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| LEAD ARTICLE

CLIMATE GRIEF, EXPERT EVIDENCE, AND ACADEMIC PRACTICE

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ABSTRACT

There is a pressing need for changing what is understood as

academic or expert evidence so as to ensure that the academy is better equipped to respond to climate change and other global environmental crises. It is critical that any new understandings

are developed with the leadership of Indigenous peoples. In this article, we present three essays on climate grief, knowledge politics, and creating institutional change to

centre Indigenous leadership. Through these essays, we argue for academic evidence that recognises values as well as facts, and is able to appreciate and navigate our co-constituted socionatural realities, including by respecting the voices and knowledges of all beings, human and non-human. Motivated by the 2019-20 summer of bushfires in Australia and the global pandemic that shut down our campuses in autumn, we call for more collaborative research that tackles the constraints of disciplinary traditions. We also present three emergent principles and practices in support of this work: centreing Country, building like-minded communities of scholars, and ensuring that intent is followed through with material change.

Introduction

The academy has a critical part to play in responding to the immense challenges of rapid climate change and other global environmental crises, yet it is hamstrung in providing expert evidence by disciplinary divides which, as we will also show, relate to systemic failures to foreground Indigenous leadership. We have not put

the term 'Indigenous' in the title of this paper because of the bias in society that grasps Indigenous issues as discrete issues and not relevant across scholarly considerations. In this paper, we argue otherwise. From Australia, we articulate how centreing Indigenous leadership in thought and action can address unhelpful knowledge practices, including institutional unwillingness to accept co-constituted socionatures. In turn, this enables us all to be clearer about what is at stake, and what might be done about it, together. As the economic fallout from COVID-19 recast the Australian university funding model, thinking critically about how our institutions operate as disciplines, and whose interests benefit from such arrangements, must be part of the review. Simplistic arguments about the contributions of STEM (science, technology, engineering and mathematics) and HASS (humanities, arts and the social sciences) are inadequate for the complexities we face.

Everywhere there are powerful examples of how human agency is co-constituted with the consequential forces and agencies of non-human otherness – including the intense heat and suffocating smoke of Australia's 2019-20 catastrophic bushfires, or the invisible movement of COVID-19 microbes. However, our understandings of these shared socionatural realities are hampered by the disciplinary arrangements of the social and natural sciences. Further, the natural sciences are often placed as the authority on environmental issues, and there is a de facto knowledge hierarchy on campus in which science appears to have all the facts, whilst others have mere



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words, with music and art not rating a mention (Smith 2016; Robin 2018). Should scientific facts be the default priority when addressing the challenges of global environmental crises? The dysfunction generated by climate politics says otherwise (Pielke 2007; Beck 2010) and so do we. In the work needed to address unhelpful knowledge practices, the academy is in a privileged position to influence how knowledge itself is judged as authoritative or not. It holds key roles because of its relationship to epistemology and rigour, including the checks and balances that arise from its diverse communities of practice (such as peer review and professional societies); the organisation and convening of educational programs; and, the priority placed on innovation and learning. In Australia, the academy can fast track this work by learning from and supporting Indigenous leaders whose inherited knowledge practices embed the social and the natural, and facts and values.

Taking the 2019-20 long spring and summer of bushfires as our foreground, in this paper we highlight the important role of the academy to engage with the socionatural impacts of such catastrophic events by asking:

- How can scholarship encompass the magnitude of what we, and our fellow species, are facing? Do we need to redefine grief and include it more broadly in academic discourse? Is there a vocabulary to articulate this grief?
- How can we as academics amplify our influence for change?
- How can we support each other to do



this work through creating spaces of hope and care in academia?

This paper is structured around these three questions, and we have each written one section in response: re(considering) grief; amplifying influence; and, supporting each other for change. We share our passion and intellect for what is happening and what might be done in response, and provide an example of how one academic department is taking steps to change. Collectively we conclude that, with Indigenous peoples' leadership, it is time to promote approaches to academic practice that generate the expert evidence that might more meaningfully support our connected lives and futures. We see momentum for this work being secured by Indigenous peoples' cultural and political resurgence, and global responses

to recognise racial bias in academia (e.g. Subbaraman 2020).

i) (re)considering grief – Kate Harriden

I volunteered to write this section while grief-ridden from the induced environmental events of summer last.¹ The thick smoke suffocating Australia's national capital, the bush capital, was the most confronting, and physically limiting, consequence of climate change I have experienced, so far. As distressed as I was to spend summer evenings wearing face masks while sitting with neighbours on the veranda, part of my despair is for the consequences yet to come. It is clear from personal conversations and the literature that climate change grief (or climate grief or ecological grief) is an increasingly common response to the climate change effects and information

all around us. Using the term ecological grief, Cunsolo and Ellis define it as “the grief felt in relation to experienced or anticipated ecological losses, including the loss of species, ecosystems and meaningful landscapes due to acute or chronic environmental change” (2018:275).

