KENNETH PREWITT

Retrofitting Social Science for the Practical & Moral

In a world facing many complex, formidable problems, how can the social sciences become a decisive force for human betterment?

I earned a PhD at Stanford University in the early 1960s. My dissertation adviser, the political scientist Heinz Eulau, was principal investigator of a project interviewing members of 57 city councils in the Bay Area. It was funded by the National Science Foundation (NSF), not as political science, but as basic research of group dynamics, then of methodological interest to NSF. If anyone had asked me how the research contributed to society, I would have shrugged, "what's that have to do with me?" Finishing my PhD, I went to the University of Chicago as an assistant professor, where, again, no one asked whether my research plans would bring benefit to society. In short, I inhabited an Ivory Tower. Curiosity was my guide; basic science my goal.

A few years later I became director of the National Opinion Research Center (NORC) at Chicago. Here, social science was (and still is) presented in an altogether different way. There was basic research, but it was now embedded in practicality-based government contracts. NORC was not either basic or applied, it was both. There was room for a lot of trial-and-error learning and, when needed, persuasive argument about how best the government should use our findings. After all, NORC was speaking truth to power, and power, having paid for it, listened.

PhD in hand, I had started my career ignorant of the origins of modern social science. Had I been better educated I would have appreciated that basic science was half the story; the other half I learned at NORC and gradually more deeply from historians. The social sciences, observes the historian Dorothy Ross, "were to be agents of improvement. Developed in the utilitarian milieu of the Enlightenment and in the moral discourse of the Scottish and German universities, their programs were in the broadest sense practical and moral."

"Agents of improvement" made sense in the late nineteenth century, as did "practical and moral." Social science came of age because there were social problems to address: rapid urbanization and industrialization, boom-bust cycles, child labor, immigration, gender inequality, concentration of wealth in corporate trusts. These added up to large-scale social dislocation, which led to doubts about whether the clergy, drawing on biblical truths, was sufficient as the nation's authoritative voice on social conditions—a role it had performed for decades.

Today we face an equally daunting agenda of social problems, with academic social science's role in, and potential for, helping to address them strong in basic science but weak when it comes to the "practical and moral." Here I explain the source of this weakness, and then present a platform converting weakness into strength. This conversion will require a retrofit: using new tools and concepts to improve an enterprise no longer adequately equipped for current social conditions.

Social science socialized

Natural science measures and explains the regularities of nature. There are also regularities of society, which can be measured and explained. Attach the term "science" to that project: modern social science arrives, with the advantage of a label that gave it instant legitimacy. Soon we were in the Progressive era, asking whether capitalism needed some reining in. Social science was thrust into restructuring the governing process itself; one of its most influential voices, Woodrow Wilson, reached the White House. Social science to the rescue was not a laughable thought.

The "agent of improvement" aspiration was greatly facilitated by the simultaneous arrival of the research university, whose intellectual project built on centuries of scholarship in the natural sciences and the humanities. The new social science had no such history, but room in the universities was made nonetheless. It helped that a cohort of aspiring social scientists were being trained in German universities, which were a few decades ahead of those in the United States. Particularly welcoming were four universities no older than modern social science itself: Johns Hopkins, Clark, Chicago, and Stanford. Not to be left behind, the prestigious Ivies, busily modernizing as research universities, added social science departments: anthropology, economics, political science, psychology, sociology. If not in depth of knowledge, social science was administratively equal to its companion spheres of knowledge, which meant access to university funding and the license to offer the PhD. Social science soon had its own professional associations and disciplinary journals, even its own academy, the American Academy of Political and Social Science. In effect, they created an infrastructure modeled on what humanities and natural science had long enjoyed.

They also borrowed methods and content: from natural science (Baconian principles of measurement and classification, experiments, causal models, generalization, positivism) and from humanities (interpretive principles and methods, as well as access to political philosophy, economic theory, and historical scholarship).

