to differences, and open the work in question both to the 'empty time' or Aion of the event and to the specific virtualities of a contemporary situation. (2004: xi-xii)*

This requires a tremendous amount of work, not only reading and engaging with a given field, but also tracing the intellectual genealogies of such fields. This is the broad contextualisation of scholarly perspectives. Do students have the time for this? Do we have the time for this? What happens if this kind of philosophical thought dies out not because of malicious intent by murderous administrators cutting programs, but because the (neoliberal) audience is simply exhausted and does not have the capacity to engage?

Projectification

There is a tendency to privilege two ways of framing scholarly activity. First, as research, and second, as the outcome of a project. As discussed above, this is so that scholarly or intellectual activity can be measured in particular ways that are of value to the globalised institution (for example, in the form of metrics that 'count' towards international rankings). The formal dimensions of a 'project', in this management model, are derived from disciplines that would regard themselves as 'science' (Nadal Burgués, 2015). Anthony Giddens' much contested assertion that in 'post-traditional societies' identity is now a 'reflexive project of the self' generated a huge amount of research about identity. What if the actual insight was about the more mobile way post-traditional societies can parse human endeavour, including the reflexive performance of one's biographical identity, into the metaphysical form of the 'project'? The concept of the 'project' itself has epistemological and ontological baggage, which in the case of the university is assumed by individual scholars as pertaining to the character of academia. The etymology of 'project' "a plan, draft, scheme" is derived from the Latin *proiectum* "something thrown forth".[1] The concept of the "project" allows us to gather together a set of human endeavours and furnish them with a singular set of goals. (Academia is at the vanguard of the projectification of everyday life. This is part of the way that everyday life is increasingly surveilled [and self-surveilled], which enables the continuous flow of life to be analysed as discrete and actionable chunks.)

What if we could problematise the 'project' (or 'projectify' the problem)? Rather than the coordinates of the project being determined by the administrative burden of measurement and correlative productivity according to maximum gradients of anxiety (the neoliberal academic model), what if the 'project' was configured as an instrument for suspending practices of discovery according to the maximum gradients of curiosity (the post-neoliberal academic model)? This is the difference between passive and active affections that befall scholars as they are socialised as academics. Scholars successful at navigating contemporary academia already do this, of course. Projects at every level. For example, to return to my problem of students reading Deleuze's work. The only way to learn and engage with Deleuze's body of work is to treat it as a meta-level project that transcends specific deliverable (and measurable) outputs.

Can we take back the 'project' from those who would use it to measure activity and use it as a tool for gathering together heterogenous temporalities into actionable outcomes?

Biographical Note

Associate Professor Glen Fuller is the Head of School, School of Arts and Communication, at the University of Canberra. His three primary areas of interest include critical accounts of media industry innovation, discourse and media events, and media and affect (enthusiasm). His current project researches cycling culture in the broader context of media culture, active transport policy, and cultural geographies after automobility. He has been an editor of the *Fibreculture Journal* since 2014.

Notes

[1] https://www.etymonline.com/word/project

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FCJ-228 University, *Universitas*

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It cannot be denied that the university is a place of refuge, and it cannot be accepted that the university is a place of enlightment. (Moten and Harney, 2009: 145)

Nothing About Us Without Us! (Charlton, 2000)

Universities have a long history. The mantra of the *universitas* – 'the whole, the universe, the world' – has moved thinkers across the centuries: the university of al-Qarawiyyin, in Fez, Morocco, was founded in 859 followed by Al-Azhar University, in Cairo, Egypt, in 972. The first in Europe, the University of Bologna (the oldest university still in existence), opened its doors in 1088. In 1636, Harvard University became the first university in the United States.

In *The History of American Higher Education*, Roger Geiger (2014) demonstrates how in the context of the United States, universities have evolved over ten or eleven generations from the religious college with a classical curriculum in the seventeenth century to the contemporary research university. These changes were motivated in large part by Thomas Jefferson's vision of education as an instrument of democracy, 'a vision that gained momentum with the

profusion of state universities in the nineteenth century, spurred by policies like the Morrill Land-Grant acts, and that reached its peak in the postwar era thanks to substantial federal and state support' (Williams, 2016).

In *The University in Ruins*, Bill Readings wonders whether universities have outlived their purpose as the safeguard of national culture whose promise it is to create tradition, to found mythologies, to form a Subject of knowledge. Is the university in the twilight of its social function? he asks (1997: 5).

The Subject of knowledge at the heart of the university's social function has historically been a privileged, male subject. From the earlier religious universities to the secular ones of our contemporary times, knowledge has been mediated by that all-seeing universalizing gaze. Centuries of university education took place before women were consistently admitted to the university: in the United States, it took more than 200 years until the first woman graduated in 1849, a period in which African Americans were still generally denied higher education. Indeed, prior to the Civil Rights Act of 1964, most colleges and universities in the Southern United States prohibited African Americans from attending.

