Silencing behaviours in contested research & their implications for academic freedom

Jacqui Hoepner

Australian National University

What do attacks on 'unpalatable' research reveal about academic freedom? When academic work is curtailed, this cherished yet misunderstood concept is undermined. Silencing based on moral objection – rather than wrongdoing – suggests academic freedom is more constrained than we believe. On paper, academic freedom is rule-bound, yet 'dangerous' ideas produce overwhelmingly visceral reactions. It was these emotional responses I examined to explore the difference between what we believe academic freedom to be, and how it manifests in contentious fields. I conducted qualitative interviews with 18 researchers whose work elicited condemnation or constraint beyond 'legitimate' scholarly critique. I used mixed-methods data analysis to determine shared themes and characteristics. While academic institutions uphold their commitment to unfettered enquiry, 'academic freedom' is highly contingent and subject to the values of players in a range of disciplinary and institutional fields that together yield a generalised field of 'academic research'. This research challenges assumptions about 'freedom' by identifying parameters that bound the notion. I argue the concept is indeed bounded, and that academics become aware of those bounds when they bump up – often unexpectedly – against them.

Keywords: Academic freedom, silencing, moral disgust, peer review, qualitative research, reflexivity

Introduction

This paper is concerned with attacks on research and what they reveal about the revered yet poorly understood notion of 'academic freedom'. I present data from interviews with academics from Australia, Canada, the US and UK whose work has been attacked on what appear to be moral grounds, rather than for demonstrable misconduct or flawed methods. Although academic institutions promote and defend an ideal of academic freedom-that unfettered pursuit of knowledge is vital to the function of universities-research silencing reveals boundaries around what distinguishes 'acceptable' and 'unacceptable' enquiry in particular fields. I conclude these boundaries are only visible as 'the rules' once they have been transgressed, when those actors threatened by the transgression act to penalise rule breakers.

This paper identifies 42 silencing behaviours present in attacks on research and interrogates what these behaviours mean for our understanding of academic freedom. It is important to distinguish between attacks based on moral objections and patent cases of wrongdoing, as the former are not accounted for in the 'legitimate' limits to academic freedom we see from an institutional perspective. That is, universities stress that with rights come responsibilities: that research must take place according to scholarly conventions; ethics clearance, peer review and so on. Research silencing reveals more insidious limits to academic freedom, as these silencing behaviours make the rules that curtail freedom visible only once they have been broken.

Academic freedom

This paper challenges what we expect and believe about academic freedom. It is often considered an unbounded ideal-only by allowing researchers unfettered freedom to pursue lines of enquiry can learning and knowledge flourish (Department of Education University of Oxford, n.d.). According to Jackson (2005, 2006) a typical Australian university policy considers academic freedom 'fundamental to the proper conduct of teaching, research and scholarship. Academic and research staff should be guided by a commitment to freedom of inquiry' (Jackson, 2005, p. 110). Conversely, other scholars point to a dangerous erosion of academic freedom. Several argue that the modern university, particularly in the western liberal-democratic world, has created perverse incentives that orient researchers towards agendas set by politicians of the day, rather than lines of enquiry the researcher deems important (Edwards & Roy, 2016; Hayes, 2015; Henry, 2006; Kinnear, 2001).

Academic freedom in its modern form can be traced back to the German university model of the early nineteenth century (Hofstadter & Metzger, 1995). It originated from teaching, rather than research, based on freedom to teach and freedom to learn (Bryden & Mittenzwei, 2013). 'Professors should have the right to perform teaching and research according to their interests, and students should have the right to choose what courses to follow' (Bryden & Mittenzwei, 2013, p. 314). According to Shils (1995, p. 7), the modern incarnation of academic freedom 'protects the moral and intellectual integrity of the teachers'. In other words, 'If the public cannot be sure whether a teacher is independent in presenting her work, then the teacher has lost her integrity and her work is of minor value' (Bryden & Mittenzwei, 2013, p. 314). Academic freedom is considered fundamental to good research as well as teaching, if universities are to produce meaningful findings and help inform public debate.

Most universities profess a fundamental commitment to academic freedom but can written, institutional policies really provide and guarantee the freedoms we believe they do? These policies are as much about protecting freedom as they are about structuring the conditions for research. Immediately obvious in these policies is a tension between rights and responsibilities. That is, the university guarantees academics' rights to pursue lines of enquiry, as long as it is conducted in an appropriate and scholarly way. It is then left up to both the written conditions and often unspoken norms within academic communities to determine guarantees and limitations. It is clear these policies reflect the values of the day-'academic freedom' is contingent and constantly shifting, as seen in recent debates around 'ministerial veto' of Australian research projects (Piccini & Moses, 2018). It is not a guaranteed, universal 'good'. It is inherently bounded and limited, in both spoken and unspoken ways. This can be seen in the current University of Sydney academic freedom policy:

The University of Sydney declares its commitment to free enquiry as necessary to the conduct of a democratic society and to the quest for intellectual, moral and material advance in the human condition. The University of Sydney affirms its institutional right and responsibility, and the rights and responsibilities of each of its individual scholars, to pursue knowledge for its own sake, wherever the pursuit might lead... The University of Sydney, consistent with the principles enunciated in its mission and policies, undertakes to promote and support: the free, and responsible pursuit of knowledge through research in accordance with the highest ethical, professional and legal standards... (University of Sydney, 2008)

The University of Sydney's policy espouses commitment to the highest ideals of freedom, and the importance of knowledge for its own sake. I draw attention to the explicit mention of 'the rights and responsibilities of each of its individual scholars, to pursue knowledge for its own sake, wherever the pursuit might lead.'The University of Sydney appears to make a theoretical commitment to pure or basic research. Implicit in this is the right for Sydney University academics to pursue research, regardless of the findings. That scholarship for its own sake is worthy and will be protected by the University.

