Department of Social Policy

Working Paper Series
July 2020

University research engagement around climate knowledge: findings from a small empirical study

Working Paper 08-20

David Lewis

Social Policy Working Paper 08-20

LSE Department of Social Policy

The Department of Social Policy is an internationally recognised centre of research and teaching in social and public policy. From its foundation in 1912 it has carried out cutting edge research on core social problems, and helped to develop policy solutions.

The Department today is distinguished by its multidisciplinarity, its international and comparative approach, and its particular strengths in *behavioural public policy, criminology, development, economic and social inequality, education, migration, non-governmental organisations* (NGOs) *and population change and the lifecourse.*

The Department of Social Policy multidisciplinary working paper series publishes high quality research papers across the broad field of social policy.

Department of Social Policy
London School of Economics and
Political Science Houghton Street
London WC2A 2AE

Telephone: +44 (0)20 7955 6001

lse.ac.uk/social-policy

To cite this paper:
Lewis, D., University research engagement around climate knowledge: findings from a small empirical study, Social Policy Working Paper 08-20, London: LSE Department of Social Policy.

Abstract

Based on detailed interviews with ten researchers from different disciplines working on climate and environment issues at LSE, this paper reports on university-based researcher relationships with, and perceptions of, the worlds of public policy. Findings indicate a wide range of different modes of engagement with policy, the importance of informal networks in facilitating such engagement, and the relative lack of contact with the private sector as compared to links with government and civil society. The paper concludes that this diversity of engagement modes is important for maintaining universities' relevance, but that universities should do more to cultivate the co-production of research agendas with both policy actors and communities.

Keywords: research-policy interface; knowledge brokers; policy engagement; public policy

Authors

David Lewis is professor of social policy and development at the London School of Economics & Political Science. A social anthropologist by training, he has degrees from the Universities of Cambridge and Bath. He teaches and undertakes research on the theory and practice of international development, with a specialisation in South Asia, non-governmental organizations (NGOs) and civil society, the study of policy processes, and rural development. He has carried out fieldwork in Bangladesh regularly since 1986. He is author of several books including Anthropology and Development: Challenges for the 21st Century (2015, with Katy Gardner), Non-Governmental Organisations, Management and Development (2014), Non-Governmental Organisations and Development (2009, with Nazneen Kanji) and Bangladesh: Politics, Economy and Civil Society (2012).

Acknowledgments

My thanks to all the researchers and policy people who agreed to be interviewed for this study, and to LSE IGA/Rockfeller for funding it. I am very grateful to Kieran Booluck, Tim Forsyth, Duncan Green, Shababa Haque, Nazmul Huq, Saleemul Huq, Diane Husic, Asif Ishtiaque, Nasreen Jessani, Nazneen Kanji, Rachel Middlemass, Lars Ribbe, Revocatus Twinomuhangi and Mehedi Hasan Tuhin for their helpful ideas on these issues. Thanks also to Md Mehedi Hasan Tuhin and Asif Ishtiaque for their help with diagrams. Finally, I wish to thank Feisal Rahman for his unstinting and good natured support throughout this project. The views expressed in the paper are my own, as are any inaccuracies.

Introduction

In order to increase the relevance of university research and improve the effectiveness of policy, there are continuing efforts to strengthen the relationship between researchers and policy makers. Academics are encouraged by funders to think more about the 'pathways to impact' from their research and there are frequent references to 'evidence based policy making' in public life.

Yet the relationship is often found to be problematic. Policy makers regularly complain that academic research lacks relevance to policy priorities, that findings are rarely communicated to them in a form that is useable, and that published work remains inaccessible. Researchers often report problems getting the attention of policy makers, or if they do, feel that their advice is not acted upon.

Others do not see it as part of their role to engage with policy at all, believing that academic research should be kept as separate as possible from policy in order to maintain objectivity and independence. As Adil Najam points out, science is at odds with policy: 'science is about understanding things; policy is about getting things done' (One Earth, 2020).

Despite the continuing prominence of the evidence based policy discourse, many academics therefore remain sceptical, believing policy makers to be only selectively interested in those research findings that can be used to justify their decisions. Nevertheless, there are signs that both parties have an interest in improving the situation, and nowhere is the challenge to achieve this more urgent than in relation to the climate crisis. Effective decision making in support of climate action in the future requires that people, including policy makers, have the best possible access to high quality climate knowledge.

This study, which forms part of a larger project entitled 'Universities as Knowledge Brokers in the Governance of Climate Change', is supported by LSE Institute for Global Affairs (IGA) and the Rockefeller Foundation. The project explores how university-based researchers see their roles and responsibilities in relation to the world of policy, by documenting the production, use and translation of knowledge within and between researchers and policy worlds.

The aims of the study are (i) to better understand the architecture of existing networks between university-based researchers and policy actors, (ii) to map and analyse the relationships between individual researchers and these actors, and (iii) to assess opportunities and constraints in order to generate ideas that can improve future engagement.

The project originated from conversations with Dr Saleemul Huq at the International Centre on Climate Change and Development (ICCCAD) in Bangladesh, which has been active in creating new 'research into policy' networks such as the Least Developed Countries Universities Consortium on Climate Change (LUCCC).

Approach of the study

The study collected its data from a selection of researchers working on climate change and environment issues in four different universities across four countries, two in the Global North and two in the Global South.

