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Speaking evidence to power? An interdisciplinary conversation

Significance:

Interdisciplinary conversations about how knowledge is produced are significant in that they allow for reflection and exchange between the 'silos' of academic institutions. This Structured Conversation explores some of the complexities that are attendant to generating and analysing data, and how data are then entered into relationships of authority and resistance.

Introduction

Mehita Iqani (M.I.) and Anna Feigenbaum (A.F.): This Structured Conversation presents a synthesis of the first Evidence & Power roundtable webinar, which took place on 15 June 2023. Evidence & Power is a roundtable series co-hosted by the South African Research Chair in Science Communication (Stellenbosch University, South Africa) and the Centre for Science, Health and Data Communication Research (Bournemouth University, UK). The roundtable summarised in this essay was co-convened and co-chaired by the first two authors (M.I. and A.F.), and hosted five scholars (the remaining co-authors) from neuropsychiatry, sociology, geography, anthropology, and data analytics, respectively. What follows is an edited version of the rich discussion that took place in the webinar. The full webinar recording is available on YouTube.

The purpose of this webinar series is to create an iterative, ongoing meta-theoretical discussion about what forms of evidence are created and deployed in various disciplines, how these intersect with power, and how, together, questions of evidence and power shape the academic project in general. These issues are, arguably, central to the politics of what it means to create scientific knowledge (and communicate it) in South Africa and, more broadly, in Africa. Precisely because of the imbalances in the knowledge economy globally, African researchers are often perceived by the North to be on the receiving end of epistemology as well as funding, even though, more often than not, they are at the heart of innovation and new discoveries. This roundtable series inverts that assumption and brings South African and African knowledge-makers to the centre of debates that should be global and inclusive.

The convenors conceptualised this seminar series, and decide who to invite to speak. Our politics is aimed at challenging North-South divides in knowledge production, radical hospitality in terms of cross-disciplinary conversations, and an attention to always ensuring that 'emerging' scholars have opportunities to converse with those more established on an equal platform. This results in a conversation that is wide-ranging and which includes a diversity of depth and breadth of commentary. Specifically, we aim to connect researchers from South Africa and Africa and the rest of the world, who are working in innovative ways at the interface of science, communication, and society to explore and theorise the relations between data, methodology and the exercise of scientific authority. The intentionally cross-disciplinary, trans-career level profile of each roundtable allows for a textured interdisciplinary discussion on the overarching theme.

What counts as evidence?

In the first round of discussion, speakers were asked to reflect on the specific forms that data take in their disciplinary traditions, and to articulate how those data forms are assessed to be valuable to a particular intellectual project.

Laila Asmal (L.A.): In psychiatry, our core focus lies in understanding, diagnosing, treating, and preventing mental disorders. When it comes to data generation, the last century has seen psychiatry taking a fundamentally scientific approach. This involves systematic methodologies in the generation of knowledge, starting with hypothesis formation and progressing through the collection of evidence to test this hypothesis. A crucial step in this process is identifying and addressing potential biases, followed by the iterative process of retesting and refining our hypotheses. This often involves studying diverse sample populations to enhance the robustness and applicability of our findings. The fundamental premise of science is that evidence is replicable and is unbiased (or if there are biases, these biases are acknowledged and are addressed). Science is sometimes described as a competition of ideas, not of people. The evidence it generates needs to be trusted by society. In Western medicine, which is the dominant frame internationally, it is crucial that research is viewed by society as a sincere, unbiased attempt by scientists to describe the world accurately. In psychiatry, we continually navigate the tension among social science perspectives, therapeutic approaches and biological methodologies that often results in a push and pull in both the generation and interpretation of evidence.

Linsey McGoey (L.M.): In qualitative sociology and social theory, one of the objects of study is how evidence is produced and how different political, social, and economic actors use evidence to meet different ends. Questions of power and domination are bound up in the study of evidentiary regimes in practice. In some branches of sociology, quantitative evidence is at the top of the knowledge hierarchy: big data sets are seen as more convincing than qualitative evidence. Ignorance studies consider how the absence of evidence can be a political goal for actors who do not want to be accountable for the negative effect that their actions can have. This is in contrast to a model of power in which the more a state knew about subjects, the more it could control them and potentially dominate them, as work by scholars such as James Scott[1] have emphasised. Ignorance studies show how *not knowing* is also useful as an instrument of power, and how the absence of a fact is evidence itself. In early attempts to publish these findings, there was some resistance to this form of evidence from journal editors and reviewers.