My own university, the Australian National University (ANU) has recently introduced a Statement on Academic Freedom that serves to bolster its existing rather ambiguously written policy (Hoepner, 2017, pp. 94-95). This Statement supports a commendable, high-level commitment to intellectual freedom:

Academic freedom is fundamental to the life of The Australian National University. Our founding values require us to advance and transmit knowledge by undertaking research, education and public engagement of the highest quality... The Australian National University affirms its institutional right and responsibility, and the rights and responsibilities of its members, to free enquiry. The University will defend the right of our staff and students to exercise their academic freedom, provided it is done with rigor and evidence. (Australian National University, 2018)

Beside the explicit reference to 'rights and responsibilities' I draw particular attention to the mention of 'rigor and evidence'. This makes a clear distinction between academic freedom underpinned by methodological and evidentiary scrupulousness and broader notions of freedom of speech-two concepts often erroneously conflated. It is also worth mentioning however, that despite this principled commitment, at the very same time I was discussing the development of this Statement with ANU's Academic Board and members of the Executive, my work drew a complaint from an external actor to the VC, leading to a lengthy embargo of my doctoral thesis and an academic misconduct enquiry (of which I was cleared of any wrongdoing). This is not to criticise the ANU, but merely to suggest that perhaps the head does not always know what the tail is doing: lengthy and complicated administrative procedures will continue to stifle 'everyday' academic freedom even when those at the top believe it is fundamental to what they do. Without carefully examining how 'messy' cases such as mine result in procedural silencing, even the most principled institutions and policies may fall short of the ideal. Commendably, the ANU has taken steps to do so.

Despite noble ideals, most university policies acknowledge limits to academic freedom, through reference to 'responsible conduct', 'ethical standards' or 'obligations'. Even on paper, academic freedom is limited. There is a tension between what we think academic freedom means and the unspoken limits that constrain it. These limits are only revealed once they have been transgressed, where we see a clear demarcation between 'acceptable' and 'unacceptable' lines of enquiry.

Research silencing

How can we understand attacks on research? Previous scholars have explored attacks on academics and their implications for academic freedom, particularly Brian Martin (Martin *et al.*, 1986; Martin, 1996, 1999, 2002, 2017), Alice Dreger (2015), Gordon Moran (1998) and Linda Gottfredson (2010). These areas of the literature provide pertinent insights into attacks on research.

Martin argues attacks on researchers can be understood as examples of 'suppression of dissent'. He argues in most cases research is attacked it is because powerful interests shut down what they see as inconvenient research. Martin highlights a problem with trying to understand the nature and extent of this problem: namely, overt examples of attacks on researchers may be unrepresentative of a broader problem. Clear-cut examples obscure more insidious forms, and the structures that enable and encourage them. Documented cases of suppression overemphasise the major and dramatic events, such as dismissals and cutting off of funding, and underemphasise problems such as blocking of publication and subtle harassment by collegial disapproval. Documented cases also overemphasise instances in which channels for formal redress are available. (Martin, Baker, Manwell, Pugh, 1986, p. 5).

Dreger's work around academic freedom, science and justice chronicles her experience navigating the tension between activism and science in fields relating to sex and identity (2015). Dreger provides in-depth case studies of academics and scientists whose work provoked extreme backlash. Many of the cases involved research into sexual behaviour and identity, such as intersex, transgender and biological bases for sexual coercion. She argues that attacks on researchers are due to science becoming inextricably linked to personal feelings and sense of identity. Particularly in research on sexuality and sex differences, science is relegated in favour of activism and advocacy. Rather than a few isolated cases, Dreger found patterns among researchers being punished for pursuing lines of enquiry deemed 'unpalatable'.

I had accidentally stumbled onto something much more surreal- a whole fraternity of beleaguered and bandaged academics who had produced scholarship offensive to one identity group or another and who had consequently been the subject of various forms of shut-downs. (Dreger, 2015, p. 108).

In her pursuit of several case studies, Dreger begins to question notions of academic freedom and whether it is 'right' that some areas of research are considered off-limits, and whether we should stop being afraid of dangerous ideas.

Is there anything too dangerous to study? Should there be any limits? What if, in order to prove how important truth seeking is, we made a point out of studying the most dangerous ideas imaginable? What if we became unafraid of all questions? Unbridled in our support of the investigation of 'dangerous' ideas? (Dreger, 2015, p. 133)

In the 1980s and 1990s, art historian Gordon Moran was compelled to investigate silencing in academic fields after finding himself on the receiving end of 'uncivil' attacks from the 'Guido Riccio affair' (Moran, 1998). Moran provides an apt justification for his (and my) use of 'silencing' as a preferred term to describe these responses to unpalatable or challenging work.