The four participating universities in the larger study were Makerere University, Uganda (Dr Revocatus Twinomuhangi), the Independent University of Bangladesh (IUB) (Dr Feisal Rahman, Ms Shababa Haque), Cologne University of Applied Sciences (CUAS), Germany (Professor Lars Ribbe, Dr Nazmul Huq), and the London School of Economics and Political Science, UK (David Lewis). LSE was added later to the original design at the suggestion of participants from the other three universities.

To the best of our knowledge this is the first study of its kind to examine the engagement of academics within a comparative frame across universities in the Global South and Global North. There is a general lack of empirical analysis around knowledge brokerage issues reported in the Global South (Jones et al., 2008).

This paper reports on the UK portion of the study, undertaken at LSE during 2019/20. Reports on the other three country studies are also available, and a comparative overview article covering all four components of the project is under preparation.

LSE is a specialised social science university. It has 23 departments, 16 specialised research centres and 3000 members of staff. It was ranked second in the world for social science research in the 2019 QS World University Rankings. There are around 12,000 students at LSE, just over half of whom are graduate students and two thirds of whom are international students.

Methodology

The study used a straightforward approach. Following a short general literature review on key issues in ‘research into policy’ debates (drawing on both academic and ‘grey’ literature), and on specialised work on climate knowledge, a set of new primary data for the study was collected from interviews with ten academic researchers working at LSE. They were selected as a purposive sample, using snowballing to achieve a good mix of respondents. Interviews were recorded and transcribed, and analysed in relation to key themes drawn from the literature.

Given LSE’s orientation, all were social scientists. The types of research topics they worked on included the political economy of climate change adaption, the importance of local perceptions of risk for climate resilience, understanding and strengthening disaster risk finance, developing methodologies for measuring progress on adaptation, the impacts of climate change on human wellbeing, the effects of conflict on vulnerability, and the relationship between climate, drought and hydropower.

In terms of disciplines, five identified as geographers, two as economists, with one political scientist, one anthropologist and one communication studies graduate. Five female and five male researchers were interviewed.

Of these two were late career, six were mid-career and three were early career staff. There were three full professors, four associate professors, one assistant professor and staff two mature PhD students employed as researchers who also had prior experience of policy engagement. Of these interviewees, four were regular faculty, four were research track staff (located in the LSE's Grantham Research Institute on Climate Change), and one was an emeritus professor.

Interviewees were first asked about any ongoing engagement with policy, and if there was no current activity, to comment and reflect on a relevant earlier experience. The interview was conducted in two parts. Part 1 took the form of a short survey component that was used to collect some basic quantitative data. Part 2 was an in-depth semi-structured interview designed to generate qualitative data and prompt reflective insights (see Annex 1 for the interview proforma).

A small number of individuals (3) from the world of policy who had been mentioned by interviewees (and with whom they had interacted during their collaborations) were later contacted for follow up conversations, and these interviews provided additional insights.

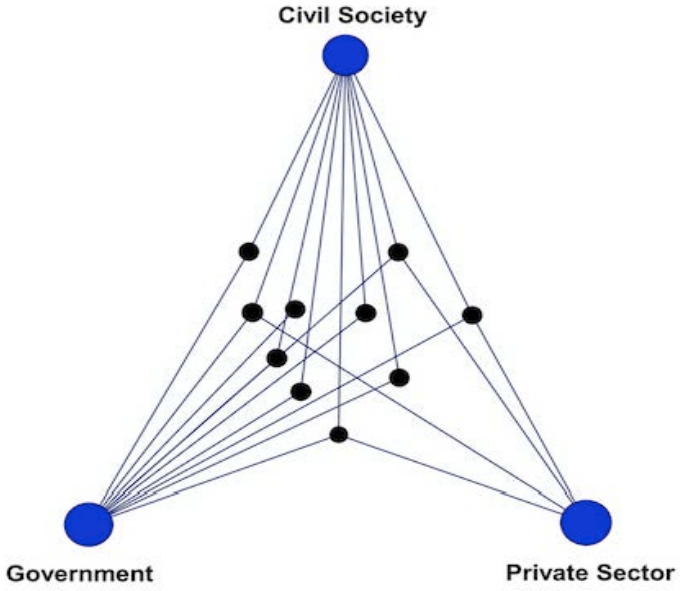
Finally, a note on how the main terms used in the study were defined. The idea of the 'broker' is used in the sense of an intermediary person or role that facilitates the transfer of knowledge from one individual, group or organisation to another through the medium of information. A broad definition of 'policy' was used that included not just government and public sector, but also private sector and civil society actors who may influence the development and implementation of policy , in line with the idea of 'policy worlds', used by some anthropologists (Shore et al. 2011). A simple four stage model of the policy process – problem identification, agenda setting and policy development, implementation and evaluation – was used for the purposes of initial discussion. For convenience, the imprecise but widely used term 'policy maker' was retained during interviews, but it was also recognised that this covers a wide range of actors and roles.

Findings

Each of the people interviewed reported that they had tried at some time, and in various ways, to engage with policy makers in relation to a piece of their research, but only seven of them were actively doing so at the time of the interview (or had done so during the past 12 months). Two others were at the very early stages of planning a new engagement in the near future, but had not started yet.

All interviewees had had some kind of contact with the governmental sector, whether this was UK or another country parliament, the European Union, a UN agency, the civil service, or the government itself (and the inter-governmental sector was also included here). Eight had also engaged with an area of civil society, ranging from non-governmental organisations, think tanks, trade unions, religious groups, and community organisations, at both national, local or international levels). Only four had engaged with the private sector. Figure 1 maps these relationships. Of current ongoing (or planned) engagements with policy makers, seven were with governments, four with civil society, and only one with the private sector.

