

Interview with Benjamin Sovacool

What was your motivation when you started thinking about a new journal on social science research on energy?

I wish I could give you an elegant grand answer that the motivation was to create a better world or to convince policy makers. But actually, it was a very strategic move of people in the energy studies field – people who study energy supply, energy use, energy demand. We had a whole family of journals that we could publish in, but even the so-called social science journals which had names like Energy Policy weren't very social science-oriented. We did a content analysis which showed that more than half of the articles are actually in pretty quantitative mathematics and economics, not in the core families of public policy, anthropology, and sociology, so they looked like they were social science journals, but we sent our articles to them and just got really, really bad reviews back. I don't mean reviews that disagree with you, I mean reviews that invalidated social sciences. I still remember multiple occasions where we would have a study that used rich qualitative data, let's say 30 or 50 research interviews, and it would be a one-sentence rejection that would say "Interviews, speaking with people, is not an appropriate method." So it was complete under-appreciation for what social science could offer. A related thing, too, was that particular journals had very strong biases for or against renewable energies or fossil fuels, so you could even do a study that was really well-designed, and the reviewers liked it, but then the editor jumps in at the last step and rejects it, invalidating the peer review. There were hundreds of us, and we talked about this at conferences, and we really wanted a new independent space that did not marginalize social science,

that put it front and center, in the name of the journal and in the aims and scope. But it was not the only motivation: we also wanted to promote *good* social science. By that I mean social science that is interdisciplinary, rigorous, with mixed methods, and comparative. Still more than 90 percent of the research in the broad energy social sciences is none of those things. It is not comparative, it looks at only one case, it is not mixed methods but uses only one method, and it usually has some pretty problematic research design that you cannot even falsify. So it was not just a push to validate social science, but also a push to make social science more rigorous, more relevant, more explanatory, and just higher impact. We chose Elsevier and went through a long process of getting the concept approved and the journal started. This took us three years – we had a very important sponsor inside Elsevier, but we also met a lot of resistance from editors of other journals. Looking back, we are really delighted how great it has done, but at the time it could have flopped. Elsevier said half of the journals they create go under in the first five years.

Was it difficult to get Social Science accepted as part of the title?

We managed to find one journal we thought was a great model for what we wanted to do. It is called *Social Science and Medicine*. This is a great interdisciplinary health studies journal that brings the social science research on health to the technical and medical community. It is a very high impact journal, it is among the top 20 of Google Scholar rankings of all journals. Initially we really wanted to call our journal Social Science and Energy, very simple, but they flipped it into Energy Research and Social Science just to differentiate it a little bit. So that was kind of our model for how we wanted to do it, and since they had the word social science in their title, it made it much easier to get social science in our title. The publisher, the board members, the editors, the authors – they all took a risk to accept a new journal, with no impact factor, no credibility, and we were really lucky that first year to get a lot of high-quality contributions from people who just had faith that it was time for such a journal.

Given that the journal is interested in interdisciplinary work, what can you say about contributions from the field of economic sociology – does that play a role, are there specific topics or fields where it could play out?

It is difficult to say how much of this is economic sociology. I know economics is tricky because it spans so many different fields: mathematical sciences, physical

sciences, behavioral sciences as well as the social sciences. So when we did our content analysis, we just treated economics as a separate discipline. It was about 20 percent of authors writing in journals like *Energy Policy* or *The Energy Journal*, or *Electricity Journal*, had an economics background. But within that there is a whole range – orthodox economics, heterodox economics, applied, environmental, ecological – so even then you get into those different approaches and it is somewhat fragmented. Sociology is a little more identifiable, but of course they also already have their disciplinary journals. Not within energy, but obviously *American Journal of Sociology*, and *Organization and Environment*, *Environmental Sociology* were already kind of in the periphery.