Silencing is a more encompassing term than censorship, suppression or peer-review rejection. Silencing takes place at various levels: A scholar might be silenced, an idea might be silenced and the truth might be silenced by a big lie... Silence is not only imposed, in some cases, on scholars and ideas, but silence is also employed, by academic leaders and peer review authorities for instance, as a tactic... (Moran, 1998, p. 3)

In the late 1980s and early 1990s, Gottfredson and a fellow colleague encountered five overlapping, yet technically separate 'events'-including blocked promotions and withdrawal of funding-that highlighted the fraught and contested nature of academic freedom. She found that while her university paid lip service to its importance, their actions suggested otherwise. As a result, Gottfredson's work provides six 'lessons' about academic freedom.

Academic freedom, like free speech, (1) has maintenance costs, (2) is not self-enforcing, (3) is often invoked today to stifle unwelcome speech, (4) is often violated by academic institutions, (5) is not often defended by academics themselves, and (6) yet, requires no heroic efforts for collective enjoyment if scholars consistently contribute small acts of support to prevent incursions. (Gottfredson, 2010, p. 273)

Most practically, Gottfredson provides a thought experiment around what university guidelines really mean. They appear so vague, contingent and contextdependent they are almost meaningless.

As a thought experiment, readers might ask themselves to whom they would turn if they thought their institution had violated their academic freedom. Who inside or outside your institution has any authority or responsibility to investigate or take action? Does your university have any written policies that specify what academic freedom is, what constitutes a violation, what constitutes credible evidence that the violation occurred, who rules on the evidence, and whether the institution is required to act on that ruling? Do all parties interpret the written procedures in the same way and, if not, whose interpretation holds? What are your options if the designated authorities simply refuse to entertain formal complaints or they dismiss compelling evidence as irrelevant? What if the authorities are the perpetrators against whom you seek protection? (Gottfredson, 2010, p. 274)

These perspectives are valuable, but not comprehensive in understanding research silencing in Western, Anglophone higher education contexts. Both Martin and Dreger's accounts focus primarily on responses from interest groups external to academia. While these and other scholars have explored vested interests, ethical perspectives and the mechanics of academic suppression, little analytical attention has been paid to the emotional, visceral landscape in which these conflicts occur, and the wider implications for our right to pursue lines of enquiry, no matter how controversial.

Materials and methods

Reflexivity statement

It is important to acknowledge how and why I came to this research problem. When I first began my doctorate at the Australian National University, I was investigating 'wind turbine syndrome' and what factors influence these health concerns. In largely English-speaking, western countries, a phenomenon has affected several small wind farm towns. Some individuals who live near turbines claim they make them sick. When I started, the literature was small but suggested there was no credible evidence to link turbines with ill health (NHMRC, 2015). And yet the fears and complaints persisted (Stop These Things, 2013).

I wanted to know if there were shared themes or experiences among those who claimed to suffer health problems, as some literature suggested (Chapman, St.George, Waller & Cakic, 2013; Hall, Ashworth, & Devine-Wright, 2013). What drove these concerns, if indeed there was no physical link? The debate had been polarised and divisive, with stark 'sides' well established. I hoped to occupy a more neutral and open space to explore what was happening. But before I could conduct a single interview, anti-wind groups (Stop These Things, 2015) and a major daily Australian newspaper (Lloyd, 2015) disrupted my data collection. While it had been difficult to recruit interview participants in such a polarised field as it was, the involvement of newspaper and anti-wind groups made it impossible. Both told their readers-the very people I was trying to recruitthat I was unqualified, untrustworthy and acting as a paid spokesperson for the wind industry. They said my agenda was to exploit and manipulate vulnerable people.

Once I recovered, I realised this attack on my study presented an even more interesting line of enquiry than the one I'd originally intended to pursue. Why was my research considered 'unacceptable' and worthy of these silencing responses? This experience provoked analytical fascination with this phenomenon and was central to the intellectual development of the project. My position as a 'beleaguered academic' was fundamental in how I approached the problem of research silencing and its implications for academic freedom.

It was necessary to employ a reflexive methodology, common in participant-observer, ethnographic and anthropological studies (Engels-Schwarzpaul, A; Peters, 2013; Guillermet, 2008; Nazaruk, 2011). 'Reflexivity is the process of reflection, which takes itself as the object; in the most basic sense, it refers to reflecting on oneself as the object of provocative, unrelenting thought and contemplation' (Nazaruk, 2011, p. 73). Reflexivity requires a consistent, active awareness of, and reflection on my own position relative to the research problem. It allows me to recognise why my initial research project within the wind turbine syndrome space was always going to be difficult, if not impossible. It also allows me to acknowledge the various ways my position both orients me and the enquiry I'm following, while also making it possible for me to gather a rich diversity of data. Only by gaining participants' trust, as 'one of them' was I able to elicit candid accounts of their experiences with research silencing. While this began as an informal impression, it became clear during interviews that our shared experiences allowed some participants to open up in ways they would not have otherwise. (Further detail of my use of reflexive methodology can be found in: Hoepner, 2017 pp. 9-23).