Figure 1: Interviewee connections with policy sectors



Finally, interviewees were asked to reflect subjectively on the effectiveness of their engagement experience in terms of influencing policy. Four people felt that their efforts had been 'very effective', four 'slightly effective' and one wasn't sure. One person felt that looking back on their most recent case of engagement they had been somewhere in between 'fairly' and 'not effective'.

Researcher reasons for engagement

Academics who work on climate related issues are usually highly motivated about trying to influence events in the 'real world' and are therefore engaged in, or open to, efforts to work with policy makers:

> *Personally, I feel that my research in order for it to have the most impact needs to involve engagements with policy. I feel that I'm dealing with an issue that is so important that I can no longer do research that is just interesting to me for the sake of it.*

Most people tend to see this in terms of the challenge of trying to 'bridge' the worlds of research and policy, and they had different ideas about how to do this.

For some people, the gap is seen primarily as a practical problem that requires researchers to intensify efforts at non-academic stakeholder consultation, the 'co-production' of research, and finding more open and accessible ways in which to communicate research findings results, such as the use of policy briefs:

> *I see my role as being in large part about creating research outputs, generating new knowledge, and then disseminating communicating, and interacting with people to use that knowledge in whatever way.*

Others framed things more politically in terms of a critical engagement around power and knowledge. For example, another researcher said:

> *I see it as my role to highlight the issues that I see as being side-lined in discussions about climate change… in international conversations about climate change I see it as my role to highlight the need for understanding that there are different perspectives on environmental change …*

The concern was expressed that there was a risk that these forms of critical engagement around environment and climate change are sometimes discouraged by the dominance of studies commissioned by 'mainstream' funders. It was also pointed out that universities in the Global South rarely have the kind of academic freedom researchers that have been used to in the Global North.

There was also much reflection on and discussion of the 'pros and cons' of being a university based faculty researcher, as opposed to a contract researcher or a researcher located in a research institute or think tank. Interviewee 4 stressed the advantages of a university as a relatively independent research location, and one that afforded the opportunity to develop unexpected research findings away from the pressures of chasing the next funding contract. This may not be possible for non-faculty or those in other types of research environments, where things are more tightly governed by funding contracts and timelines.

Interviewee 2, who had worked from positions in both thinktanks and universities, commented on the need for both pure and applied modes of research to be combined more effectively. They broadly saw university research broadly as tending to be more rigorous, while thinktank research was often 'quick and dirty' since commissioning required a tight time frame for application. The downside to university research, this person felt, was that it can sometimes be slower, more out of touch and extractive.

Two interviewees felt relatively distanced from policy worlds, and generally did not prioritise engagement even though they had occasionally engaged in interesting ways with policy in the past. One saw little need to make much effort in this regard, explaining that experiences of engagement were the result of approaches by policy people or knowledge brokers. The main job as a university academic, they felt, is to do research and write about it, and not to engage proactively but to be willing to respond if and when the findings are discovered by those interested to use them.

Another person saw the value of consultancy as a useful vehicle with which to respond to requests from non-academic users, but similarly did not see the need to be proactive in seeking out such opportunities:

> *I will continue the research I'm doing and if somebody finds it interesting and asks me about it … but I don't get so many offers for consultancy that I can pick and choose. I've done the ones that are interesting.*

Modes of engagement

Participants were asked about the mode of communication they used with policy makers. Eight interviewees reported having been active in direct, formal networking, with one person active in six different networks, but most people said they were active in just one or two. In addition to consultancy, six people reported occasional, informal network engagement, with one person involved in three such networks and the others just one or two. It was more common for these LSE researchers to be invited by policy makers to engage (6), rather than initiating the contact themselves (2). Only one person reported doing both.

A common theme was a belief in the value of informal links for effective policy engagement. Interviewee 8 noted the importance of chance and informal meetings as ways into policy worlds, rather than the use of formal networks or contacts. Interviewee 6 emphasised the value of informal relationships that can exist 'under the radar', sometimes arising from previous policy links were kept alive and then later lead to further influence and policy impact. Another interviewee was frustrated with formal interactions: '*the danger with them is that you end up talking about the same things to same people, and I find it very circular'*.

Two of the university faculty members reported that their engagement with policy had mainly been through consultancy rather than acting in an academic research mode, though the consultancy opportunity had arisen because their reputation in the field was known from earlier research.

Researchers were also asked whether they could say what 'stage' (or stages) of the policy process they had mainly engaged with. Five had been involved with the 'problem identification' stage, six with 'agenda setting', five with 'implementation,' and three with 'evaluation'. One person reported engaging with all four stages, but most reported engaging with two or three of these stages only, the most frequent being 'agenda setting' (6 cases). Three interviewees were dismissive of the idea of stages as over-simplifications, and (quite reasonably) believed that such frameworks do not correspond very accurately to the realities of policy making.

In terms of forms of engagement, the most common was stakeholder consultations/policy roundtables (6), followed by publications, consultancy, scientific events and conferences, writing policy briefs, and the least common was through the use of social media.