The research on climate change grief makes it clear that it is a form of disenfranchised grief (Cunsolo and Ellis 2018). That is, it is not a publicly acknowledged or socially sanctioned form of grief. There are no shared mainstream social conventions, mechanisms or support structures to overtly articulate or process disenfranchised grief outside of the arts, which by their nature are often transient. For this reason, it is important that those of us who viscerally feel climate change grief publicly name it. Then we can start



the important work of creating relevant and appropriate ways to manage this grief, while continuing to challenge the conditions that allow it to flourish.

As a relatively new area of academic study, the conceptual and theoretical basis of climate change grief is still developing (Cunsolo and Ellis 2018). Psychological studies lead the way in trying to understand climate change grief, but are hampered by current grief models based on the end of life (Bryant 2019), and the paucity of research investigating grief borne from marked, permanent changes in nature and climate (Cunsolo and Ellis 2018). Climate change grief is very different to the end of life focus of grief research, such as the Kubler-Ross 'five stages of grief' model, and its impractical reliance on linear predictability

(Bryant 2019). People die but once, whereas the environment will continue to change with the climate, with immense uncertainties about the reach of its effects and consequences. Thus, we need to find ways to be with grief, whilst continuing to live with the anticipation and realisation of yet more grief. I find the Worden model of grief useful, with its four non-sequential tasks: i) intellectually and then emotionally accepting the reality of the loss; ii) working through painful emotions of grief; iii) adjusting to the new environment, acquiring new skills and sense of self; and, iv) reinvesting emotional energy (Bryant 2019). This paper is written in the spirit of the third task, even as the authors work through the previous two tasks.

The actual writing of this section is prepared as I am wracked with grief from the recent death of my dog. This is another disenfranchised grief experience, although common to many people regardless of race, gender or status. For example, about 10 years ago my most effective therapist yet asked for a list of my top five values/principles, and top of my list was interspecies relationships. They responded with a standard stalling tactic, saying "that's interesting...never heard that before. Explain what you mean". Explain I did, in terms echoing how my wiradyuri mob talk about connection to ngurambang (wiradyuri for country). That all species interact, be it directly or indirectly. That all species need the others, in some way. That across the huge diversity of known species, communication and understanding are possible and that such communication and understanding is a critical precursor to different ways of knowing and being.

That the therapist had no professional

language for discussing interspecies relationships is indicative of the academy's addiction to separating nature and society, arising out of imported colonial approaches of the environment, as compared with Indigenous peoples' approaches (e.g. Pascoe 2014). Human-animal studies themselves emphasise transactional and human-centred concerns, investigating the animal in isolation and not as an active party in relationships with humans (Kuhl 2011).



To illustrate, when reviewing the literature about human-dog relationships, Kuhl identified two main research foci: benefits humans gain from dogs as pets or service animals; and, dog behaviour/cognition in the human-dog relationship, where the emphasis is on how dogs have changed to suit human needs (Kuhl 2011). A similar myopic focus has been recorded in equestrian sports, with the rider as athlete

¹To me these are more than environmental issues, they stem from a systematic failure of capitalism to prepare for the consequences of its systemic failures.

receiving the attention while the role, skills and contributions of the horse, and the relationship between horse and rider, are downplayed (Gilbert & Gillett 2011). This failure to acknowledge animals as actors in our relationships with them, is particularly true for those animals with which humans have few shared physical, intellectual and social characteristics (Cerrone 2020).

Instead, Kuhl's research into human-sled dog relations makes it clear that these are mutual, multifaceted, sometimes profound partnerships, based on respect, communication and trust that enrich the lives of both species (2011). This finding reflects how I characterised the relationship between the dog and me. We both adapted ourselves to the other, so that we could live a good life together. It did not matter that we had no obvious shared language. We trusted that the other would fulfil their part of the relationship 'bargain' and respected the other enough to discharge our role diligently. This is how I like to approach my scholarship, be it individually or collaboratively. Research is not a one-way process. Even the most isolated of research endeavours require communication, trust and respect.