In ERSS, we do not organize articles by discipline but by theme, and we have eight to ten core prominent themes. So let us approach your question by looking at these themes. Four themes account for at least two-thirds of submissions, and they are themes that completely and commonly recur. The first two are what I would call our bread and butter, where articles are submitted very frequently. They are either on energy behavior and use – patterns and modes of consumption, energy reduction, demand response, practices – all of that fits into this space of energy and behavior and how people put energy to use. The other one that is really core is the social acceptance, for a lack of a better term, of new energy systems and people's attitudes, preferences, and knowledge on things like shale gas, nuclear power, renewables, retrofits, and so forth. Then there are two that are less conventional but now very popular. One is energy justice and equity – all the stuff about just transitions, about winners and losers, about vulnerability and vulnerable groups, externalities, and energy poverty, fuel poverty fits into that space. The other one is transitions, sociotechnical, energy transitions, low-carbon transitions, transformations, disruptive innovation. If you are interested in the fastest-growing themes, in the two past years we have seen contributions on energy institutions and governance, especially new forms of governance like polycentrism, and what we have called energy and demographics – which is all the things like gender, race, class, age, income. Here we have seen a real flourishing, especially gender, that I am very pleased with because I think that those themes were very under-covered before. And even now that gender gets good coverage, there

are not so many articles dealing with race, ethnicity, or indigenous communities. I am quite happy to see those areas starting to get some of the attention they deserve.

Benjamin K. Sovacool is Professor of Energy Policy at the Science Policy Research Unit (SPRU) at the University of Sussex Business School in the United Kingdom, where he serves as Director of the Sussex Energy Group. Since 2003 he has worked as a researcher on energy and climate issues. His research focuses on renewable energy and energy efficiency, the politics of large-scale energy infrastructure, designing public policy to improve energy security and access to electricity, and building adaptive capacity to the consequences of climate change. He has also engaged in these fields as a consultant and policy advisor, and his views are frequently published in journalistic outlets – he interacts with academic, public, policy, and expert audiences alike. In 2012, he and a group of energy scholars started to think about launching a new journal on social science research in the energy field. This came to life as *Energy Research & Social Science* (ERSS), published by Elsevier, in 2014, with Benjamin Sovacool as Editor-in-Chief (Sovacool 2014, 2018). As a peer reviewed journal, ERSS investigates the social system surrounding energy technology and hardware. Since its inception, its impact factor has risen to nearly 4.8. I was interested in Benjamin's experiences in bringing social science research on energy questions to the fore – and I realized that there are themes in which economic sociology is strong that have so far not figured prominently in the journal. b.sovacool@sussex.ac.uk

If I try to draw obvious links from economic sociology to energy research, I would think of something like the role of economic actors in transition processes, or the capitalist foundations of energy production and consumption, or the role of finance in transforming energy systems, or energy markets – does that come up at all in the submissions you receive?

Certainly there is a little bit of the first, economic agents and actors and how they work, especially if you get into things like aggregators and how they work for electric mobility markets, or intermediaries – people who sit between the consumer and the producer, like a car sales person or a community energy planner. We do have an emerging theme on finance. But then it is more a question of the geography of finance than the sociology of finance. And then the final thing that we do have with people using geography approaches is regimes of accumulation, and neo-Marxist approaches, talking about dispossession, commodification of people, problems of capital and concentration of wealth. Honestly, one of the strengths of the journal is that we have been able to capture work in geography where there was not really a space for it. The economics energy community already has three very good core journals that are getting most of the economics papers: *Energy Economics*, *Ecological Economics*, and *The Energy Journal*. They even have their own association, the International Association for Energy Economics. We do not see the kind of usual economics work on energy here, because it goes to these journals.

On the relationship between economics and sociology and the study of energy, it's a challenge which way the contributions go. When you do research on energy that connects to a discipline, you can either bring the energy insights to the disciplinary journals, or bring the disciplinary insights to the interdisciplinary energy journals. Much of the work at the journal does both.

And each time it is a completely different style of writing and presenting.

Yes! Although I find myself getting a little more homogenous in my style. This is also important: to have your own voice. In fact, I even had some blind reviewers who wrote "This sounds like Benjamin." They clearly know how I write and how I think. But you are right – the framing for, let's say, a geography journal is fundamentally different from the framing for an economics journal. Or, especially if you are going up to a *Nature* journal, like *Nature Energy* or *Nature Climate Change*, this is also a completely different style, and much shorter articles.

How has the attention for social science research in the energy field evolved?