University teaching is an under-appreciated form of knowledge brokerage that creates an indirect influence on policy worlds, according to Interviewee 4. Masters students in particular may go on to

take up jobs in influential policy positions that enable them to influence and even enact policy change. The fact that students are required to read academic papers and engage with their findings is not sufficiently recognised by those critical of the relevance of academic publications produced in so called 'ivory towers'. However, interviewee 1 remains sceptical of such claims, citing cases of students who become excited about radical ideas in class later becoming more risk averse once they take up a job within a mainstream organisation.

Several people made the case for networking and engagement to be placed more fully at the centre of the design and implementation of research. Rather than just doing research that is interesting, they argued for a shift in research mode to one of 'co-production' with research users:

> *My last example of engagement was to build on some analysis I'd done around climate resilience with the aim of putting together another project to then answer more of those questions in depth. I brought in policy makers at that stage so that it was about showcasing the initial analysis we'd done, and then getting their input into what questions they need answering, before going any further.*

The high level of urgency around climate crisis has led some researchers to want to move away from the idea of the distanced academic to taking a position and being more direct about the need to tell policy makers more clearly 'what needs to be done and why'.

Lessons learned and constraints that remain

The data indicates that there has been, and continues to be, a great deal of useful policy engagement by researchers at LSE on climate and environmental research. It is reassuring that eight of the people interviewed felt that their engagement had been either 'very' or 'slightly' effective.

Ingredients for success that were identified by interviewees included (i) the importance of building long term relationships with non-academic users based on mutual trust and respect, (ii) the value of informal networking as a way of identifying productive opportunities for collaboration and exchange, and (iii) the effective use of 'consultancy mode' as a productive way of applying earlier research knowledge in practical settings.

At the same time, most responses also indicated continuing problems around the theory and practice of research-policy engagement, with more work needing to be done.

One potentially important issue that emerged from the interviews is the continuing need for academic researchers to try to gain better understanding of how 'policy worlds' work, which remain poorly understood. One interviewee felt she had gained some useful insights from a previous

internship in the UK parliament:

> *It helps if you can understand what makes [policy makers] tick and where the differences are. This comes back to the placement idea. I think it adds a lot when you've spent time on the other side… It helps because you can easily put yourself into their position, and also you can understand their constraints.*

The world of policy continues to be seen as a 'black box' by many researchers. For example, interviewee 10 noted that it is always necessary to distinguish between different categories of 'policy maker', rather than use the term generically (for example, does the term include technical advisers who inform international negotiation teams?). Without understanding the point of view of a policy maker, and the constraints that they face, academics are unlikely to build mutually rewarding or useful relationships.

Another theme was the perception that the university environment itself can restrict rather than facilitate policy engagement. For example, some feel that career development incentives are not aligned with policy engagement. Interviewees 5 and 6 both discussed the heavy time demands required for engagement, requiring tough trade-offs if one is to invest in meetings, engagement and maintaining the necessary links. For junior academics in particular this runs up against career progression criteria. They may be told to publish only in certain highly rated but obscure journals and hit publication targets. All this may lead researchers to be risk averse when it comes to trying to engage with policy.

There are also difficult trade-offs in academia in terms of time – the need to invest in engagement meetings and roundtables - and then maintaining these links, particularly early on in a career:

> *Everyone of course is saying at LSE that we do impact driven work, but at the end of the day what counts are academic publications, and they are not measured by impact but by where you publish …*

Interviewee 5 felt this has become easier as she has become more established. She has acquired more skills around how to balance and prioritise policy engagement work with research and is now able to make the relationship between the two more effective.

Funding pressures may be another element of the incentive problem. Interviewee 3 was critical of the funder-driven research 'impact' discourse that can limit open-ended or critical research agendas. Interviewee 1 suggested that research that is seen to question 'mainstream' assumptions may be given less priority than research that supports ongoing efforts to secure incremental change.

Another important (though perhaps obvious) finding is that not all university research is produced under the same conditions or for the same purposes. Applied research that has been

commissioned by outside policy interests is different from basic or pure research that is undertaken independently. Each offers different opportunities or constraints in relation to policy engagement. The former is more likely to be taken seriously by the policy maker and contribute to incremental change, but less likely to lead to critical engagement. The latter may provide a more independent point of view, challenge received wisdom, and speak truth to power, but may more easily be dismissed.

There are also disincentives to engage that may arise from the attitudes of policy makers. For example, interviewee 8 noted that she was sometimes put off from engaging with policy by the feeling that for policy makers her findings did not really matter and they were simply 'ticking boxes', at stakeholder consultations, with little meaningful engagement usually following from it.

Finally, the personal characteristics of a researcher may influence the extent to which they are comfortable getting involved with policy engagement, and on preferences for informal networking:

> *I have more of an implicit liking for individual interaction, I'm a bit more introverted than being able to engage a whole audience as a strong advocate … now some people have those skills and can be incredibly influential and effective in those situations and that's great. Others work better as behind the scenes advisers, and that's probably where I'm more comfortable.*

In summary, our data indicates that the architecture of existing networks between university-based researchers and policy actors rests on both formal and informal relationships, with the latter felt to be more important than the former. If we map the direction of these relationships we find these tend to be skewed towards government and civil society rather than the business sector. When it comes to the factors that constrain engagement, interviewees identified university incentives, funder policies, individual researcher characteristics and values, policy maker attitudes, research focus and communications and dynamics between researchers and policy makers - which corresponds to findings from similar work in the field of public health (e.g. Jessani *et al.*, 2018). Ideas for improving engagement are discussed at the end of this report, but include improving researcher knowledge about policy worlds, creating more opportunities for co-producing research, and rethinking our models of how the relationship might work.