As I experience these two forms of grief, I see an obvious link between the unwillingness of academia to accept the reality and importance of interspecies relationships, and the disregard for the preferences of non-human species in many climate change science and debates (e.g. the human-centred approach of ecological services). Many human world views too readily dismiss non-human beings as 'things', lesser others, or simple machines

(Plumwood 2002). This is particularly so for those species with whom we have few shared physical, intellectual and social characteristics (Cerrone 2020). The term "Umwelt", first developed by



Through wiradyuri practices such as asking the tree before cutting a gulaman (coolamon), totem relationships, recognizing rivers as living entities, and knowing that it is fishing season for a particular species because a certain plant is flowering, it seems evident that Indigenous peoples already function in a world replete with Umwelt overlap.

Uexkull, is a way to illustrate this argument. Cerrone describes Uexkull's Umwelt as "the subjective world as constructed and acted upon by a perceiving subject" and expands this idea to "Umwelt overlap" (2020: 127). In this, Cerrone argues

that areas of overlap in meaning are constructed by different species, enabling interspecies communication. That is, there are commonalities in the way various species construct and engage with the world around them that makes it more or less easy to communicate, and have relationships, with other species. Umwelt overlap is obvious in Kuhl's mushers and sled-dogs, where two sentient, subjective individual beings of different species have formed meaningful relationships. It was also evident in my relationship with my dog.

As a species, homo sapiens have failed to prioritise the shared Umwelt between our and other species, including in the formalisation of academic knowledge, and this contributes to climate change inducing behaviours, including weak policy and social responses, and inhibits attempts to build sustainable environmental and social systems. To benefit from sustainable environmental systems and equitable social systems, it is critical that the human/nature or human/other incommensurability be delegitimatised. Humans collectively need to recognise both Umwelt overlap and that other species experience Umwelt beyond our ken. Indeed, these are the logics of connection that I have been taught by wiradyuri ngurambang and my elders. Through wiradyuri practices such as asking the tree before cutting a gulaman (coolamon), totem relationships, recognising rivers as living entities, and knowing that it is fishing season for a particular species because a certain plant is flowering, it seems evident that Indigenous peoples already function in a world replete with Umwelt overlap. In response to these ontologies, Gammage

observed that “[p]eople today think of what animals need. In 1788 people thought of what animals prefer” (2012: 211). To me, this succinctly articulates a stark difference apparent in different academic approaches based on the ability to consider, or not, another species’ Umwelt and its overlap with our own. The denial of Umwelten and, by extension ngurambang wiradyuri and more, by colonial practices and capitalist structures, which presume animal ownership and scientific methods of gathering evidence, undermines and devalues the expertise and knowledge in building/maintaining interspecies relationships, including those held by Indigenous peoples. Yet, as I have argued, such interspecies expertise and knowledge is exactly the type of scholarship required to pursue equity and sustainability in response to global environmental crises.

So here I am, processing two apparently distinct grief events, which are so very deeply connected, and are also both socially transgressive grief responses. My grief is largely unrecognised by the wider Australian community, barely understood by the healing professions (broadly defined), and a major blind spot of both academy and government. It seems to me that if interspecies relationships, mediated through Umwelt overlap, are socially, even philosophically, disregarded or disapproved of by powerful knowledge structures, then we cannot, richly, meaningfully understand climate change grief. Which means that we cannot effectively respond to its full consequences and effects. Perhaps a first step toward understanding, and responding to, climate grief is for the human species to accept non-human

beings as perceiving subjects constructing and acting in a subjective world, as we do. Only by offering this level of regard can we exist respectfully, responsibly and ethically with non-human beings.



Universities need to address the systemic exclusion and marginalisation of Indigenous people by transferring power and resources (Hemming et al. 2010).

ii) amplifying influence – Jessica Weir

For the academy to amplify its influence in the great matters that are at hand, it needs to review what it means by knowledge and evidence. In this, there is a lot to learn from how Indigenous leaders embed together facts/values and nature/society to identify what is important, what is not, and what might be done in response.