It started with a dormant or latent group of social scientists working on energy for thirty years, and my sense is that many of them are still around. They began working on these issues in the 1970s, with the energy crises, which catalyzed all of the people that were on my dissertation committee, all of my mentors. They just kept doing it. By now the journal has created a huge network and a conference. The network is called the *Energy and Social Science Network*, and we have grown from 200 members to 2000 members in three years. And then we have this Energy for Society conference every two years, and both of those times we dramatically underestimated the interest. The first time we did it we thought we would get 200 submissions for papers and posters – we got 1000. The second time we did it we thought we'd get 1000 – we got 2000. Clearly there is a huge appetite within the community, and I think this is precisely because you can be a geographer or sociologist or political scientist or psychologist or anthropologist and can still not only have a home but find a community that is really interesting and engaging.

But there is also a huge growth in the *demand* for social science research; it also has become more codified in a lot of the funding processes. Many of the top funding agencies have switched from disciplinary funding to more challenges-based funding, where the

challenge is, for example, low-carbon retrofit. Then you organize research teams by the challenge, and when you do that, social science usually is at least a third of the team. In some cases they can be half or more of the team. And all of the major research platforms – Horizon 2020, ERC, and here in the UK the Research Council – use this challenge-based approach. While ten years ago it was sometimes really difficult to find calls for our proposals, we now get a request every week, within my group, to join someone's research proposal because they need social science research. I think there has been an exponential increase in demand for social science, recognized and driven predominantly because the funding organizations have restructured how they disperse their money.

Would you say that these requests to join proposals is mostly instrumental, in the sense that they look for the odd social scientist who does something about social acceptance?

I think it depends. We have had both. Within my own experience, out of the last ten projects that I have won, two have been what you say. We call it tokenism. It is a huge team of natural scientists but someone told them they need a social scientist, so they come to us and we do some sub-task, some random work package, and we generate a paper or two and they keep doing what they want to do. It is more like legitimation rather than meaningful involvement. That said, we still say yes, because usually we can still craft that work package ourselves, and usually we find something we were thinking of doing anyway, or we supplement a project. But the good news is that in the other eight projects, social science is core, front, and center. Eighty percent of our budget is social science. There are good examples where the social sciences really set the agenda for the next five years, and somehow the usual tokenism is inverted, that is, social science is the main focus, with other approaches being peripheral.

Where do you currently see the biggest challenges for social science contributions on energy questions to expert and public debates?

I see two very difficult challenges, and they are unfortunately contradictory. The first challenge is that too much social science research is not well-designed. This could be due to a lack of resources, or lack of training, or lack of appreciation of better methods. We get so many submissions to the journal with a sample size of ten interviews, or it is a research question that is really very vague and does not have a good answer. I think the need for greater rigor is immediately problematic.

Much of the research that we see is incomplete, does not adequately test rival hypotheses, our research does not reveal limitations – they sometimes do not even have a research method section, so you don't even know how they collected data, how they had a research design, how they executed it. That is the first challenge, because if you do not have rigorous research, then of course social science won't look as good and strong and robust as other research designs, or research that may have counter findings. And when you are debating things in fields like renewable energy or the risks of nuclear power, you want to make sure that your study has the highest degree of validity that it can.

However, the second challenge is the need to make social science far more translatable to the public and the experts. And the more you address the first challenge, with having some intricate technical research design, big data, triangulation, you lose the simplicity and the elegance of being able to translate it. Here I was really struck. My department has a very good relationship with the Parliamentary Office of Science and Technology – this is the kind of group that advises Parliament on issues of technology – and we had three of their senior staff visiting us three years ago, all of them had a PhD. We had a roundtable discussion and I flat out asked them when was the last time they had read an academic article. One laughed and said during their PhD, one said “I can't remember,” and one said “Not since I started the job.” So I said, wait, your job is to examine trends in science and technology and you are not reading any of the academic literature? They said, no, but we'll tell you what we do read: we read the press releases. Because if the study is important enough, they will translate it for us into a 600 or 700-word press release, and that's great because we can still cite it as being peer-reviewed, we get all the credibility of quoting academics without having to read the academic output.