A.M. Kanngieser (A.M.K.): In the sciences, climate change evidence is often drawn through quantitative data sets collated from different sensing technologies over diverse environmental registers. There is also ethnographic work in disciplines adjacent to and within geography on the ongoing impacts of colonialism and ecological disasters in frontline communities in the Pacific.[2,3] Ethnographic accounts tell stories that are different from quantitative data collection that seeks to export case studies for broad application. It is interesting to consider research in this domain that places into dialogue quantitative and qualitative sources to see how these sit together, because they can reveal many tensions. Ethnographic evidence can show how climate change is not a one-size-fits-all phenomenon, and that there are differential impacts happening in different or even the same places. People's experiences of those impacts can contradict what quantitative data project.[4,5] So the question of compelling evidence becomes messy when there are contradictions between long-range global data sets and ethnographic accounts of lived experience. The challenge will be to bring these two forms of evidence together, because the complexity of lived experience can undermine or complicate sensor readings.

Alexander Dunlap (A.D.): In political ecology, it is probably most accepted to start with an understanding that objectivity is impossible; that all epistemology is constructed by discourse[6,7], and all evidence is always going to have some kind of inherent bias or subjectivity. It is concerning that any data, even quantitative models, are passed off as objective.[8] Ecology makes claims to objectivity; political ecology says that it is impossible because politics and ecology are irreparably intertwined.[9,10] What is compelling evidence when we live in a political system that is more or less completely unresponsive to ecological catastrophe, social crisis, and the climate crisis? The notion of evidence being 'compelling' does not hold, because evidence often does not lead to decision-making; economic interest and political power do — whoever has the most money, will initiate extractive projects, pay things off, and keep the existing system going in the way that is suitable to capitalist political economy. Although it may not have the same power to sway, in political ecology, the most compelling evidence comes from being present on the ground, spending time, interviewing, and triangulating all of those data with multiple sources of corroboration.

Thema Monroe-White (T.M-W.): In the field of science, technology, and innovation (STI) policy, quantitative data generated from large quantitative data sets has had an outsized influence on policy audiences. More recently, this quantitative framing has been rebranded under the umbrella term, 'analytics', which relies on applying computational and statistical approaches to data sets for the purpose of generating informed decision-making. Data analytics is not unlike its disciplinary cousins (data science, machine learning, big data, artificial intelligence, etc.) in that it serves as a highly influential tool because it reinforces the long-standing values of quantification that have remained central to principally economic policymaking. In turn, the field of analytics as a whole has been equated with 'compelling evidence'. In STI policy, what counts as compelling evidence is broadly understood to include rigorous and empirical insights that are reproducible and/or transferable to different contexts. Unsurprisingly, these same quantitative studies are also sought out as validation of the empirical evidence generated by qualitative studies and scholars. The aims of reproducibility via open access code and data sets, while highly respectable and desirable, are all too often overshadowed by this prioritisation of the quantifiable (i.e. statistical and computational). In fact, insights derived from this compelling evidence can cause more undue harm if the data-driven analyses fail to be adequately humanised (i.e. critically examined in the context of the lives they reflect and/or are meant to serve). The limits of quantification have yet to be fully recognised by STI policy audiences; that said, the rise of critical quantitative scholarship focused on algorithmic bias, data harms, and methodological pluralism is helping to balance the scales.

How can evidence be used as an instrument of power?

In the second round of discussion, speakers were asked to reflect on how the forms of evidence that tend to dominate in particular disciplinary domains are, or can be, deployed from the top down, as tools of authority, control or oppression.

L.A.: Psychiatry, as a medical specialty, has been dominated by a biological and quantitative approach since the second half of the 20th century. For researchers in low- to middle-income countries, this raises concerns. As we entered the millennium, 90% of the global population lived in low- to middle-income countries, but only 5% of mental health research in the high-impact journals (the ones that actually matter in terms of change in practice) came from those countries.[11] This speaks to the bias towards quantitative research, which goes largely unrecognised. At a very basic level, quantitative research in the medical sciences is expensive. Winning big grants to do such research requires a fair amount of technical know-how, and as such is gamified towards high-income countries. Researchers in low-income countries usually end up with small sample sizes or qualitative data that are not usually regarded as good medical science. Such studies do not hit the level of large quantitative studies. This means that, in Africa, for example, it is not uncommon for African collaborators to be included in big projects led by researchers in high-income countries, and to be simply treated as data collectors. The high-income country researchers prioritise what research questions are asked and the approach, and African collaborators are sidelined. It is not infrequent for a high-income country's collaborator to 'swoop in from the fancy plane' to make broad recommendations, and then the low-income country's researcher needs to do the work on the ground for little credit. In a system in which only 5% of the high-impact journal articles are published with data from low-income countries, researchers from those countries have to toe the line. It's high stakes to talk about systemic inequality in the research funding environment, because the journal editors, the conference organisers, and the people who have access to a lot of the journals (because these journals are expensive) all exercise power within the system.