Analysis

As might be expected, a wide range of views emerged from academics about the ideal relationship between research and policy. The data reflects a set of important yet difficult issues that continue to be discussed with the field of public policy and social sciences more widely.

The first of these is a disagreement about how the relationship should be framed. For UNEP (2017) the essential problem is that:

> *In a global political context where scientific evidence is not often understood or used by policy-makers, there is a growing disconnect that has emerged, which not only dismisses, but excludes opportunities for collaboration.*

It has therefore become common to conceptualise the problem of interaction between science and policy mainly in linear terms, as a 'gap' that needs to be closed or bridged. For example, the UNEP report sees the problem of gaps that serve as barriers to creating an 'effective science-policy interface', such as in the evidence base itself, and in the effective transfer of evidence that is intended to be used to influence decision-making. If these gaps can be identified and strategies adopted to address them, the interface between science and policy can be strengthened.

Jessani *et al*. (2017) diagnose a problem that 'gaps in the passage between research results and their contributions to policy decisions are among the reasons why universities in sub-Saharan Africa are not fully realising their potential social impact'. They go on to state that 'narrowing the gaps requires deliberate and strategic engagement between academics and policymakers to enhance evidence-informed decision making (EIDM)'.

None of this is straightforward, however. McNie (2020) argues for example that productive interaction is made difficult by the fact that the worlds of research and policy have different cultures and epistemologies, with 'a sub-optimal understanding of how useful information is incorporated into the decision-making process'. Cairney (2016) suggests that policy makers do not only adopt 'rational' strategies in accessing and considering evidence, but also on habits and emotions. Understanding among researchers of how policy work is actually enacted is rarely as well understood as it could be.

The linear model has the merit of being simple and easy to use for developing practical action, but it also has a number of problems in that it does not easily fit with complex realities. Critics of this approach are wary of what can be termed an 'information deficit approach' in which 'more information is assumed to lead to better understanding' (Jacobs et al., 2017).

In particular, insights from science and technology studies (STS) lead us to question the taken for granted values and social preferences that are embedded in models of science and policy, and therefore the assumption that provision of more knowledge necessarily makes it easier to resolve value conflicts or reduce uncertainty. As Park et al. (2012) have argued, 'knowledge delivery alone is unlikely to be sufficient'.

One interviewee saw their role as much as about broadening the ideas of policy makers as giving them specific research findings or guidance:

> *I see it as my role to highlight the issues that I see as being side-lined in discussions about climate change. Similarly, but different, in international conversations about climate change, I see it as my role to highlight the need for understanding different perspectives on environmental change.*

Another person observed, in the same vein: ‘The risk at the moment is that the debate about climate change has been reduced, when we should be opening it up.’

Actor-network theory (ANT) challenges the idea of research and policy as two distinct bounded organisational worlds and instead invites us to recognise their instability and examine the informal networks and processes connecting their meanings and practices. Cvitanovic and Hobday (2018) find that ‘decision-makers primarily rely on experiential knowledge in isolation from evidence-based science’ (p.1). They too reject what they call the unhelpful notion of the ‘science policy gap’ because it ‘validates the misleading and outdated notion that scientists and decision-makers are distinct groups of individuals divided by a range of unsurmountable cultural and epistemological differences, rather than recognising their interdependency and shared values.’

This opens up a ‘co-productionist’ perspective that has implications for how researchers think about (and intervene) at the science-policy interface with respect to encouraging learning and change. In this perspective it is necessary to make one’s assumptions explicit and to be open to others in order to create the possibility of ‘mutually constructed’ identities and representations (Pallett and Chilvers 2014). Such a perspective offers a challenge to linear models by emphasising the need for stakeholder involvement in both knowledge creation *and* decision making as linked processes, and by promoting continuous reflection and learning. This is more likely to produce emergent knowledge that is grounded in experience *and* action (Park et al. 2012).

What Pielke (2012) calls the ‘stakeholder model’ is presented as an alternative to the linear approach. It recognises that there is a range of different interests – stakeholders – who operate at the science policy interface. The power of these stakeholders tends to disrupt any effort to influence policy whenever simple linear ‘means-ends’ thinking is applied. Once we recognise that ‘science has come to be viewed as simply a resource for enhancing the ability of groups in society to bargain, negotiate, and compromise in pursuit of their special interests’ (p.10), he argues, then it becomes necessary for researchers to think carefully about where they choose to position themselves.

An example of this was interviewee 2’s recounting of a critical view of ‘binary’ discussions about whether as a PhD student you might go into ‘either’ research ‘or’ policy on completion of your studies. This binary was felt to be unhelpful because it plays down the possibilities of moving between these two worlds, and implied a closed-off boundary between universities and policy.

One unexpected finding was the relative lack of attention given to the private sector by researchers trying to engage. For example, interviewee 2 noted the invisibility of the private sector in thinking about policy engagement in relation to climate research. Interviewee 4 also recognised this as a problem and identified work with the private sector as an important priority that many in the climate change field have ignored. The exception was interviewee 5, who felt that she has successfully worked with the private sector and continues to do so (though she noted that this was not always easy, with a key problem being a tension between short term priorities of the company and the longer term approach to the work required by the researcher).