Interviews

My participants were researchers from Australia, the US, UK and Canada whose work had been attacked, constrained or silenced in some demonstrable way. I identified many from adverse media coverage around their work as well as tips from colleagues, while employing snowball sampling from these participants to identify researchers with similar experiences. Participants were from a range of fields, though most overlapped with public health in some way, with participants' findings challenging conventions around sugar, obesity, addiction, mammography and circumcision, among others. Research which threatened identity (around race and sex in particular) was also prone to attacks, which supports Dreger's findings (Dreger, 2015). It is worth noting that while some participants I interviewed were from physical science backgrounds and could be described as 'disgruntled academics' who were blindsided and confused by the attacks on their work, many were from social science disciplines and as such had examined research silencing within their respective fields from a theoretical perspective too. These should be considered 'participant-experts' as their views were nuanced, considered and based on theoretical and experiential knowledge.

All 18 interviews were semi-structured, with questions following similar themes: how they became involved in the research, responses to their work and how they feel about the same (Hoepner, 2017, pp. 29-30). While it would be impossible to include the backgrounds of all participants, full interviewee summaries can be found in Hoepner (2017, pp. 23-29).

Analysis

After completing the interviews, typing up transcripts and ensuring the validity and acceptability of the data with participants, I performed an iterative process of thematic analysis, common in qualitative research (Fereday & Muir-Cochrane, 2006; Nowell, Norris, White, & Moules, 2017). I carefully parsed the transcripts for emerging themes. I hand-coded themes and myself and supervisors reviewed these several times to ensure validity. Once preliminary themes were established, data was reviewed again to group and analyse accordingly. From this analysis, it was possible to identify shared themes and patterns, particularly around the range of responses participants encountered. The analysis also revealed the groups most likely to instigate research silencing.

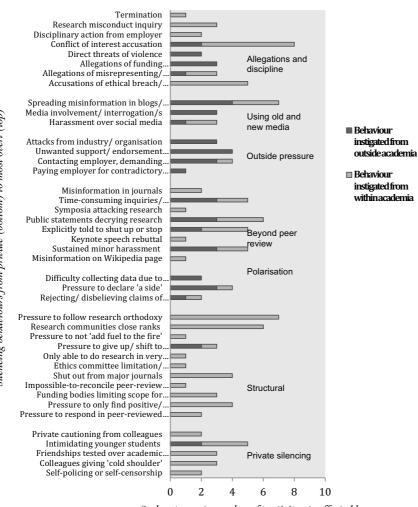
Results

Summary of Figure 1

Figure 1 visually represents several aspects of my dataset. The vertical axis represents discrete forms of silencing behaviour. They have been placed on a scale from more covert or implicit behaviours (bottom), to overt or explicit behaviours (top) for ease of interpretation. The behaviours range from self-policing or self-censorship, to termination of employment. Pale grey represents silencing behaviour that came from within academia or the scientific community, while dark grey represents behaviours from outside academia-whether members of the public, media or industry. The horizontal axis represents the number of participants interviewed who encountered the behaviour. The 42 silencing behaviours in Figure 1 have been broken into seven groupings: private silencing; structural limitations; effects of polarisation; beyond peerreview; outside pressure; using old and new media; and allegations and discipline. This is to both simplify the graph and provide a consolidation of the different types of behaviours my participants encountered. This means the behaviours can be understood in several ways: grouping, level of overtness and whether the response came from within or outside academia.

Patterns of silencing behaviours

After analysing the data, it was possible to identify 42 distinct 'silencing behaviours' that participants experienced in response to their research. Most participants encountered multiple behaviours within this range. As shown in Figure 1, these behaviours range from subtle and hard to pin down, to overt or very public attacks. The motivation for these silencing behaviours



Scale represents number of participants affected by silencing behaviour

Figure 1: Graph of silencing behaviours and their prevalence within and outside academia

was often unclear at the outset, though from researching each participant's experiences through interviews, surrounding media coverage and peer-reviewed literature; it seemed well beyond the standard peer-review process researchers expect. From my investigation into their respective cases, opponents in most cases were unable to provide proof of misconduct or wrongdoing. From the beginning of this project, the responses followed similar patterns. For instance, many mentioned accusations of conflict of interest or denouncements in mass media. Once I began interviewing participants and analysing the data, it became clear these kinds of responses were common. These responses are not part of an established peer-review structure, as they do not appear to be aimed at improving research or furthering understanding through critique, but rather to silence or shut down.

formalise and tabulate thematic and behavioural patterns within the dataset for this problem to be considered in a more productive way: that this is not just sensitive academics feeling slighted. Visualising the data reveals there is something more systemic at play here.