As an example, an interesting study was done in which the researchers looked at tuberculosis treatment amongst a well-performed randomised control trial, and they had clinicians from England review the study. They did not reveal or explain from where the scientists came, and the clinicians rated the study very highly. When they randomly assigned the publication source to either a high-income or a low-income country authorship, the clinicians rated the article differently.[12] The findings provided evidence that when a study is seen to be from a high-income country, clinicians rate it as more relevant and recommend the finding to peers; if the study was perceived to come from a low-income country – featuring the *exact* same science around tuberculosis treatment – the recommendations were completely different with lower ratings of relevance and lower peer recommendations. This has an impact on the scientific trajectory of scientists: those from low-income countries are likely to have less success with grant applications, to be invited to fewer conferences and so on. It also has implications for knowledge translation and accessibility, in terms of which research findings make it into clinical practice and patient care. This is an accepted and unspoken status quo; however, there are examples of change starting to happen. Low- and middle-income countries provide important and unique insights into long-term outcomes and intergenerational effects of trauma (including post-traumatic stress disorder), HIV and mental health, mental health services research, neurogenetics and neurodevelopment.

L.M.: Another worthwhile case study for thinking about how evidence is used as an instrument of power is a long-term study of the Bill and Melinda Gates Foundation, which I carried out before the wave of recent conspiracy theories related to Gates, COVID-19, and vaccines. The study showed how evidence can be used in unintended ways and how those generating that evidence need to take accountability for that. When the Gates Foundation got involved in global health funding, they directed the vast majority of their research grants towards recipients in developed, wealthy nations.[13,14] Recipients tended to be based at Ivy League institutions, and there was a debate about the justice of this. Speaking up about this carried the risk of losing potential funding from that Foundation, however. When pressed, the Foundation decision-makers would say that science should be a competition of ideas, and not people, and that they chose to fund the most cutting-edge science. Although they claimed to want to end world inequality, surely, they should have tried to enhance the research capacity in developing nations rather than compound existent inequalities. These arguments have largely fallen on deaf ears. Although critiques of the Gates Foundation were valid, unintentionally they also

fuelled extremist perspectives on philanthropic activities in general and bolstered a perception that there are shadowy pockets of people trying to control world events. When a valid critique gets redeployed as a kind of misinformation, it can be very dangerous. Ignorance studies can feed into conspiratorial logic, because it suggests that some of the most important types of power are not visible to certain actors. This in turn can lead to extremist reactions which can fuel violence and inequality. This unintended deployment of evidence as a tool of division is very concerning. It shows that evidence is not something that researchers can ever fully control, nor seek to.

A.K.: In climate research, quantitative data sets are presented as objective – this is impossible. More attention must be paid to how and by whom the data are produced – how data are generalised, despite local differences, from where they are collected, and, very importantly, the geopolitical relationships surrounding the production and use of the data. For many reasons, including ethics and onto-epistemological differences, researchers in the social sciences incorporate and centre ethnographic data where possible, as some kind of counterpoint to quantitative data. An issue here is that, in the Pacific climate space, a lot of the ethnographic work is conducted by white Australian, New Zealand, European, and American researchers. Equally here, there needs to be open self-reflection about who is forming research agendas and themes, who asks questions, the language of delivery, and how research participants are recruited. Furthermore, there is limited transparency about how researchers are funded, their ethics, and with which organisations they do or do not collaborate. Funding is largely allocated to Western researchers coming from outside, and funding grants are written in alignment with the funding government's political and economic principles and interests, rather than those of local Pacific communities. In Australia, for example, there is a strong push for public-private partnerships and industry connections. This forces researchers to frame their questions and approaches in alignment with these terms, otherwise the research does not get funded. Ethnographic research funded through these mechanisms is equally implicated in generalisation. When the same participants get asked similar questions by researchers over and over, a particular narrative becomes perpetuated. In this way, both qualitative and quantitative forms of evidence are used as instruments of power.