The Knowledge Broker role

The Climate Knowledge Brokers initiative set out a valuable framework for thinking about different kinds of brokering between researchers and policy makers, based on a framing five problems and possible solutions: (i) insufficient awareness by policy makers of the issues (requiring *outreach*), (ii) a lack of available quality information (requiring better *feedback* to information producers), (iii) the problem of hidden information (requiring finding and *interfacing services*), (iv) untailored information that is difficult to use (requiring contextualizing and *synthesising*), and (v) the problem of too much information (requiring the need for *filtering*) (CKB 2015). While this framework is a helpful one, even though it relies on a somewhat mechanistic understanding of the broker role.

Interviewee 3 emphasised the role of the academic as a 'knowledge broker' who could communicate ideas and information between different interest groups who may have unequal power, such as grassroots communities/activists on the one hand and donors/policy makers on the other, thereby redressing inequalities in information access:

> *I have more legitimacy with certain of these people then they do and that means I have the opportunity to share perspectives that might not otherwise be heard. I think that has been successful. I can't quantify the number of policies I've caused to change but that feels like a substantive impact that I have felt in those conversations.*

One person, who had previously worked in a government agency in a policy role, said that they had continued to keep open a role in both the researcher and the policy maker camps, and that this was increasingly valuable:

> *Policy makers … need knowledge brokers like me because they just don't have the time to go to academic conferences, but there's much more of this transferring knowledge from science to policy making [happening] … adaptation is in many respects a very applied science field.*

Overall though, the idea of brokerage remains comparatively underdeveloped one as a way of thinking and acting among the researchers interviewed. Only three people saw any version of the 'broker' role as important in what they were doing.

Insights from climate research for 'research into policy' debates

These conversations with academics raise issues familiar to anyone who has investigated the 'research into policy' literature. For example, how should the relationship between researchers and policy makers be conceptualised, what kinds of new tactics and improved skills might help to build more productive interactions between them?

Interviewee 6 sees the consultancy route to policy engagement as a useful mechanism (as distinct from taking your academic research and trying to get policy makers interested in it). But she also recognised that there are constraints within the consultancy process that can be frustrating.

Interviewee 9 emphasises the need to challenge notions of academic 'impartiality' and take a more normative approach to engaging with policy makers when it comes to climate change.

It is widely recognised that researchers and decision makers have different priorities, and that to make a relationship 'work' a key challenge is not just to ensure that research meets practical needs, but also that it retains its intellectual interest to the researcher. One policy maker interviewed who particularly valued working with researchers was clear about the need for fellow 'research users' to be less instrumental in their views. He called for more engagement around research questions that are both intellectually and practically interesting, and more recognition that academics will not want findings to 'dumbed down' (such as having to respond to requests to turn detailed work into 'one pagers').

Conclusion

There are many different ways for university based researchers to engage with policy and we should remain open to pluralism as regards disciplines, methods and scale. Effective engagement with policy requires researchers to be interested in policy processes, ready to work at building partnerships based on trust and a recognition of each sides different priorities and needs, and an ability to recognise and be sensitive to issues of power both in policy processes and knowledge construction.

Most respondents had one or two ongoing relationships with policy makers. There was a mix of engagement contacts government and civil society, but very few with private sector. Some researchers feel that engagement with the private sector is an important missed priority for climate change researchers.

These researchers do not necessarily see themselves as 'knowledge brokers'. They either approached policy makers with their findings directly, or they were approached by a policy maker in the 'discovery' model. However, one specific 'knowledge broker' role that *was* identified as important in a few cases was the idea of the researcher acting as a broker who translates knowledge between grassroots communities and more powerful policy actors.

Engagement by university based researchers may be limited by incentive problems, lack of knowledge about policy, and tensions between research and policy modes of action.

Implications for theory

Within our small sample of university based researchers we find examples of each of Pielke's (2012) four 'ideal type' modes of researcher engagement. There is the 'science arbiter' who is happy to serve as a resource for a policy maker seeking information to make a decision but who does not try to guide them towards any particular decision. The 'issue advocate' goes further and tries to suggest a preferred option, by making a case for one course of action over another. Then

there is the ‘honest broker of policy alternatives’ who tries to provide as comprehensive a set of options as possible so that the policy maker can narrow down and make a decision. And there is the ‘pure scientist’ who is prepared to make basic research findings available to decision makers but does not take much interest in what is done with it.

Climate change, in the opinion of several interviewees, increasing requires researchers to move to ‘issue advocate mode’ rather than rely on the honest broker role.

This range of positions is consistent with ideas from STS, which emphases the ways that scientific research is subject to the same kinds of forces that shape wider politics. Consensus forms around particular interests, with the result that certain views and perspectives are either included or excluded. There can therefore be no simple ‘translation’ of findings into policy. As the Covid-19 crisis shows, the relationship then quickly becomes politicised. It is the nature of science to both provide new knowledge and highlight the gaps in that knowledge, and it rarely points in a single direction.[1]

Instead, the relationship between science and policy is better seen in terms of ‘co-production’ (Jasanoff 2004). From this perspective, the transmission of knowledge to policy is one in which the value of research is negotiated and contested among different interests, and is subject to strategic choices, trade-offs and alliance building.

Understanding how policy makers might or might not use research as evidence, or calculating the likelihood of them doing so, remains limited for many researchers, even among those willing to engage. But there is broad support for a shift from the idea of ‘evidence-based policy making’, in which policy makers are understood as needing clear and rigorously obtained evidence on which to base decisions, towards the more tentative, but arguably more realistic and achievable goal of ‘evidence-informed policy making’ (Mayne et al., 2018).

