Deliberative Public Consultation via Deliberative Polling: Criteria and Methods

By James S. Fishkin

What purposes might be served by broad public deliberation on topics such as gene editing in the wild, or other scientific issues that implicate values important to the public? Broad public deliberation means some method of inclusion for members of the public to do the deliberating. Hence the issue we are posing is not about the value of convening experts or stakeholders (except as a step toward convening the public). Experts and stakeholders might bring diversity and different kinds of expertise but they are not the public. The notes from our initial Hastings Center meeting on this topic mentioned a list of potential aims for "broad public deliberation":

- Expanding moral imaginaries and generating novel ideas
- Enhancing transparency in how decisions are made
- Accountability of institutions
- Civic education
- Making power and politics visible
- Aligning science with publics values
- Building capacity for social movements that catalyze change in the science and technology enterprise
- Advising government agencies or non-governmental institutions
- Epistemic purposes: learning from deliberators

These are all worthy aims. But I want to describe an aim that does not precisely fit any of these categories but overlaps with several. Further specifying the aim of public consultation embodying "broad public deliberation" will help clarify the best methods for accomplishing it. The closest item on the group list to my own focus is "advising government agencies or non-governmental institutions." The question is: why should such institutions, governmental or not, listen to "advice" from the public? If it is a question of expertise, surely professional experts can be found whose "advice" might be more valuable because of their technical training or proficiency. What qualifies a convening of members of the public to give such advice without any claim to special expertise? What models for such convenings are most appropriate?

The Central Question

My premise is that the aim of broad public deliberation on issues of science that implicate important values of the public should be to answer the hypothetical question: **what would the public think should be done if they could consider the issue under good conditions** (or the best practical version of good conditions that can be realized)? By good conditions I mean access to accurate, evidence-based considerations weighing for and against the proposed policy alternatives or proposed actions. The good conditions should also include an opportunity for extended discussion to probe the issues in depth as well as an effective opportunity for the deliberators to get their questions answered as the discussions proceed. The aim is not to educate the public to the point that they have become experts. It would be

unrealistic to try to approximate a life-time's professional training with some kind of crash course. In any case, the advice for which the public is uniquely capable is not the same as expert advice. Nor, in my view, should it attempt to be.

If we keep my hypothetical question in mind then the process should aim, first, to bring a representative microcosm of the public to an understanding of the main competing arguments and their implications for the realization of values to which the public (or significant portions of it) might be attached. Second, the aim should be to actually engage this good sample of the public in weighing those competing arguments on the merits. The root of the word "deliberation" is "weighing", and the weighing of competing arguments on their merits is the core of the deliberative process.

What is the weighing of arguments about? Ideally it is about competing answers to the question: "what is to be done?" The focus of public deliberation relevant to policy choices should not be primarily about abstract philosophical or metaphysical questions disconnected from possible actions. It is about the direction for public policy on a contested issue, an issue which implicates competing arguments, values or goals important to the public. Does the public, on reflection, prefer to see goal X or Y accomplished through a given policy? Does it think that goal, or policy proposal, merits the effort and cost, or should an alternative approach be adopted instead? The aim is to arrive at the considered judgments of a group that credibly represents the public's view about what should be done. The product is the answer to a question of political will and not merely questions of fact (although contested facts may, of course, be part of the deliberative process).

This aim is thus different from that of a jury. Modern juries try questions of fact, not law --and not policy goals or value laden aims to express the public's collective political will. Juries are not remotely representative of the public because of the process by which they are chosen (miniscule response rates, peremptory challenges, small numbers in the juries). But ideally they can offer some diverse perspectives on a factual claim. Ever since the landmark study by Kalven and Zeisel, The American Jury[1], there has been a social science understanding that they do fairly well on this core function. But they are not, as usually constituted, a useful instrument for deliberative democracy.