A.D.: In the field of low-carbon infrastructure (often wrongly called renewable energy) research[15], it is possible to make a choice about whose voices will be prioritised. Will it be the corporations or the autonomous insurrectionaries and indigenous farmers?[16-18] In the academic research space, questions need to be asked about whether knowledge should be marketised or devoted to protecting habitats, the waters, the trees, and the soil, and to reveal what is hidden by extractive companies which typically use tactics used to divide and conquer communities through social development, green rhetoric, advertising, or violent repressive strategies.[19,20] Research should generate the best kind of information and knowledge so as to uncover what Power is trying to hide. Researchers should ask whether knowledge production is the best way to support ecologies and people. We need to question whether speaking truth to Power actually works. Arguably, Power is well aware of what it is doing, what its objectives are, and is not particularly concerned with the harm that it causes.[21] Critical research should be focused on actually speaking to people to understand environmental conflicts, rather than just generating new working groups or bureaucracies to continue the existing token procedural adjustments. If research in low-carbon infrastructures and wind and solar generation (more accurate terms than renewable energy) only creates new governmental standards, committees, and checkboxes, is real change being achieved or simply a change in procedures and definitions? Evidence in the solar/wind generation and energy studies can also be used by different kinds of hydrocarbon sectors in an attempt to support continued extraction, which muddies debates, policies, supply chains, and accounting procedures.[8,15] This happens while not a single government is reflecting on past failures and actively working to understand the problems.[22] Instead, governments are failing to take environmental or climate policy seriously.

T.M-W.: Power is often used to manipulate. In the scholarly publication space, evidence shows that the scholarly publication landscape benefits from, amplifies, and showcases topics and questions that relate mostly to the majoritarian view of the world, which is hegemonic, i.e. white male. A key study on this matched author identity to topic and discipline.[23] It found that an author's race and gender identity map very closely to the topics that they study, and, even when controlling for discipline, with authors in the same discipline writing on the same topics with the same keywords, black women would be cited less on average than white men. One way that power manifests is in the identity profile of publications in scholarly literature. The "eugenics map"[23] shows how existing social hierarchies of race and gender, invented and imposed by a very narrow segment of the population to highlight and amplify the position of a very narrow segment of the population, namely, white men and white women, also show up in whose research gets published and cited the most. The analysis showed that publications data was very stratified by race, with, always, men first, and women second, within each of the race categorisations. This social power hierarchy manifests in publications in terms of citation counts and recognition of who is the owner of the knowledge, and who is attributed to being an expert in a field. The study was expanded to look at institutional affiliation, to see how race and gender intersected with being at a prestigious institution. The findings held that the ranking of research is lower when it is published by black women, even when they are affiliated with higher ranked institutions. These findings show that, in the terrain of knowledge production, power manifests in a very structural way and that structure is compounded over time. These inequities are systemic, and therefore require change at leadership and policy levels.

Evidence as resistance to injustice

In the third round, we asked how creating and sharing evidence can be an act of resistance to injustice.

L.A.: The case of schizophrenia research is instructive. This is a very underfunded area, despite the prevalence of the condition in low- and middle-income countries. There is some very exciting research being produced in this field, such as intersectional collaborations that are empowering individuals and communities to be active agents in generating knowledge and shaping research agendas.[24] This is challenging with a condition like schizophrenia; people living with it often have challenges to their capacities (that is the nature of the illness). There is a movement happening to involve people living with schizophrenia in research on the topic, which is also causing researchers to take a step back and question academic and intellectual privilege. Debates about evidence and power can be challenging to follow for someone who does not have educational or mental health privilege, and research on the illness can be inaccessible to those who have it. Recently, the US National Institutes of Health (NIH), one of the biggest funders of medical research internationally, awarded a pinnacle research (R01) grant of USD3 million to a research team, including, as co-investigator, a person with lived experience of schizophrenia. Ten years ago, this would have been inconceivable. This is cause for hope, and an opportunity to begin to undo some of the biases inherent in the practice of science.

An interesting study analysed PhD papers that were produced over 10 years in America across disciplines.[25] It found that the more underrepresented a person was in terms of gender or race in their discipline, the more likely they were to introduce novel concepts. So, in the early 1980s, a woman in computer science was more likely than a man to produce something novel in their research. A man in nutrition was more likely than a woman to produce something novel, non-white people in sociology were more likely to produce something novel, while a man in psychiatry was less likely to produce something novel. This proves that diversity can bring novelty to science, which means better science. Although the same study also found that this novelty does not necessarily translate to impact and implementation, it still offers hope in that it shows the massive value in diversity. In psychiatry, by partnering with people with lived experience of the illness we research, and bringing their diverse experiences into research design, we can create better science. Cautious optimism about the way forward is warranted.