Figure 1 is something

conversational

experiences

to research

behaviours

and

suppression

anomalous.

of a translation-rendering

data into quantifiable, tabular

data. This is not to say my

data are quantitative, or that

they are representative of

more broadly. However, it

does provide a sense of how

were within the dataset. Is it

an anomaly only experienced

by one or two participants,

or is it something we can

see across disciplines, across

systems, that may suggest a

pattern in negative responses

to research? It is important

to stress that overt cases

This rendering of the data

into clear thematic patterns

illustrates this is a problem

that plays out in subtle and

explicit ways, originating

from both inside and outside

academia, and across different disciplines. The significance

of this problem is worthy of

investigation and analysis.

As such, it is necessary to

research

appear

countries

the

academic

of responses

prevalent

different

of

often

qualitative,

all

Examples of silencing behaviours

While it would be impossible to outline and provide examples of all 42 silencing behaviours within the word limit, a selection is given below.

Self-censorship or self-policing in this instance refers to participants who felt pressure to avoid controversial research topics as they felt it was too risky or potentially damaging to their careers. Participants who mentioned this had either previously been attacked or suppressed

Silencing behaviours from private (bottom) to most overt (top)

and did not want to experience it again, had witnessed a colleague encounter backlash or had some well-founded reason to avoid controversial research. For example, a participant from public health discussed the various reasons academics may avoid particular research areas.

I don't doubt that concern about the reputational damage and personal attacks deter a lot of people from getting involved in the field, or at least in making public comment on these sorts of controversial issues. It probably also affects their preparedness to get involved in the research.

This kind of silencing behaviour may be entirely unspoken or even unconscious. It would be difficult to ascertain how prevalent academics policing themselves

out of controversial topics is, as there is little data on what research academics choose not to pursue. This comment suggests steering clear of fields likely to draw attacks might happen at every stage of research-from deciding

not to pursue it in the first place, through to avoiding publication or public engagement.

Shut out from major journals in this context refers to participants unable to get published in major journals because journal editors and reviewers considered their position indefensible. This appears not as a matter of substantive problems with methodology or data analysis, but intolerance of the moral implications of the paper. An anthropologist I interviewed recounted her difficulties getting published in mainstream circumcision journals.

I had kind of extraordinary attempts to try and stop publication of the paper. And it took ... a long time to get that paper published. I had something like 25 reviews for that paper... And what was happening too is that I quickly realised that there were certain people that if the paper was sent to them they were just in principle opposed to everything I was saying in the paper, so I would specifically list them as non-preferred reviewers. But then what I realised at a certain point was that it was intentionally being sent to those people I had indicated as non-preferred reviewers. And then I think one of the reviews I received in about the third journal I submitted it to, was a one-sentence review where the person said 'In my prior 8000-word review on this topic, I've indicated why the arguments are untenable in this paper and it can't be published. Full stop, end of story.'

Public statements decrying research in this analysis refers to participants who had their research condemned

in public forums, rather than through journal peer-review. This overlaps with several other behaviours. This often caught participants by surprise, as they expect to justify their work through established peer review channels and not in the mainstream media. An epidemiology participant believed he was doing the right thing by sending advance publications of his follow-up paper to relevant organisations, but it ultimately backfired.

When... I knew the 25 year follow-up was about to be released by the BMJ, I notified the Canadian Cancer Society Research Institute that it was coming out, and I sent them the advance publication. Their reaction was to thank me for this, but what it did was to arm them with the ability to react as soon as our report hit the media, when they were out in force decrying it, on the

It would be difficult to ascertain how prevalent academics policing themselves out of controversial topics is, as there is little data on what research academics choose not to pursue. wrong basis. So, these were people who were definitely obsessed with the idea that mammography was the right thing to do and they weren't prepared to listen to evidence.

Contacting employer, requesting disciplinary

action in this study refers to participants whose critics called or emailed their employer demanding they be punished, or their position terminated. This was a common silencing behaviour described by participants. While oneoff calls did not appear to be persuasive in most cases, they may have exerted influence when enough pressure was applied. This pressure also contributed to a lingering sense of unease in participants, as the implication was that they had acted inappropriately in some way. An evolutionary biologist participant was generally unmoved by the attacks he encountered but says the ones that did upset him were those that questioned his professionalism and integrity.

What bothered me about it was they felt their perception of it was accurate and correct and as a consequence, I must have done something improper. And as a result, they... went as far as they could to try to penalise me for my behaviour. Now this is contacting the Vice Chancellor of our university, contacting the ARC regarding my funding statement. Meanwhile, if they'd just approached me I would have said 'This is where it came from, this is how I got it.' And I tried to do that to some and they just said they didn't believe me.

Research misconduct inquiry refers to participants who were forced to defend their work against claims of wrongdoing in an official investigation. Although participants who experienced this behaviour were ultimately cleared of misconduct, they believe their reputations sustained damage throughout the process. A nutritionist I interviewed explained her anxiety around having a research misconduct inquiry, as she feared her reputation might be permanently affected.

I was stunned when... the Pro-Vice Chancellor of Research... made the decision, after a long time, I think it probably was December 2013, so we'd been now going almost two years. She made the decision that the only way to settle this was to institute an inquiry into research misconduct. And honestly the words 'research misconduct' were enough to make me feel sick, because you know, it would mean from thereon in if someone, you know, got your name and just Googled it, it would be associated soon enough with something called 'research misconduct'. And you didn't have to read far to gain the impression that I'd done something wrong.