Climate change is the example par excellence of how foregrounding science for policy decision makers does not lead to climate action (Beck 2010). As important as climate change science is, it has been contested and ignored by many, and it has been assumed to be more influential than it is. We have seen politicians and

lobbyists move from positions of denying climate science towards positions of simply ignoring it. At the same time, other important matters such as climate grief – an intrinsic motivator for political action and change – are not a research priority, and do not even fit with understandings of what evidence is for policy makers and society who are expecting facts (Rigg and Mason 2018). I see two clear steps for the academy in response. First, all scholars need to take the time to understand the workings and assumptions of different knowledge communities, including their own, and then they need to do something to address knowledge discrimination. Second, universities need to address the systemic exclusion and marginalisation of Indigenous people by transferring power and resources (Hemming et al. 2010). I think these two steps are central to meeting with Indigenous leaders on more just terms, as well as amplifying the influence of the academy to make change to support ecological and social justice. Current events illustrate this point.

I am writing at the time of #ShutDownSTEM, #ShutDownAcademy and #blackintheivory social movements, which are calling out systemic racism, as recently prompted by Black Lives Matter in the United States (e.g. shutdownstem.com). Critically, the global response to Black Lives Matter has reiterated the explicit language and expressed need for immediate change, including by academic institutions. For example, on the 10 June 2020 day of shutdown in North America, the journal Nature decided not to publish “as one of the white institutions that is responsible for bias in research and scholarship”, and instead “educate

ourselves” and identify actions to “play our part in eradicating anti-Black racism in academia and STEM” (Nature website editorial 10 June 2020; @nature Twitter 10 June 2020). The comments underneath Nature’s Twitter announcement show the work that needs to be done: unpacking and illuminating the contested positions about whether science is part of politics, and, if so, how this relates to its authority as science. For many, addressing this question has to come first, before matters of racial discrimination, and colonial and imperial privilege in the academy can be discussed.

The general assumption that expert knowledge is legitimate only by being separate to politics, arises out of the iconic scientific method. Science generates expert evidence based in observations of the empirical world, seeking to rule out subjective influences and instead develop practices and results that can be replicated by anyone. In turn, this approach has positioned expertise that does not meet the standards of science as subjective, local and/or cultural. This includes the classical philosophical question about whose knowledge claims are legitimate (Marres 2018: 428). The pre-dominance of these logics is evident in the academy’s de facto knowledge hierarchies of hard and soft sciences (aka quantitative and qualitative research), and the automatic privileging of science, especially when it comes to environmental issues (Robin 2018; Smith 2016). Indeed, to say “listen to the philosophy” instead of “listen to the science” is to invite confusion and then ridicule. Science is of immense value in political decision making (Durant 2017); it is just not the only expert evidence we

have. In society we continue to debate facts, rather than understanding that facts and values need to be navigated together. This is evident in simplistic demands that political decision makers respond swiftly to climate change, as they have with COVID-19. However, the possibilities of these decision makers are about what matters, to whom and why: that is, the politics. Specifically, they are influenced greatly by whether there is societal consensus about the issue, and also the consequences involved in different response pathways (Pielke 2007).

Indigenous leaders repeatedly raise how the split between the natural sciences and the social sciences, and facts and values, fundamentally challenges academic engagement with all our social-natural realities (Whyte 2017). At the same time, this disciplinary arrangement keeps trying to separately categorise Indigenous peoples’ co-constituted socio-natural realities, knowledge, laws and governance (Watson 2018; Graham 2008). This includes communicative experiences with the land and other species, and understandings of knowledge as formed through and with a multitude of beings – species, land forms, ancestors and more (Gay’wu Group of Women, 2019). To challenge these knowledge practices, Indigenous leaders find themselves challenged by the logics themselves – with Indigenous knowledge routinely typecast in the academy as local and cultural, and not actually informing the very terms of the debate, including what is evidence and what is knowledge (Moreton-Robinson 2015; Smith et al. 2019; Whyte 2017; see also Rose 2014). These powerful self-referential knowledge binds judge whose

knowledge is legitimate and authoritative, and help perpetuate systemic racism and white privilege in the academy, for example, when academics appoint their academic successors in line with knowledge hierarchies that marginalise Indigenous scholars.

The 2020 call to #shutdownacademia is in dialogue with long histories of Indigenous people and allies protesting discrimination perpetuated by universities across the world. This includes “Not about us without us” at the Australian National University, “Rhodes must fall” first at Capetown and then Oxford universities, and Decolonising SOAS (School of Oriental and African Studies) at University College London.² Alongside street protests, some universities responded. Anecdotally, my employer, Western Sydney University, organised a Black Lives Matters Pledge.³ I also saw that the Australian Academy of Science retweeted the International Science Council’s ‘Statement on combating systemic racism and other forms of discrimination’, and affirmed their support for this agenda (@Science_Academy 12 June 2020). Significantly, science institutions have an important role in addressing the assumptions and abuses of de facto knowledge hierarchies in the academy by checking their own privilege, and making more space for other expertise to be heard on its own terms, especially in relation to the abuses of Indigenous peoples’ knowledge and governance authority.