In my view, broad public deliberation for questions of collective public will should not be entrusted to anything that looks recognizably like a jury. Juries, even when enlarged to 25 or so as in a so-called "citizens jury" are too small for their representativeness to be evaluated in a statistically meaningful way, and too small for their opinion changes (even if data before and after data were collected) to be evaluated statistically (so that we could know if the changes were statistically significant). Why should we want to know if the changes are statistically significant? We want to know if they are just noise or could be likely be the product of chance variation. We need to rely on the changes if they are to inform public policy. And we need to know the representativeness at the start. If the group starts out skewed why should we listen to it at the end?

Consider taking a contested question of public will formation to either a jury like model or a larger sample deliberating on the Deliberative Poll model. Suppose the issue is something like whether or not human actions should be permitted that may lead to the mass destruction of some species in the wild. Experts can offer evidence about the likely effects and even some information about the damages and/or benefits of such an action. If a jury were convened it might offer a verdict as to the facts of what might happen or might not happen. Even then, there is an issue of whether or not an expert panel's recommendation about the likely effects should have more weight than a jury or jury-like deliberation—

at least on the quasi-factual question of what the likely risks and benefits are. But suppose the real question is not whether the effect on the species would occur, but rather, whether it should happen in light of all the relevant arguments on either side. Perhaps there are economic or other human interests at stake. Any very small and certainly unrepresentative collection of a few citizens in a jury like model raises the question: why listen to them about the question of public will? They might speak in the name of a judgment of unbiased citizens in order to decide a question of fact in light of competing evidence. But for a question of public will, I would argue, we need a microcosm of the public. Such a microcosm, if it is truly representative in attitudes and demographics, can speak for the public as a representation of what the public would think, under good conditions for thinking about the issue.

By contrast, if a jury is unrepresentative to begin with, in either its initial attitudes or its demographics, that starting point could distort the eventual decision. If it happened to start by leaning one way or another and that was initially very different from the mass population, then that could privilege certain arguments, disadvantage other arguments and perspectives. In addition, small groups modeled on the jury strive for consensus as in a jury verdict. It is often difficult to resist the pressure to go along with the crowd. By contrast, with the Deliberative Polling (DP) model, or some other deliberating microcosms, the final considered judgments are collected in confidential questionnaires. The social comparison effect producing conformity is limited by the use of what are, in effect, secret ballots.

Another line of argument would hold that public deliberation cannot do as good a job as technocratic decisions based on cost-benefit analysis. Instead of trying to aggregate the decision by a lot of ill-informed members of the mass public we should try and assess what is gained and what is lost by each possible option. The decision should turn on a technocratic application of expert assessment. But this is ultimately to substitute one contested philosophical answer, utilitarianism (which cost benefit analysis is ultimately designed to approximate) for an active decision by the public. The utilities experienced by sentient human beings may not cover all the value questions posed by the effects on other species and forms of life in the wild. And in any case, maximizing total or average utility is far from the only value that can be used in assessing policy options. As the now-canonical work of John Rawls demonstrated, distributive justice maximizing the minimum share of what is to be valued (in his case, “primary goods”) rather than maximizing the total or average level of utility is worthy of consideration. There is no easy technocratic solution to contested value questions.

One might take the position that the public really has no business offering input on complex questions of policy, even value laden questions that pose trade-offs on issues they might care about. Perhaps those questions should just be left to the expert community. But note the way we have framed this—value laden questions of policy choice that pose trade-offs on issues the public might care about. It is those trade-offs that require a decision that impacts the public’s values or value laden goals. If the experts do not consult the public then they must find the values somewhere. Where? Why should the public have to live with whatever personal values the experts happen to bring? Alternatively, conventional polling can indicate some general values the public subscribes to. However, the distinctive issue of policy choices posing trade-offs is that the weight of the values and value laden goals have to be tested in context. General values, outside of a context for their application rapidly take on the character of slogans or clichés. Liberty? Equality? Social Justice? Human rights? Animal rights? Respect for the environment? When these are implicated in particular choices, one can begin to weigh implications. Perhaps some survey experiments could do so, but our experience is that the weighing process is greatly

improved by discussion. And the discussions are far more relevant to a challenging policy choice when the trade-offs are explored in depth.