Discussion

Distinction between responses from inside and outside academia

In this analysis, I have chosen to distinguish between responses initiated by those inside the academic community, and those outside the community, whether they are interest groups, media, public figures or industry. Within my data, recriminations arising within the academy against academics that crossed these lines were far more prevalent than those from outside. Some participants encountered attacks from both insiders and outsiders and this did not necessarily correlate with whether or not they were supported by their institution. This reflects findings from the broader literature (Martin 2002, 2017; Dreger, 2015; Gottfredson, 2010; Moran, 1998) that many academics are left to defend themselves when institutions fear reputational or financial damage.

A distinction between insiders and outsiders is important for a couple of reasons. First, the behaviour may feel more or less hurtful depending on who initiated it. An attack from a member of the public can be dismissed more easily as 'ignorant' or 'ill informed', as several participants did. Opposition from an industry group who feel threatened by findings provides a clear motivation to suppress or condemn research. These external attacks may be just as devastating and limiting as any other, but the reason may be easier to understand or accept. However, if a peer within the academic community attacks your research, particularly outside of established peer review channels, it may be much more difficult to comprehend the backlash. This confusion may contribute to an already distressing atmosphere.

It is also important to separate these responses because it suggests academic training does not stop someone from perpetuating visceral, knee-jerk responses. The data indicates these reactions are just as prevalent within academia as without, if not more so. After all, cognitive biases and partisan thinking can be exacerbated when one is expertly trained in research and distinguishing between 'good' and 'bad' sources (Kahan, 2014). The impact of internal attacks should not be downplayed. Certainly, ministerial vetoes make the news (Piccini & Moses, 2018), but the way the academy internalises and 'weaponises' societal expectations, orthodoxy and palatability through 'legitimate' structures such as conferences, ethics, peer review, for instance, to silence colleagues can have a much more significant, and more insidious influence on the research that is, or is not conducted.

What does research silencing reveal about academic freedom?

The silencing behaviours described lie outside established peer-review channels, beyond what an academic expects to deal with, based on (flawed) assumptions around academic freedom and research protocols. These responses do not appear to be based on critical or rational critique. Rather, these are impulsive, knee-jerk, visceral responses aimed at shutting down, denouncing or silencing unpalatable or discomfiting research. We see communities closing ranks and penalising those who cross boundaries or refuse to play by the rules.

Is academic freedom really what we think it is? Does it live up to the ideal? It would seem that once research crosses a boundary-and deemed unacceptable-unspoken and invisible boundaries are revealed, drawing a clear line between 'good' and 'bad' research. Patterns of silencing behaviours establish what it looks like when researchers are punished for transgressing boundaries.

So what drives attacks on research when no substantive misconduct or wrongdoing is present? A visceral, kneejerk response. One aimed at shutting down lines of enquiry, and reprimanding those not playing by the rules. Hidden limits are revealed in a close examination of the relations of disgust. These limits are particularly apparent in lines of enquiry that threaten the public health field, in and through my interrogation of the actors who have experienced silencing of their work. Moral disgust literature suggests people may 'primitively' appraise ideas they find morally reprehensible, rather than cognitively processing them (Chapman & Anderson, 2013). This response may override critical, conscious thought. It's important to acknowledge that while emotion may motivate the initial response, those opposed to offending research can be quite methodical and careful in employing

silencing tactics. In these emotive responses, Haidt argues the 'rational mind' can operate in service of passions, not in spite of them (Haidt, 2012).

Most academics will likely never encounter this response and will continue to take the ideals universities espouse for granted. It is only those cases in which a researcher pushes a previously unseen boundary that we see this visceral response, exposing the fragility of the academic freedom ideal. My participants' stories demonstrate that when academic work crosses boundaries, individuals or groups will wield whatever power is at their disposal to shut down the offender. There is no attempt to engage critically or review the work in question. It is simply to silence, to stop, to shut down.

Limitations

The nature of this research meant I relied on a relatively small sample of the more extreme cases of research silencing. In recruiting academics and researchers whose work had been publicly attacked or at the very least contested enough to draw my attention, I likely

missed more subtle or insidious cases. The true scale of research silencing, from private silencing, through to disciplinary action is difficult to comprehensively account for.

Another limitation of my sample was their disproportionate geographical representation. Most participants were from Australia, with around a third from the United States, Canada or the United Kingdom. This means I missed stories from academics in other parts of the world. European countries such as Finland, Slovenia, Czech Republic, Hungary and Spain measure highly on five indicators of academic freedom, including academic tenure and legislative protection (Karran, 2007). Conversely, countries like the United Arab Emirates, China and Singapore are more overtly restrictive than the four countries I drew participants from (Kinser, 2015). My dataset was overwhelmingly drawn from English speaking. western, liberal-democratic countries.