Since then we have followed a strategy that every time we have a study that we want Parliament to engage with, we do a press release. And we have dramatically increased our mentions in Parliament because of this strategy. What this clearly indicates is not that these people have trouble reading social science, they don't even bother. It doesn't even occur to them to look up my journal or even *Nature Energy*. The ability to translate academic output into policy briefs, press releases, blogs, whatever it might be, really helps. As you know, writing a press release with a quote is a very different style than writing an academic article.

So I think the solution to those two challenges, making it more rigorous and making it more impactful, and to the tension between them is to write multiple outputs. You make your rigorous study for *Nature Energy*, and then you have the kind of simplified press-

ready version for the public, and then you have a policy brief that distills the insights for policy makers. Every time you get an output, you actually do three things with it, not just one.

And how do you make your department acknowledge all this extra work, make room for it, or even incentivize you for doing triple work?

Well, right. In the beginning we did everything ourselves. And I had some really bad press releases. The University of Sussex Business School, which is where we are, has five departments and 300 faculty and staff and 5000 students. The University of Sussex has, given all of that, one press officer. He is really good and he is really responsive. He can be available because not that many people would ask for his service. So almost every day there is some press release, or he is calling the *Guardian*, or he was very good at getting me in *The New York Times* – not published, but they referenced our research last year – and he is very good at blogs. So we do have that. But then we started putting a greater focus on impact and engagement into our grant proposals. Now we actually have three full-time staff who do communication, outreach, and engagement. And it is not just this. The other key thing we do is we write testimonies and we respond to consultations from the government. We are frequently submitting written testimony to the House of Commons, House of Lords. I was actually in front of the Prime Minister's Council for Science and Technology here in the UK last month, talking about hydrogen, and we did a presentation for them but also produced a two-page brief, written exclusively for them. We would never be able to do that if we did not have this kind of communication and engagement team. We are doing a decent job, but we are not the best. I will give you an example of the University of Nottingham. They have an amazing anti-slavery institute called the Rights Lab. They are even more impactful than we are. They have had bills named after them, they were having dinner with Theresa May – they have twelve full-time communication and engagement officers, twelve! So that gives you a sense of what you need to get up to that level. You have to have staff capacity to do media and policy work at an equal rate to the academic work.

Do you have any recommendation for scholars working in economic sociology who want to engage in the field of energy research and want to get published there?

Yes. We often get asked by new early career researchers wanting to publish, or by those who publish articles that have no impact: What can I do to get better with

research? As we mention in an extremely long review paper, good research is actually three things. It is an equal mix of rigor, novelty, and style. Economics research, and to a degree some of the sociology research, in particular tends to excel in only one of those three areas. Really deep, quantitative economics work may emphasize rigor, with very sophisticated statistical techniques or modeling, but sometimes it has the least interesting research questions. Something like, what is the optimal rate for a feed-in tariff? Well, by the time you have finished the study, rates will have changed anyway; it doesn't matter how rigorously you answer that question, it is going to be politically challenged. Sociology can have very conceptually interesting pieces that have very little practical relevance. My plea is, remember that a great article needs more than any one of these things. You always have to find a contribution that is either conceptually novel, or empirically or methodologically novel, but you also have to write well. That is the trickiest area for most of us in the re-

search community because we are taught to write very technically. Or we even think that styles of good writing do not apply to academia, like writing in the passive voice, or writing in the third person. I tell all of my fellows to do as much as they can at getting trained in how to write, creative writing, style of writing, visual elements, designing diagrams, photography – or, if they are more technically oriented, to learn how to tweak their programming skills with things like Python or MATLAB. Anything you can do to enhance the quality of your research. Because I think it's a huge shame if we put all this effort into generating huge research which is badly written – which means it is never picked up by policy makers or readers or students. The whole community is struggling to attract readers and put its research to use, so I guess it comes back to the translation point – being able to translate our work, but also being able to pay as much attention to writing well as to being rigorous.

References

Sovacool, B. K. 2014. "What are we doing here? Analyzing fifteen years of energy scholarship and proposing a social science research agenda." *Energy Research and Social Science* 1: 1–29.

Sovacool, B. K., J. Axsen, and S. Sorrell. 2018. "Promoting novelty, rigor, and style in energy social science: towards codes of practice

for appropriate methods and research design." *Energy Research and Social Science* 45: 12–42.