Perhaps the best answer about what a community should do lies in deliberative democracy, taking account of all the apparently conflicting considerations and allowing the public to weigh them against each other to provide a recommendation. But there are obvious impediments to consulting the public. Under normal conditions the mass public does not engage policy questions in any depth or detail. A great deal of social science tells us that the public will tend to be "rationally ignorant" on most complex policy issues because individual citizens, individual voters, have little rational incentive to pay a lot of attention to the details of competing policy proposals. Of course, a few of us may do this out of sheer (and perhaps idiosyncratic) interest. But most ordinary citizens in large scale mass democracies are too busy with other matters. Their individual votes or opinions cannot be expected to make any appreciable difference and they have so many other areas of life where their efforts can make more of a difference.[2]

Some commentators on American public opinion and democracy (and implicitly the democratic systems around the world) have concluded that the public is not only low in information levels but greatly limited in its competence to deal with any shared issues of governance.[3]

But deliberative democracy research, which started out as an exercise of the political imagination has turned empirical, transforming thought experiments into real experiments by actually assessing what the people would think under good conditions. And there is a host of evidence that the public is actually pretty smart. Good random samples are actually capable of deliberating complex issues and coming to considered judgments, often in stark contrast to their initial opinions (see "America in One Room" for a controlled experiment).

<u>An Example Generalized</u>

Each year, Professor Saul Perlmutter (a Nobel Prize winning Physicist at Berkeley) uses his large science and society class to prototype a Deliberative Poll on a science related topic. Over the last two years his team chose "Gene Drives in the Wild" for their topic.[4] Except for the fact that their participants were a class of Berkeley students rather than a random sample of the public, the exercise was exemplary. It illustrates detailed briefing materials with arguments for and against a series of policy options, the use of questionnaires before and after the deliberations to assess the changes in opinion, accessible and evidence based arguments that might lead to support or opposition to the policy proposals, balanced panels of distinguished scientific experts who could respond to questions about the options and the arguments on either side.

The Perlmutter deliberations were based on briefing materials that offered a lucid explanation of gene drives, their potential benefits as a cost effective deployment against diseases spread by mosquitos or threats to crops from certain pests. The technology has advantages when compared to vaccines or handing out mosquito nets. The negative arguments were mostly about the risks of deployment and the potential unanticipated consequences. Eliminating mosquitoes through gene drives may fight disease but also remove a food source for other species. Release of the gene drives would challenge international oversight since genetically modified mosquitos may cross national boundaries. Mosquitoes kill more than 700,000 people every year by some estimates (especially from Malaria) and so the potential benefits are enormous, even though the risks are difficult to assess.

If a broad public deliberation were conducted on the model of the Perlmutter deliberations, it would simply have to expand in some key respects. I list them along with those the example already satisfies:

a) Demographic representativeness of the relevant population
b) Attitudinal representativeness of the relevant population
c) Sample size large enough to adequately evaluate a) and b).
d) Sample size large enough to evaluate opinion changes in the sample (likely satisfied by c).
e) Collection of the opinions in confidential questionnaires before and after deliberation in order to limit social comparison effects or the social pressures of a jury verdict.
f) Balanced briefing materials as a basis for deliberation. The materials should be balanced in that they provide the strongest evidence based arguments that can be found in favor and against specified proposals.
g) Vetting of the briefing materials and the proposals by a balanced advisory board representing different points of view on the issue.
h) Moderated small group discussions of the options in the briefing materials, with a moderator trained not to permit anyone to dominate the discussions but to facilitate a civil and mutually respective exchange.
i) Provision of an opportunity for the small groups to pose questions to competing experts who will answer their questions. Briefing materials cannot be expected to anticipate all the questions and concerns the public will have about an issue.
j) To ensure accessibility, the briefing materials should be accompanied by video versions that clarify the issues and that help ensure that the less literate can participate fully.
k) The project should produce both quantitative and qualitative data. Before and after questionnaires to assess the changes in opinion and transcripts that be used to help explain the key concerns that motivate change. The questionnaire, ideally administered both to the deliberators and the control group, should have both the policy options and explanatory variables that shed light on support or opposition to the policy options. This quantitative data can then be matched up to the qualitative data collected from the transcripts.
l) At the end of the process the data should provide a detailed picture of which options the public would support and which options they would not support-and for what reasons. With adequate sample size the results should withstand challenges as to representativeness (both demographic and attitudinal), the significance of opinion changes, the reasoning behind the opinion changes, and the issue of whether it is the deliberations or some event in the wider world that is producing the changes (via comparisons to control group that does not deliberate). The whole process brings to life the forceless force of the better argument in key contested issues. It can be conducted entirely on line with video based discussions to make it cost effective (see http://cdd.stanford.edu for a range of cases).

Are topics like “Gene Drives in the Wild” fundamentally different from other issues addressed by Deliberative Polls? It might be argued that they differ in two ways. First the need for some scientific literacy and second the difficulty of assessing the risks of such new technologies.

While both these points have some merit, other Deliberative Polls have required some immersion in scientific or technical issues to clarify the policy trade-offs that need to be considered. After the Fukushima disaster, the Japanese government sponsored a national Deliberative Poll in 2012 on its energy choices, involving consideration of relative risks and benefits of nuclear power, conservation, renewable energy, fossil fuels. The public was asked to make a choice among competing plans that had different mixes of these energy choices, including the complete elimination of nuclear power in one of the plans. Given the Fukushima disaster, the risks of nuclear power were contested and difficult to evaluate. Similar challenges faced South Korea when it used a national Deliberative Poll to decide whether or not to continue construction of two partially completed nuclear reactors, Shin Gori 5 and 6 in 2017. Other Deliberative Polls, past and planned in the future on climate change face similar challenges. There is the problem of communicating enough technical understanding to frame the issues and the value-laden trade-offs. And some empirical effects, both risks and or benefits, are imponderable. For example, what will be the effect of climate change on the ocean's currents and in particular, the Gulf Stream, that is essential to the current climate for the British Isles and large parts of Europe? We know enough to identify the potential problem but not enough to quantify likelihood or magnitude of the possible effects.

There are some policy problems that pose value laden trade-offs that can be considered by the public where action or inaction will need to take place without the participants—and the experts—having a high level of confidence in the likelihood of the various risks and benefits. Gene editing in the wild is one of those emerging policy areas. If experts and citizens proceed with broad public deliberation about the risks and benefits, whatever contested decisions emerge will do so with a roadmap to achieving public trust and legitimacy.

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[1] The classic systematic study with real juries (rather than mock juries) was Harry Kalven, Jr and Hans Zeisel The American Jury (Boston: Little, Brown 1966).

[2] The idea of "rational ignorance" was famously put forward by Anthony Downs in An Economic Theory of Democracy (New York: Harper and Row, 1957). For the generally low levels of knowledge in the mass public see Michael Delli Carpini and Scott Keeter What Americans Know About Politics and Why it Matters (New Haven and London: Yale University Press, 1989).

[3] Those who believe otherwise are allegedly deluded by the so-called "folk theory of democracy." Christopher Achen and Larry Bartels Democracy for Realists: Why Elections do not Produce Responsive Government (Princeton: Princeton University Press, 2016).,

[4] The briefing materials for the in-class Deliberative Polling exercise are available at: https://drive.google.com/file/d/1_EA4iR4N6XTR6yFbAY4MybDNfblAPF0w/view