This paper was never intended to assess the validity of my participants' research. Unlike Alice Dreger, I was not concerned with proving through comprehensive research and analysis that my participants were justified in their research. I was also less concerned with the structures that enable suppression of dissent, like Brian

While we may acknowledge more 'legitimate' constraints to the practice of academic freedom, such as peer review and ethics protocols, there are unspoken, insidious 'rules' that severely curtail and silence particular research, in ways that go beyond written policies.

Martin. I was not concerned with discussing examples where researchers had demonstrably breached codes of ethics or manipulated data. My sole focus was on exploring research silencing and its implications for academic freedom.

Implications for academic freedom

This paper questions assumptions usually associated with the concept of 'academic freedom'. Academic freedom is not a given, without limits or borders. While we may acknowledge more 'legitimate' constraints to the practice of academic freedom, such as peer review and ethics protocols, there are unspoken, insidious 'rules' that severely curtail and silence particular research, in ways that go beyond written policies. This means that academics'

> own understanding of their rights and responsibilities is inadequate, as they expect to be protected so long as they 'play by the rules'. I have argued that we should not take academic freedom policies for granted, as the silencing behaviours I've documented here reveal that boundary transgressions can

be harshly penalised, despite academics believing they were doing 'all the right things'. This paper calls for a more reflective, honest examination of the ways research silencing sets the conditions for scholarly thinking and enquiry, rather than accepting the 'just there' ideal of academic freedom.

Implications for the literature

This paper has significant implications for the broader literature around contested research and academic freedom. In some ways, it reinforces respective findings from Martin, Dreger and Gottfredson that vested interests, identity and controversy can influence and curtail what research is seen as 'acceptable' and 'unacceptable'. While previous work in this field provides pertinent insights into the problem of research silencing and its implications for academic freedom, this paper goes further. I argue that it is not that academic freedom policies are being flouted, or ignored, or breached in cases of research silencingbut the protections widely assumed to be provided by academic freedom are illusory. The boundaries between 'good' and 'bad' research are only see-able once they have been crossed. These boundary crossings override any 'legitimate' rules, which creates confusion and a sense of

injustice for those academics penalised: 'I thought I was doing the right thing.'

Implications for players in the field

My research findings have significant implications for players in academic fields, including universities, research communities and individual academics. University policies pertaining to academic freedom promote an unrealistic ideal; suggesting unfettered enquiry is fundamental to their role within society, despite competing obligations 'client service delivery', industry stakeholders, international collaborations, broader 'national interest' and brand management, among others. While many academic freedom policies stress researchers must meet scholarly requirements, these legitimate and widely accepted 'rules' ultimately mean nothing if a line of enquiry crosses a boundary and is deemed 'bad' or 'dangerous'. It will not matter that academics 'fulfilled scholarly responsibilities' to those threatened by a boundary transgression, whether representatives of university administration, academia, industry groups or the public.

For research communities, this paper argues for a more reflective approach to the work we do, and whether it is justifiable to silence findings we disagree with. If we continue to allow lines of enquiry we don't like to be curtailed, narrowed or shut down, does all research become conditional and subject to research silencing?

This paper concludes individual academics need to recognise that although they may satisfy scholarly requirements, their work may still cross a boundary and as such provoke research silencing. Calls to defend academic freedom in light of attacks on researchers mean little when our understanding of 'academic freedom' itself is so lacking.

Acknowledgements

I would like to thank the researchers who generously gave their time to share their often-traumatic experiences. To Professor Simone Dennis for her expertise and guidance, as always.

Dr Jacqui Hoepner is Early Career Fellow for HDR

Supervision at the Australian National University, where she also teaches Masters and undergraduate courses at the School of Archaeology and Anthropology. Her scholarly work focuses on institutional culture, academic freedom, critical public health and contested research.

Contact: jacqui.boepner@anu.edu.au

References

Australian National University. (2018). *The Australian National University Statement on Academic Freedom*. Released 23 July 2018. Retrieved from: http://www.anu.edu.au/files/committee/ANU%20Statement%20on%20 Academic%20Freedom.pdf

Bryden, J. & Mittenzwei, K. (2013). Academic freedom, democracy and the public policy process. Special Issue: *Sociology, Knowledge and Evidence in Rural Policy Making*, *53*(3), pp311–330. http://doi.org/10.1111/soru.12012

Chapman, H. & Anderson, A. K. (2013). Things rank and gross in nature: a review and synthesis of moral disgust. *Psychological Bulletin, 139*(2), 300–27. http://doi.org/10.1037/a0030964

Chapman, S., St.George, A., Waller, K. & Cakic, V. (2013). The Pattern of Complaints about Australian Wind Farms Does Not Match the Establishment and Distribution of Turbines: Support for the Psychogenic, "Communicated Disease" Hypopaper. *PLOS ONE*, *8*:10, pp1–9.

Dreger, A. (2015). Galileo's Middle Finger. New York: Penguin Press.

Edwards, M. A. & Roy, S. (2016). Academic Research in the 21st Century: Maintaining Scientific Integrity in a Climate of Perverse Incentives and Hypercompetition, *Environmental Engineering Science* 34:1, p51–61. http:// doi.org/10.1089/ees.2016.0223.