Despite decades of argument, the systemic discrimination of Indigenous peoples’ laws and societies has not been addressed by the people and institutions that benefit from the status quo because

people do not wish to do it, and it is also hard work (McLean et al. 2019). Nonetheless, it was never appropriate to ignore these issues, and more equitable and ethical approaches are needed in the academy. This will also facilitate more sophisticated responses to the new normal, to engage with knowledge diversity and plurality across different knowledge holders, and understand how this influences our possibilities (e.g. AAH 2018). Fundamentally, the academy needs to listen to Indigenous leaders on their terms, in order to pave the way for amplifying the evidence we all need for change that meaningfully supports diverse lives and ways of knowing.

iii) supporting each other – Kim Cunio

I write with the belief that music can change our physical state in this world (Koelsch and Jäncke 2015), because to me, music is connected with the heart space. Despite our best efforts to systematise music as a creative practice, particularly in the university environment (Draper and Harrison 2011), it remains personal and enigmatic to most of us. Music and the creative arts contain a voice to add to our debate in unique and transformatively powerful ways. The arts can be prophetic and call us to action. We have had the song ‘Treaty’ since 1991, although there is still no treaty in Australia. In the West, political and environmental awareness is often inserted into art to make a point. However, in marginalised communities music and art are central (Cunio and Landale, 2018). In my experience, Indigenous scholars in all fields are often creative artists, demonstrating a sense of transdisciplinarity for generations that the academy is only now considering.

One of the ways that I wish to assert my artistic/authentic self into my (the) academic world is to be honest about my point of view. I come to this paper



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as a lucky and unlikely member of ‘the academic club’. This is not imposter syndrome; my Iraqi/Indian/Burmese heritage makes me look and thus feel different to my almost exclusively white musical academic peers. This experience has led to a fundamental choice that informs my thinking and my modest contribution to our shared aims. This is the simple idea that if we are lucky enough to profit from a system that is inherently colonialist, that we have a shared responsibility to change the system. I want us to define and implement processes of institutional accountability, to change the power balance between the iterative and figurative⁴ descendants of colonial settlers and our Indigenous First Peoples, and to make shared spaces that are Indigenous-