This makes the challenge of communicating and informing policy makers more realistic, but not necessarily any more straightforward. Mayne et al. (2018) state that ‘evidence matters, but its framing and the receptivity of policy-makers to its implications are as important as scientific assessments of its quality’ (p.3). Policy makers, for example, may be more interested in the *relevance* of research evidence than its *quality*, and tend to use ‘cognitive shortcuts’ to process and prioritise evidence in relation to the problems they are trying to solve (Cairney 2016).

The data here suggests that more could still be done by researchers who want to engage by learning in more detail about how policy works and what decision makers need. This confirms lessons from Oxfam’s experience that researchers should learn the political ‘rules’ of policy worlds and build long term relationships with policy makers. This will make it more likely that they will able to tell convincing stories about how policy problems can be addressed in ways that can be seen as both desirable and feasible. Researchers need to ‘design’ evidence to maximise its influence, bring additional influencing strategies such as ‘insider persuasion or outsider pressure’, and finally to be ready to take more of a ‘trial and error’ approach to this type of work (Mayne et al. 2018).

[1] https://www.theguardian.com/world/2020/apr/23/scientists-criticise-uk-government-over-following-the-science.

The knowledge broker idea may need further refinement. While the idea has power only a few interviewees here felt they were brokers and instead saw it as a role generally performed by others, such as comms staff, researchers in thinktanks, etc. The neat knowledge broker framework set out by the CKB (2015) initiative was found to be at odds with the messier realities of university life. Yet knowledge brokering remains a useful idea because it spans both linear and non-linear understandings of the policy process and the research-policy interface.

Finally the value of 'boundary spanning', defined as 'work to enable exchange between the production and use of knowledge' (Bednarek *et al.* 2018, p.1176), is supported by the data as a means for bridging the interface between science and policy. This can add value by increasing the efficiency by which research can be made available for consideration by decision makers, improve the durability of decision making, increase the legitimacy of science, and may help to better identify policy 'windows' through which researchers can make better choices about research that has the potential to inform policy making. These choices include the power of the simple story, or the identification of 'bright spots' of success to harness the power of optimism favoured by Cvitanovic and Hobday (2018).

Implications for practice

The Covid-19 crisis has brought issues at the research-policy interface into sharper relief. In the UK, daily press briefings show members of the government standing alongside representatives of the scientists whose advice they claim to be acting on. The relationship often looks uncomfortable, and the claim by the government to be 'following the science' is regularly challenged by scientists who point out that research is always ongoing, that it offers little certainty, and that all they can do is provide advice about what is known, what is not known, and what is still disputed.

So what is to be done? First we need to recognise diversity: there are different kinds of relationships that researchers may choose to pursue with policy makers, from active engagement to simply making their work 'discoverable.' Interaction seems to work best when these are based on clear communication, mutual trust and respect, where they have been built up over a long time, and where there is recognition of the differences in each side's operating mode and needs.

Second, universities - who are under increased public scrutiny these days - can do more to support researchers attempting to engage with policy worlds. One way forward is to think about the 'co-production' of research agendas, particularly through a deepening of conversations with local communities as well as policy makers, which is likely to result in more and better engagement. However, this needs to be done slowly, so that the alignment of both sides and can be tested and adjusted in order to avoid 'friction costs'. They also need to be reflexive, sensitive to power, and pluralist with regards disciplines, methods, and scale. Forms of capacity building such as encouraging secondments or embedding researchers in policy positions can strengthen policy and academic links. Many academics feel relatively uninformed about policy worlds.

Universities could also give more recognition to engagement with policy in their career progression criteria. Recent progress in giving more priority to teaching performance in addition to research excellence when considering promotions suggests that this is achievable. If we are to further highlight and develop meaningful knowledge brokerage roles, we will need to build better links

between universities and local communities, with the business sector, and with research institutes, think tanks, and NGOs, if ways forward are to be found.

References

Bednarek, A.T., Wyborn, C., Cvitanovic, C. et al. (2018) 'Boundary spanning at the science–policy interface: the practitioners' perspectives'. *Sustainability Science* 13, 1175–1183 doi:10.1007/s11625-018-0550-9.

Cairney, P. (2016) *The Politics of Evidence-Based Policy Making*. London: Palgrave McMillan.

CKB (2015) *The Climate Knowledge Brokers Manifesto.* Climate Knowledge Brokers, Renewable Energy and Energy Efficiency Partnership (REEEP), Vienna, Austria. www.climateknowledgebrokers.net.

Cvitanovic, C. and A.J. Hobday (2018) 'Building optimism at the environmental science-policy-practice interface through the study of bright spots'. *Nature Communications* 9: 3466 DOI: 10.1038/s41467-018-05977-w, www.nature.com/naturecommunications.

Jacobs, R., C. Howarth, and P. Coulton (2017) 'Artist-Scientist Collaborations: Maximising Impact of Climate Research and Increasing Public Engagement', *The International Journal of Climate Change: Impacts and Responses*, Volume 9.

Jasanoff, S. (2004). 'The idiom of co-production'. In Jasanoff, S. (Ed), *States of Knowledge: The Co-Production of Science and Social Order*, pp. 1-12. London, UK: Routledge.