Though Gallaudet, a US college for the Deaf, was founded in 1864, successful accommodations for disabled scholars remain few and far between in the university (Garberoglio, Cawthon and Sales, 2017). The situation for the DeafBlind is even more dire: an astonishing number of DeafBlind students leave the university before completing their degree. Poet John Lee Clark, who took 19 years to finish his BA, writes:

> *DeafBlind people are capable of gaining knowledge, thinking critically, and synthesizing and applying information and thought. Yet only a handful of DeafBlind people have graduated from college [...] Almost all the curricula and syllabi are streamlined around the assumption that students are hearing and sighted and can read at a certain speed. Schools are navigable for most students. But for DeafBlind students, they are nearly impossible. (Clark, 2014, loc 1736)*

The burden of exclusion also falls on classical autistics: DJ Savarese is the first non-speaking autistic to graduate from Oberlin College, one of only a handful so far in the United States: 'No one believed that a nonspeaking [autistic] could really get into, let alone go to, college', he

writes (2017). Not only are the accommodations lacking in these cases, the neurotypical logic at the heart of the university's universalizing mandate actively excludes other ways of knowing. In Stephen Kuusisto's words, '[u]niversity faculty and administrators are not skilled when it comes to thinking about diverse learning styles or needs. In historical terms the university is built on a model of exclusion, a narrow model, one which suggests quite openly that only certain bodies and minds need apply' (2019).

The exclusive promise of excellence of the *universitas* has morphed under the corporate university.

> *'Innovation' is the new mantra of American higher education. It is invoked as an indubitable good by college presidents and government officials, business advisors and philanthropists alike. It typically refers to developments in technology aimed at delivering 'educational content' and transforming the way that universities themselves work, as well as developing products for businesses outside. (Williams, 2016).*

The corporatization of the university under neoliberal capitalism exacerbates its exclusionary framework by integrating the university more firmly into the economy, one of whose basic operations is to produce scarcity through inequality. 'Innovation' feeds right into the schism between overproduction and uneven resources: 'At its core, the innovation agenda represents the interests of the business elite over those of educators or students. At its worst, it is a property grab of a formerly public service' (Williams, 2016).

'At the present time, [...] the system of graduate education is no longer understood as being "like" a market; [...] graduate education is a market' (Bousquet, 2008: 206). In this model, what is innovated is capitalism itself. Ironically, the turn toward "useful" knowledge in the market-driven university – the complaint that the Humanities, for instance, produces little of marketable value – moves counter to capitalism's insatiable appetite for change. Flexibility should indeed be the new corporate mantra. Cathy Davidson, arguing for alternative pedagogies for the contemporary university, makes a similar claim, though not in the service of the neoliberalisation of thought (2017).

With the decline of national and state funding for universities and the bolstering of the corporate university, tuition costs have increased, and with them student debt. As Williams writes:

> Now the paradigm for university funding is no longer a public entitlement primarily offset by the state but a privatized service: citizens have to pay a substantial portion of their own way. I call this the 'post–welfare state university', because it carries out the policies and ethos of the neoconservative dismantling of the welfare state, from the 'Reagan Revolution' through the Clinton 'reform' up to the present draining of social services. (2006)

The same period has seen a rapid increase in underpaid adjunct faculty and a decrease in tenure-track faculty positions. Bousquet argues that this trend is not due to a lack of jobs: 'We are not "overproducing PHDs": we are underproducing jobs' (2008: 40). The overproduction of contingency has become a new motor of exclusion: the casualization of labour 'is an issue of racial, gendered, and class justice' (Bousquet, 2008: 43).

The imbrication of late capitalism and the university goes both ways. Tenure-track faculty continue to accept the 'market bonus' while their adjunct colleagues teach twice or three times their workload for a third or less income. Very little resistance is waged by those who are increasingly positioned 'as a docile channel between performance systems as sender, and students as destination, or the researcher as channel for the interests of stakeholders' (Murphie, 2008).

The arts have not been spared from the trend toward the neoliberalization of research: as art-based doctorates increasingly become part of the university curriculum we see evidence of:

> … hybrid forms of activity promising to capture for research the creative energies of artists working within the academic institution, [encouraging] a structure of standardized quality control and an accounting of quantitative results of the kind the arts have historically resisted. [...] As in other sectors of the university, the emphasis on making artwork accountable has the consequence, whether explicitly intended or not, of formatting artistic activity for more directly economic forms of delivery to stakeholders' (Manning and Massumi, 2014: 85).

Art-based research is, in a sense, the canary in the coal mine: it makes starkly visible the way the 'creative economy' has infiltrated the university, 'prototyping [...] new forms of collaborative activity expanding and diversifying the pool of immaterial labor' (Manning and Massumi, 2014: 85).