L.M.: Something that is discussed a lot in epistemology and philosophy is the idea that seeing things from different perspectives in no way voids the effort to achieve objectivity, but actually strives towards more possibility of objectivity, because you start to correct for the limitations of those who see things only through a very narrow perspective based

on their own cultural privileges, or racial privileges or class privileges of the past.[26,27] This is different to an argument about the absence of objectivity; it is actually striving towards a better definition of it.

Nevertheless, in the social sciences, there can sometimes be a duplicity towards diversity that results in the exact opposite, even if a more plural field is created. When diversity is prioritised in recruitment processes, on paper, the candidates might come from the Global South, but they all might have studied at elite institutions in the West. In practice, then, the so-called effort towards diversity can lead to class biases that privilege people from poorer regions who are at the top of the class hierarchies in their own nations. Although it is crucial to validate the importance of people in the academy from different racialised backgrounds, we also need to consider other forms of privilege and bias that might come into play. Although academic research and knowledge production should continue to address and speak truth to Power, we should also remember that Power does not care. This forces researchers to be bold about certain achievements; for example, studying at an elite institution, when it comes to an effort towards plurality, will have unintended effects. An honest conversation is needed about those effects without that honesty becoming an apology for the status quo. The status quo needs to change, but it will change in imperfect ways. That leads to a necessity for compromise — a word that needs to come to the forefront as a new radicalism.

Compromise *is* a type of radicalism, especially in a time when the political spectrum is divided by proclamations of achieving a certain type of purity on one side or the other. On the Left, there is pressure to speak one way on every issue or else face being outcast. On the Right, there is growing tolerance for extremism and hate politics. These are both problems. Compromise should be validated as a radical rather than defeatist solution. Optimistic language is the way to go to create political change. I think the Left has become overly reliant on a language of negativity. A language of emancipation gives hope.

A.K.: Who gets validated as a knowledge holder and is able to contribute to discourse in particular ways is central to these debates. Ethnography conducted by and with Pacific researchers and collectives is used to advocate on behalf of Indigenous Pacific peoples and to intervene in climate policy and gender policy.[28] In the Pacific, as in many regions of the world, limited research has been done into climatic and environmental impacts on transgender and [other] queer people. A transgender and queer group in Fiji, called DIVA for Equality, has been conducting "ethnographic" work within their community for several years to produce policy reports and publicly available information around the kinds of discrimination and oppression that transgender but also [other] queer people are experiencing in terms of access to resources, such as shelters during disasters, and materials for rebuilding. Similarly, PANG Fiji produces research reports on economic neo-liberalism and resource extraction in the region, including environmental impacts.[29] These examples show how independent community organisations rely on long-term relationships, kinship networks, and trust. This allows them to conduct their own research and set the agenda. Communities experiencing ecocide and climatic impacts gather evidence in their own voices and for their own purposes. This fundamentally destabilises the idea that the university, think tanks, and governments are where all knowledge is produced.

A.D.: A key question in this debate is what constitutes diversity in knowledge. In elite universities, even though there might be diversity in gender and race in the classroom, it sometimes feels like everyone is from the same gated community. A lot of research in the field of low-carbon extraction simply creates new bureaucracies. In military manuals, bureaucratic processes are noted as a way to sustain occupation.[30] This is simply another version of neo-colonialism. The term ecocide could also potentially be used in problematic ways; for example, the way LGBTQIA+ rights were used to justify overseas interventions by Hillary Clinton.[31] Researchers should, ideally, do everything in their power to produce knowledge that can help people defend their territories and defend their habitats. Evidence should be open access; researchers should be encouraged to do outreach with their findings. From this perspective, universities themselves are the obstruction to social change. Instead of being sustained as spaces that facilitate deep ideas and conversations, they have turned into competitive bureaucracies competing for students and grants. Regardless, the central existential question for researchers should be: can we place ourselves outside of the conflicts that we study? Are we looking "through the window"[32], placing living processes and existences in Petri dishes to poke at and analyse, or do we remember that we are also in the Petri dish?

Researchers should strive to create and widen space inside and outside universities, and to really make social change. This requires thinking seriously about social change and diversity. What are the politics we are trying to create? These definitions matter. Evidence should help to improve the quality of relationships amongst people, with trees, with rivers, with our surroundings, so collectively we can move towards a society that is truly socially and ecologically renewable. When researchers act from a place of just trying to hold onto a job, criticality and integrity are compromised. At this juncture in human existence, evidence is about more than resistance, it is about survival.

