Last month I was invited to testify before a hearing of the US Senate’s Committee on Environment and Public Works on the science of climate change. It is a privilege to be called upon to share one’s expertise with policy makers. Yet most experts, and certainly most academic experts, receive little training in how to engage effectively with policy makers in a formal setting such as an evidentiary public hearing. I am fortunate to have had excellent mentors over the past several decades, who shared with me some key advice for engaging effectively in the policy process. I would like to pass along a bit of their advice, which I have come to appreciate.

Experts who are called to offer evidence in a formal political setting such as a Congressional hearing play a different role from political appointees, who are expected to present, defend, or account for the formal actions of an administration or a government. Generally, there are two types of experts: experts who are also policy advocates, and independent experts.

Experts in the first category typically present testimony in support of a particular political agenda. These experts are usually associated with corporations, think tanks, or other nongovernmental organizations. Congressional staff have told me that elected officials prefer to hear from such experts because the expert’s political agenda is explicit. Policy makers are then in a position to hear adversarial arguments and to evaluate claims and counterclaims without needing to guess what hidden agendas might be at play.
Under the US system of receiving testimony before Congress, each political party is allowed to select the experts that they wish to hear testify at a hearing; the party holding the majority determines how many people will be asked to appear and how many will be allocated to the minority party. The risk of such an approach is reminiscent of the old saw about the drunk and the lamppost – expertise can be used more for support than for illumination. For example, at the Senate hearing last month, the only engagement between majority senators and several of the minority's witnesses dealt with who funded the organizations where the experts worked. There was no acknowledgment whatsoever of the substance of their testimony, which was quickly dismissed as tainted by association.

Experts in the second category are independent experts, with "independent" meaning unaffiliated with any organization advocating for a particular course of action. Often, independent experts are chosen because of their role in leading a formalized assessment of knowledge, such as reports of the National Research Council or government science advisory committees. The expert is generally expected to represent the assessment rather than their personal views. Because the assessments are often conducted at the explicit request of policy makers, they constitute an important mechanism for connecting expertise with decision making.

Independent experts not affiliated with formal assessments are also commonly invited to provide testimony. A specific expert is asked to testify because policy makers see some political advantage in having that expert testify. Academics unaffiliated with government, advocacy groups, or formal scientific assessments should quickly disabuse themselves of any notion that they have been invited to "speak truth to power." Rather, they are carefully selected for the perceived political benefits of their testimony.

In my case, I was invited by Republicans on the Senate committee because several Democrats, including President Obama, have recently been making statements about the relationship between human-caused climate change and extreme weather that go well beyond what can be supported based on current scientific understandings. The previous time
that I testified before this same committee, I was invited by Democrats. An expert cannot control when their knowledge will be perceived as relevant, or by whom; but when an invitation is received, we have an obligation to participate in the democratic process.

Expertise is commonly brought into the political process through some overt political conflict, as politicians seek to hold each other accountable for public representations that invoke claims grounded in science. This strategy was on display in the Senate hearing, when a Democratic senator queried me on the reality of climate change – an issue on which we agreed – but steered clear of the substance of my testimony, which focused on extreme events.

Experts offering evidence in such an unavoidably political process need to remember that their job is not to tell policy makers what they want to hear, but to provide their best judgment about what the evidence can support on subjects in which they have some expertise. While this is an easy recommendation to make, there is no shortage of experts willing to engage in stealth advocacy by presenting a view of evidence that is friendly to a partisan agenda by engaging in cherry picking of research or even offering misleading or unsupported testimony. Those tactics were fully on display at the Senate hearing in which I participated, and are unavoidably fundamental to the process.

Each of us "independent" experts afforded the privilege of participating in the democratic process by delivering evidence has to decide what role we wish to play. I have long argued that stealth advocacy by experts -- while seductive and offering a quick route to political impact -- ultimately risks the legitimacy and authority of expertise, especially the ability of the expert community to offer effective science arbitration or honest brokering. The flip side, of course, is that in the context of the most politicized issues, representations of evidence that do not fit a partisan agenda may simply not be welcome in the process, especially if it is equivocal, nuanced, or uncertain.

The expert can reduce the odds of merely serving as a political prop in a larger debate by asking policy makers what specific questions they would like to see addressed in the testimony. In my testimony before the
Senate last month, I was asked to testify about extreme weather, a subject I have been researching for more than 20 years. In the vocabulary of *The Honest Broker* (Cambridge, 2007), I assumed the role of the "science arbiter." I was not asked to share my strongly held views on a carbon tax, light bulb standards, global energy access, or the reform of FIFA. Staying focused requires discipline, restraint, and a healthy respect for the process.

When delivering testimony, it is important that an expert have a clear, overarching conclusion that can be backed up by a manageable number of supporting points. Academics are trained to build arguments from the ground up, piece by piece, ultimately arriving at conclusions; but delivering evidence to policy makers turns academic convention on its head: Lead with your conclusions.

In testimony before the US Congress, witnesses are typically allocated five minutes to deliver oral remarks. This is not much time, but it does encourage one to get to the point. Anyone giving testimony, no matter how experienced, should practice their delivery. Speaking freely is preferable to reading a text, and keeping focused is essential. To become skilled at presenting a coherent, compelling, five-minute message takes a lot of practice. Classroom exercises, including mock hearings, should be far more common in our graduate and professional education.

When giving Congressional testimony, witnesses submit written testimony in addition to the five minutes of oral remarks. This written testimony should be taken seriously, as it offers an opportunity to provide background and details to support the claims made in the oral remarks.

Experts called to testify should recognize that they are speaking to two important audiences. One audience, of course, is the elected officials and their support staff. However, your message is also presented to a far more diverse audience: the media, your peers, other policy makers, and even the public. In an era of Twitter and YouTube, the authority of a formal evidence-gathering process gives the expert a rare platform for communicating to a very broad audience.
Experts who participate in formal processes of evidence gathering would benefit from explicitly considering the roles they might play in the process. Also necessary is a realistic perspective on the inherently partisan nature of political conflict and the tensions between informing the process and supporting a particular agenda. As in other forms of engagement, the challenge lies not in seeking to somehow keep expertise and politics separate, but rather, in achieving an effective integration of the two.

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