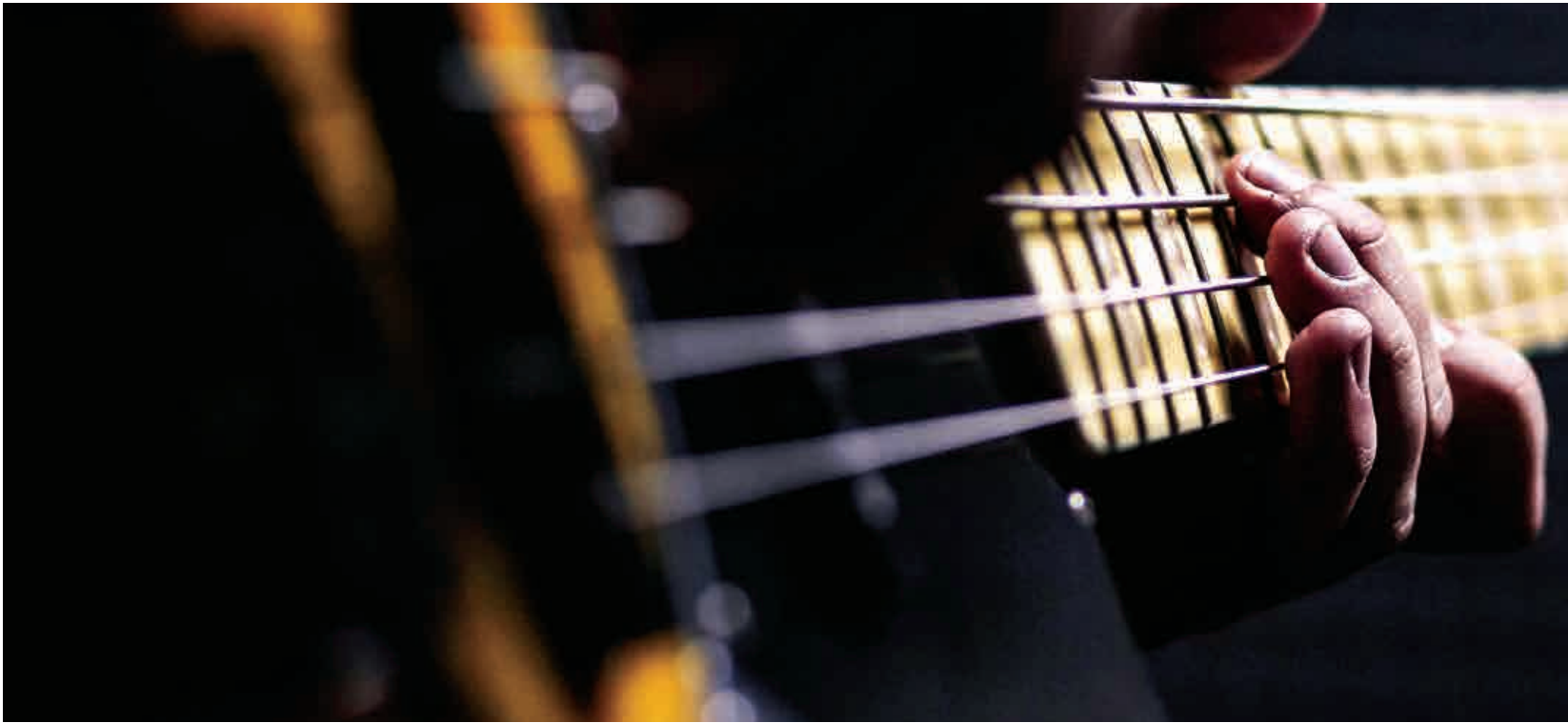
led that work within and beyond current understandings of evidence.

If those of us who are not Indigenous are to play a meaningful part in Australia’s next phase, we need to truth tell and support truth telling across the nation. My version of this truth telling starts with the realisation that I was part of the problem. I was 19 and had ridden my bicycle from Sydney to Brisbane, and went to the phone box to call my parents. I had 30 cents in my hand, no ID and was wearing shorts, thongs and a singlet that were stained with sweat. I had been outside for weeks and my skin colour was pretty dark. A police car with two young men scarcely older than me pulled me over and a very scary two hours ensued. In the course of that evening my education, a determinant of privilege, saved me from being arrested (Graetz 1988). My ‘story’ checked out, so I did not get locked up for being a vagrant, which was code for Aboriginal kid, by two disgraceful young men who simply by their uniform could change the course of my life. After I got over the shock, I realised that in Brisbane it could be, and often was still, a tacit crime to be Aboriginal. This was the late 1980s, and this left leaning Sydney kid was shocked. It has been estimated that in Queensland, in the late 1980s, Aboriginal people were statistically 10 times more likely to go to jail than non-Aboriginal

² For example <https://blogs.soas.ac.uk/decolonisingsoas/> accessed 17 July 2020

³ https://www.westernsydney.edu.au/equity_diversity/equity_and_diversity/western_sydney_university_blm_pledge accessed 17 July 2020

⁴ I define iterative as being those people that define their intellectuality from dominant discourses, figurative as those whose culture is derived from dominant expressions.



people (Biles 1992). With a Royal Commission in place, Aboriginal deaths in custody were headline news and I had just experienced the breadth and the resilience of the colonialist system. I had spent quite a lot of my childhood with Aboriginal kids, but only then realised the blindingly obvious: that my singular experience was daily lived experience for many Indigenous people. The casino of colonialism had rigged the cards.

More than 30 years later I have a few simple questions:

- How do we support each other?
- If I/we are to be Indigenous allies, what protocols and practices can support this process?
- What role do our universities and national structures have to play?

- How can we support Indigenous people of all ages and stages to work within this system to affect change?
- How can we make sure our Indigenous leaders and scholars are heard in our national debates?

These questions are important to me because I became the Head of the Australian National University School of Music in 2019. We have a Vice-Chancellor who wants to make things better (Schmidt, 2020), so a window is open. I am not going to miss this opportunity to play a small part in the redress that our country so desperately needs.