T.M-W.: Evidence-based resistance can produce serious, real change for people in their lives. From this perspective, research is never in vain, and evidence always offers hope. In the quantitative world, there is hesitancy to discuss positionality, critical approaches, and critical lenses, but that is changing. New work is addressing the underlying structures that shape the meaning of data and how they are used. There is growing acknowledgement of how power structures envelop all aspects of life, including science and theory. This is creating opportunities to carve out new spaces and experiment with marrying very quantitative, big data, and AI approaches with and critical approaches. This can be summarised as "emancipatory data science"[33]. In this framing, the voices of the marginalised are centred, as well as their experiences and logics. This is about more than getting more people from these marginalised communities involved in research alongside an elitist few. It is about every researcher being able to consider their background, their origins, their privilege, and to integrate that into their knowledge production. Participatory research that centres data from and voices of those most marginalised allows for theorising emancipatory perspectives on the world. This is impossible without partnership and collaboration with the community. Researchers, even in positions of modest to moderate power, can create spaces to integrate and amplify good research. These kinds of acts of resistance are happening everywhere, even in academia.

Consider the example of Howard University, in the USA, a historically black college in Washington, DC. I made a conscious choice to leave a highly prestigious, predominantly white institution in favour of Howard, because during my time at the previous institution, I was in a constant and exhausting state of intellectual resistance and [received] overtly racist remarks from teachers and hostile behaviour from students. The shift to a black institution meant that significant time was saved from having to protest, and instead I could simply focus on my studies. Relatively modest acts of resistance, such as rejecting the doctrine that predominantly white institutions are best, or citing marginalised, minoritised writers, matter. This means that researchers must actively look for research and scholarly publications from structurally underrepresented groups. As well as this, researchers should choose as much as possible to publish open access. Even those who have not yet gained tenure can consider these routes, so as to be their full selves in scholarly spaces.

Conclusion

A.F. and M.I.: This conversation has illuminated questions about how we share and archive practices of 'speaking evidence to power'. Evidence does not "speak for itself" and usually needs to be explicated or interpreted by scientific actors, which in turn means that it can be appropriated or deployed with specific agendas, either by those in power, or those resisting authority. The emancipatory possibilities attached to evidence will therefore shift depending on context. Evidence means something different in each disciplinary research setting, is shaped by specific ideological leanings, and is deployed in different ways depending on political agendas. There remains the problem that "Power doesn't care about evidence". Indeed, power will always find ways to twist evidence to its own purposes, and to serve its own agendas. What role then, could evidence continue to play in empowering those who are exploited or marginalised?

There would be benefit to sharing more examples of studies and research projects, whether inside or outside of academia, that are doing really innovative things, combining quantitative and qualitative methods and participatory research of some kind, whether that is through the ways it is done in medical research, through a kind of co-production/ co-creation, or through working with community organisations.

Secondly, there continues to be a tension to navigate between knowledge production inside and outside of academia. Our seminar speakers each explored specific tensions in the projects of producing university- and government-validated knowledge and producing counter-knowledges with communities. Whether it is pressures produced by funding applications, promotion processes, seeking job stability or higher levels of influence, work inside academia will always have to conform to certain frameworks and standards of what counts as knowledge and evidence. Even within the same disciplinary boundaries, evidence can sometimes have many faces, or wear different masks. Huge epistemological debates take place within disciplines as well as between them, and as such we need to continue to explicitly engage in debates about what kinds of data are considered convincing and why, in which contexts.

Although there is huge potential in a politics that seeks to amplify the co-production of knowledge outside of the university, this has in some ways become more complex in the past decade as universities have taken increased interest in public engagement, and research impact and evidence (or some kinds of evidence) has come to exert more power. This raises questions about whether academia and its pressures for public engagement is the right place for activism and change-making.

This interdisciplinary conversation has dived deep into power and how it operates through knowledge construction and knowledge making. It has shown how all forms of science are structures of communication, are practices of communication, and are all completely embedded both within structures and histories of power as well as different modalities of defining what evidence is. These questions, and ongoing conversations in response, should remain at the heart of all kinds of ontologies of what research knowledge creation is and can be.

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Declarations

We have no competing interests to declare. We have no AI or LLM use to declare. All authors read and approved the final manuscript.

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