Jessani N., Kennedy C. and Bennett S. (2017) '*Enhancing evidence-informed decision making: strategies for engagement between public health faculty and policymakers in Kenya', Evidence & Policy: A Journal of Research*, *Debate and Practice*, DOI: http://dx.doi.org/10.1332/174426416X14595114153349.

Jessani, N. S., Sameer M. Siddiqi, C. Babcock, M. Davey-Rothwell, S. Ho and D. R. Holtgrave (2018) 'Factors affecting engagement between academic faculty and decision-makers: learnings and priorities for a school of public health'. *Health Research Policy and Systems*, 16: 65 DOI: https://doi.org/10.1186/s12961-018-0342-9.

Jones, N., H. Jones, and C. Walsh (2008) 'Political Science? Strengthening science–policy dialogue in developing countries', London: Overseas Development Institute (ODI) *Working Paper 294*. https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/474.pdf.

Lewis, D. and D. Mosse (2006, eds.) *Development Brokers and Translators: The Ethnography of Aid and Agencies.* Bloomfield: Kumarian.

Mayne, R., Green, D., Guijt, I. *et al.* (2018) 'Using evidence to influence policy: Oxfam's experience'. *Palgrave Communications* 4, 122 doi:10.1057/s41599-018-0176-7.

McNie, E. C. (2020) 'Organizations in the making: Learning and intervening at the science-policy interface'. Unpublished draft paper, University of Colorado.

One Earth (2020) 'Voices: bridging the science-policy divide'*, One Earth* 2, 4: 295-384, https://www.cell.com/one-earth/fulltext/S2590-3322(20)30157-3.

Pallett, H. and J. Chilvers (2015) 'Organizations in the making: Learning and intervening at the science-policy interface'*, Progress in Human Geography*, 39,2: 146-166.

Park, S.E., N.A. Marshall, E. Jakku, A.M. Dowd, S.M. Howden, E. Mendham, A. Fleming (2012) 'Informing adaptation responses to climate change through theories of transformation', *Global Environmental Change* 22, 115-126.

Pielke, R. A. (2007/12) *The Honest Broker: Making Sense of Science in Policy and Politics*. Cambridge: Cambridge University Press.

Shore, C. & Wright, S. (2011). 'Introduction', in *Policy Worlds: Anthropology and the Analysis of Contemporary Power*, edited by C. Shore, S. Wright and D. Però, Oxford: Berghahn.

UNEP (2017) *Strengthening the Science-Policy Interface: A Gap Analysis.* United Nations Environment Programme. https://www.unenvironment.org/resources/report/strengthening-science-policy-interface-gap-analysis.

Annex – Survey questionnaire and semi-structured interview (SSI) prompts

Part 1

1. Interviewee name. 2. Organization name. 3. Sex. 4. Professional career stage.

5. Academic position. 6. Years in current position/with university 7. Discipline.

8. Are you active in any formal or informal research-policy networks around climate change, either directly (fully involved) or indirectly (only occasional participation)? (Please list each one).

9. Have you ever attempted to use your research findings to engage directly with policy makers beyond the university?

10. If Yes, with which of the following sectors? (government, civil society, private sector).

11. If Yes, with what stage(s) of the policy processes have you been engaged?

12. Are you currently actively engaging with policymakers (or have done so within the last twelve months)?

13. If yes, with which sector(s)? (government, civil society, private sector)

14. In general, how was this contact with policymakers initiated?

1 Invited by the policy maker
2 Instigated contact yourself

15. In your most recent case of interaction, what form(s) has your engagement with the policy process taken?

1 Traditional journalism (e.g. op eds)
2 Stakeholder consultations, policy roundtables
3 Advocacy and campaigning
4 Research-policy networking
5 Scientific events (e.g. conferences)
6 Social media activities (e.g. Twitter)
7 Publishing blogs
8 Writing policy briefs
9 Other

16. Could you provide a list of ‘policymakers’/decision makers at any level with whom you are sharing or discussing research evidence currently (or in the past 12 months)? (e.g. civil servants, MPs, business leaders, ministers, people of influence in civil society). Up to five for each.

17. In general terms, during the past year, how effective do you think your role has been as a university-based researcher in influencing policy around climate change?

1. Very effective 2. Slightly effective 3. Not effective 4. Don’t know

Part 2

1. How do you see your role as a university-based researcher (and/or teacher) in relation to climate change policy issues?

2. What specific research findings have you attempted to use to engage policymakers, and why? (Ideally during the past 12 months, but if not, then from earlier experiences)

3. To what extent have you been able to carry out this role? Please give some examples of engagement.

4. What achievements, or setbacks, have you experienced?

5. How useful have you found formal and/or informal networks in helping to facilitate this type of work? (please refer back to your answer in Part 1, Q8 below).

6. In your experience, how do you see the relative challenges of engaging with (i) government, (ii) civil society, and (iii) business?

7. What kinds of support does your university give to support researchers engaging with the world of policy?

8. How useful is the support/training in your view? (If you have had such training, please give an evaluation of strengths and weaknesses)

9. How could such support be improved?

10. What are the advantages/barriers to engaging with policy from the position of working in a university?

11. How far is the intellectual freedom of universities being maintained to ensure that policy engagement by researchers around climate change issues remains possible?

12. What are the general responsibilities of universities in trying to address climate change

challenges, and how do you think they might better meet those responsibilities?

13. Can you give any examples of ‘best practices’ in this area (either in your university, or observed in other universities, or both?).

14. Is there anything else you would like to add? Is there any aspect of this subject that we have not covered properly, in your opinion?