Answer number one is in listening:

Listening, responding and deferring to those who have the greatest land connection is fundamental, and music

and art have powerful and transformative roles. For example, the process of acoustic ecology⁵ is now part of mainstream music practice. With this method we can listen to the sounds of the world as they are in a given point in time and hear with the aid of technology sounds that we would not ordinarily hear. To me this is the start of listening to the land, to its song and its cries, to find a way to sit, and to allow the land to enter our hearts. It is my opinion that a deeper listening to the land can be led by Indigenous peoples. To do otherwise is to continue to not hear.

Answer number two is the transferring of power and dismantling white privilege:

I am fortunate to work with Indigenous composer and thinker Dr Christopher Sainsbury, who has been centrally involved in transferring power within



All of our Indigenous composers and musicians are exceptional; but even if they were not we would support them. I want to be really explicit – this is about the cessation of privilege.

our department, across our university and more broadly. With his lead and his example we seek to foster Indigenous musicians' engagement within our School of Music. All of our Indigenous composers and musicians are exceptional; but even if they were not we would support them. I want to be really explicit – this is about the cessation of privilege. It is the system that overwhelmingly benefits from Indigenous engagement, not just the Indigenous participants. We also host Ngarra Burria First Peoples Composers (Sainsbury, 2019), a program that sees us offer everything in the ANU School of Music to 10 Indigenous composers from any or no academic institution. This helps address cost and other barriers for Indigenous musicians who wish to access academic systemised compositional music practices. There is

a guiding principle to all this work: seed and cede power. Having an in-house Indigenous academic is critical for this process, as cultural agency must reside with Indigenous peoples. Further, whilst many good things are happening in the Indigenous space, we also need to extend further into the ANU and other networks.

Answer number three is in changing structures and processes:

Again with Dr Sainsbury, we have sought to make sure structures and processes are created to outlast our individual good will. We have lobbied for Indigenous students to have access to the creative arts as part of their ANU studies in any discipline. Also, and drawing on in-house allied expertise (Newsome 1998), we are setting up structural Indigenous guidance and governance for our music school. At

the same time, we are acknowledging and seeking to change how music making and scholarship are skewed towards colonialist music. For example, in jazz we can see the huge effect that American race politics have played on music itself, but, despite this, critical race studies are not central to its study or pedagogy. There is a lot we must do within our disciplines even as we reach across them.

I list these three steps to demonstrate how institutions can and are changing, and can do so in supportive and collaborative ways. With the leadership of Dr Sainsbury and our Indigenous PhD students and graduates, we are not just seeking a

⁵ A methodology descended from Musique Concrete, an idea that the recording of sounds contain the same intrinsic value as recorded music.

more equitable academy, but one that makes explicit the transformative power of Indigenous music, and music more generally. And, in doing so, with the inheritance of Indigenous peoples' land ethics, we can bring powerful evidence about the critical issues of our times.

Our concluding thoughts

In this paper, we articulate the pressing need for more dynamic approaches to knowledge practices and academic evidence that are not constrained by traditional disciplinary arrangements, and their powerful assumptions about nature and society, and facts and values. This is critical if the academy is to be relevant in the face of our complex socio-natural realities, not least climate change and global environmental crises. Our distinct voices have offered initial responses, certainly not answers, to the three questions listed at the start of this article. With these questions and our responses, we seek to spark diverse conversations about the nature and consequences of human-centred academic norms, how to amplify scholarly influence, and how to support each other through this process of challenging current academic evidence standards. This work needs to be collaborative, and so we seek to write, on accessible terms, beyond our particular academic knowledge communities, as part of bringing people together and informing debate.

In our work to generate a new normal for the academy, we have articulated emergent practices and principles, which we are also developing with scholars who are similarly undertaking to change

academic practice. Currently, these practices and principles are:

1. Centreing: Everything begins with Country. With the support of the traditional custodians, we will listen to Country, collaborate with Country, and give back to Country.
2. Community-ing: Supporting networks of like-minded scholars so that we can normalise and build more platforms for this way of operating across diverse academic traditions and practices, including safer working spaces.
3. Changing: making sure that, along with intent, there are also always meaningful material processes and outcomes in hand.

By bringing expertise in more equitable relations, we can more meaningfully engage with each other as academics, and establish together the processes and structures for grappling with socio-natural complexity and the embedded concerns of social and ecological justice. Let us take the compassion that this pandemic has brought to us for reflecting on unhelpful disciplinary hierarchies and divisions, and bringing other academic expertise to the foreground, so that we can have greater access to evidence that already exists about what is happening, to all of us.

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