Any discussion of the 'realities of the job market' by tenure-track faculty rings hollow: 'official disciplinary "solutions" all proceed out of the primary ventriloquism of the Clinton era, "I feel your pain" [...], but which vigorously reinstalls the market logic that produced that pain in the first place' (Bousquet, 2008: 45). Bousquet argues for fair wages: 'What if, instead of constantly adjusting ourselves (and our compensation) to "meet the needs of the market," we started to adjust or regulate the "market;" to meet *our* needs?' (2008: 208). While this would certainly be a good first step, the exclusions on which the university is founded will not simply disappear with market equalization: value can't be reduced to the market. As the exclusion at the heart of the *universitas* has demonstrated over centuries, you have to discount to count: the valuation of what is included depends on systemic exclusion. As adjunct faculty Joe Berry underlines, it is not uncommon for a tenure-track faculty member to use the term 'faculty' to refer only to the full time tenure-track faculty (in Bousquet, 2008: 14).

The current tiered system, while of a different economic make-up, is not so far from the historically exclusive so-called 'universal' university. Indeed, the Jeffersonian vision of education as an instrument for democracy was always classist, gendered, ableist and racist, despite any claim he might have made regarding his abolitionist views (Wiencek, 2012; Magnis, 1999). 'All men are equal' must read: all white propertied men are equal.

To contend with the contemporary university is to engage on two fronts: to consider how to address the deep inequities for thought and economic survival brought about by the corporatization of the university, and to consider how the foundational exclusionary model of the university is prolonged and exacerbated by its neoliberal turn. What forms of resistance does the corporate university quell? What modes of thought does it silence?

When Moten and Harney say that 'the only possible relationship to the university is a criminal one', they are charting the impasse: the debt that comes of studying is unpayable by most (2009: 145). 'Nearly 40% of all students who started their post-secondary education in 2004 will

default on their student loans by 2023' (Ausick, 2019). Of this 40%, 20% will represent black college graduates compared to 4% of white graduates (Ausick, 2019). 'In the face of these conditions one can only sneak into the university and steal what one can. To abuse its hospitality, to spite its mission, to join its refugee colony, its gypsy encampment, to be in but not of – this is the path of the subversive intellectual in the modern university' (Moten and Harney, 2009: 145).

How to shift from the enlightenment model without giving in to the market-driven one? How to steal from the university the quality of what moves across it without being consumed by it?

The university is renowned for creating sites of resistance. Protests against the Vietnam war began in universities – the Berkeley protests of the 1960s a prime example of university-based mobilizing. May 68, a movement that started as a student revolt against the Americanization of the university, growing into a general contestation of capitalism and colonialism on the part of workers as well, was also initiated by student occupations. Similarly, the Maple Spring of Montreal in 2012 began as a protest against rising tuition but quickly mobilized other sectors critical of neoliberal austerity measures and eventually brought down the government.

If the university leads resistance, it is not because of its enlightenment values or its entrepreneurial posture of innovation: resistance forms in what Moten and Harney call the university's 'undercommons' (2013). Undercommons are the interstices where thought bubbles into orientations as yet uncharted. Thought thrives in the interstices. There is great power here, where the university cannot steal from us, where there remains confidence in our knowing otherwise. When study happens, when an undercommons of thought reveals itself, it is not because the university has fostered it. It's because an enclave has grown in resistance to all the university devalues.

The corporate university won't be brought down with corporate logic. Nor will it be dismantled by a return to enlightenment values. Any future for the university relies on abolishing what it stands for. This includes its colonial past. How many universities were built from the plunder of slavery? (Smith and Ellis, 2017). 'The story of the American college is largely the story of the rise of the slave economy in the Atlantic world' (Wilder, 2013).

All universities in North America are built on stolen Indigenous land. Universities remain active participants in the settler colonial project which includes the colonization of thought: '[indigenous] intelligence has been violently under attack since the beginning days of colonialism through processes that remove Indigenous peoples from our homelands' (Simpson, 2014: 13). Decolonial work in the university *as it is* is an oxymoron (Battiste, 2013). This is why the indigenous resistance movement *Idle No More* facilitates teach-ins in the community instead of in the university. As Leanne Betasamosake Simpson writes, 'my experience of education was one of continually being measured against a set of principles that required surrender to an assimilative colonial agenda' (2014: 6).

Robin D. G Kelley calls for taking a suspicious stance with respect to any reform of the university. Refusing to situate the university as an 'engine of transformation', he asks why we would commit to the reform of what is fundamentally exclusive. Integration is not the answer for Kelley. 'The fully racialized social and epistemological architecture upon which the modern university is built cannot be radically transformed by "simply" adding darker faces, safer spaces, better training, and a curriculum that acknowledges historical and contemporary oppressions' (2016). Inclusion, after all – whether in the name of race, or gender, or disability – assumes a normative center. As Clark emphasizes, accommodations remain tethered to existing systems of value (2014). Deschooling is necessary at every level (Illich, 1970).

Deschooling is never a call to stop learning. Quite the opposite: to deschool is to decouple thought from the market of knowledge. The first tenet of deschooling is a refusal of the universal. This requires a 'deinstitutionalization of value' (Illich, 1970: 80).

To recreate the university is not to rebuild it. It is to multiply what already moves across it. In the amplification of undercommon resistance, what is proposed is not a return. For what resists has never stopped resisting.

A redefining of the university could begin here, in the interstices where the studying has already begun.

Biographical Note

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