Engels-Schwarzpaul A. & Peters, M. (2013). *Of Other Thoughts: Non-Traditional Ways to the Doctorate: A Guidebook for Candidates and Supervisors*. Rotterdam, NLD: SensePublishers.

Fereday, J. & Muir-Cochrane, E. (2006). Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods*, 5(1), 80–92. http://doi.org/10.1177/160940690600500107

Gottfredson, L. S. (2010). Lessons in academic freedom as lived experience. *Personality and Individual Differences*, 49(4), 272–280. http://doi. org/10.1016/j.paid.2010.01.001

Guillermet, E. (2008). Reflexivity–A tool for the anthropologist. An example: the fieldwork of a French PhD student. *Antropoweb*, 16–21.

Haidt, J. (2012). The righteous mind: Why good people are divided by politics and religion (1st ed.). New York: Pantheon Books.

Hall, N., Ashworth, P. & Devine-Wright, P. (2013). Societal acceptance of wind farms: analysis of four common themes across Australian case studies. *Energy Policy*, 58, 200–208.

Hayes, D. (2015). New ranking exposes curbs on university freedom of speech. *The Conversation*. Retrieved February 3, 2016, from https://theconversation. com/new-ranking-exposes-curbs-on-university-freedom-of-speech-37060

Henry, A. (2006). Academic Freedom Under Fire: The Case for Critical Pedagogy. *College Literature*, *33*(4), 1–42.

Hoepner, J. (2017). You Need to Shut Up: Research Silencing and What it Reveals about Academic Freedom. PhD Thesis. Open Research—Repository, Australian National Centre for the Public Awareness of Science, College of Physical & Mathematical Sciences, The Australian National University. Retrieved from: http://hdl.handle.net/1885/121823

Jackson, J. (2005). Express Rights to Academic Freedom in Australian Public University Employment. *Southern Cross University Law Review*, 9, 107–146.

Jackson, J. (2006). Implied Contractual Rights to Academic Freedom in Australian Universities. *Southern Cross University Law Review, 10* (2005), 139–200.

Kahan, D. (2014) Climate-Science Communication and the Measurement Problem. *Advances in Political Psychology (2015)*, *36*, 1-43.

Kinnear, P. (2001). Academic Freedom and Commercialisation of Australian Universities Perceptions and experiences of social scientists. The Australia Institute, 37. Lloyd, G. (2015). In response to the Media Watch report about The Australian's coverage of wind farms. *The Australian*. Retrieved from http:// www.theaustralian.com.au/business/media/in-response-to-the-media-watch-report-about-the-australians-coverage-of-wind-farms/news-story/ ea7e13660d70930785876c412a97917c

Martin, B (ed.). (1996). *Confronting the Experts*. Albany: State University of New York Press.

Martin, B. (1999). Suppression of dissent in science. *Research in Social Problems and Public Policy*, 7, 105–135.

Martin, B. (2002). Dilemmas of defending dissent: the dismissal of Ted Steele from the University of Wollongong. *Australian Universities' Review*, 45:2, 7–17.

Martin, B. (2017). Defending university integrity. *International Journal for Education Integrity*, 13:1, 1–14.

Martin, B., Baker, C.M., Manwell, C. & Pugh, C. (eds.). (1986). *Intellectual Suppression: Australian Case Histories, Analysis and Responses*. Sydney: Angus & Robertson.

Moran, G. (1998). Silencing Scientists and Scholars in Other Fields: Power, Paradigm Controls, Peer Review, and Scholarly Communication. Greenwood Publishing Group. ISBN: 156750342X, 9781567503425

Nazaruk, M. (2011). Reflexivity in anthropological discourse analysis. Anthropological Notebooks, 17:1, 73–83. NHMRC. (2015). NHMRC Statement and Information Paper: Evidence on Wind Farms and Human Health. Retrieved from https://www.nhmrc.gov.au/health-topics/wind-farms-and-human-health

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16:1, pp1–13. http://doi.org/10.1177/1609406917733847

Piccini, J & Moses, D. (2018). Simon Birmingham's intervention in research funding is not unprecedented, but dangerous. *The Conversation*, published online 26 October 2018. Retrieved from https://theconversation.com/simon-birminghams-intervention-in-research-funding-is-not-unprecedented-but-dangerous-105737.

Shils, E. (1995) Academic freedom and permanent tenure. Minerva 33, pp5-17

Stop These Things. (2013). Cape Bridgewater: Sonia. Australia: YouTube. Retrieved from https://www.youtube.com/watch?v=lx1rRxMUwvc&list=PLAktpg ushkOMxKByCxZ5ZvwxfALpC3v1x&index=4

Stop These Things. (2015). Simon Chapman, Will Grant & Jacqui Hoepner: the Wind Industry's Health "Expert" Great Pretenders. Retrieved from https:// stopthesethings.com/2015/03/16/simon-chapman-will-grant-jacqui-hoepnerthe-wind-industrys-health-expert-great-pretenders/

University of Oxford, Department of Education. (n.d.). *Academic freedom and values*. Retrieved from http://www.education.ox.ac.uk/about-us/academic-freedom-and-values/

University of Sydney. (2008). Charter of Academic Freedom, (May), 2008.