Particularly useful for social science was the deep reflection science and humanities brought to an ancient question: was knowledge for the sake of knowledge, or to serve society? Both were claimed. The philosopher Martha Nussbam writes that the ancient Greeks, almost without exception, "defended some form of the view that intellectual study was appropriate and valuable only insofar as it made some contribution to the practical." However, "Socrates and, even more clearly, Plato … insisted that the benefits of philosophical inquiry were not just instrumental … inquiring and contemplation were themselves activities of enormous intrinsic value." The interpretation of "intrinsic" is important: for Nussbam, this meant "the most special contribution is to be the sort of thing that goes beyond instrumentality." What that "sort of thing" might be is my focus here.

Social science entered the twentieth century secure in its university home, and adept at expanding its how (methods) and its what (research agenda). The two world wars led to early and influential research on national security issues. The Depression led to significant strengthening of macro- and micro-economics, from the development of the concept of gross national product (GNP) to sampling theory applied to employment, consumer behavior, health, and education. The point is that as conditions changed, methods and theories caught up. It is a long list, one social science can boast of. "Agents of improvement," Ross's pithy phrase, was easily imported from the Gilded Age to the new century, explaining why we have social science in the first place. But the twentieth century also underscored a structural problem for which there is no easy fix. I introduce it here, and return to it again in the context of the twenty-first century retrofitting task.

The challenge from within

In 1964, Congress instructed the Commissioner of Education to investigate "the lack of availability of equal education opportunities for individuals by reason of race, color, religion, or national origin." By the standards of social science at the time, this study was big: 600,000 students and 60,000 teachers in 4,000 public schools. Led by the sociologist James Coleman, the resulting report was more than substantively influential, though that it was. The Coleman Report proved that social science could take on national problems at scale. If natural science could offer radar and the atomic bomb for the war effort, social science could tell government how to fight a war on poverty or war on drugs. Soon there was an ambitious government-funded agenda of nationally scaled social experiments based on randomized field trials: negative income tax, housing allowances, health insurance, and time-of-use electricity pricing.

The first half of the twentieth century took for granted that social scientists were agents of improvement, and the second half constructed a correspondingly robust and well-funded social science enterprise. But what the enterprise as a whole failed to anticipate was the uncomfortable fact that social science results can be challenged, not just politically but on scientific grounds, from within. Academic neoconservatives found unintended consequences hidden in social welfare policy, in such diverse areas as ruined inner-city schools and dampened economic growth. In effect, an edifice built by what was taken to be mainstream social science could be (and partly was) dismantled by a more politically conservative social science.

What I take from this dismantling example is a distinction between natural and social science. The

former can produce settled science describing underlying regularities of nature. The Copernican revolution replaced the Ptolemaic model of the universe with a heliocentric model. The earlier model was challenged by new science that did a better job describing and predicting the same regularities. Social science, in contrast, stands on a shifting substrate. What is learned about social patterns at one time can be used to change those patterns at another time: eighteenth century biological race science using cranial measures "proving" one race superior to another led to twentieth century anthropology, which proved it wrong. Or, in the 1980s, social welfare policy seemed to be more or less settled, until its unintended consequences came to light.

I generalize this point. Social science itself is subject to change in the principles that shape its methods and practices. This change is more likely to be imposed from outside than generated from inside. I believe we are currently in a shift of some importance. Social science as an agent of improvement in the nineteenth and well into the twentieth century rested on what social science asserted as its contribution to the nation. Here are our findings, this is what the military or school system or immigration policy might do with those findings. Starting in the late twentieth century, and now inescapable, the locus of agency shifts. If social science expects public funds, we cannot just assert our contribution; we will learn to be responsive to what the receiving end expects our contribution to be. Such responsiveness does not imply "applied research." It does mean, however, that research priorities will often be externally generated. To deal with this fact requires fresh thinking, certainly keeping what worked in the past but also adding and adjusting to what is expected in the present.

Beyond the tropes

We cannot reach this fresh thinking without first challenging two formulations that today's social science considers settled. First, social science should not assume that the "usefulness of useless knowledge" works as our narrative. Yes, it works for natural sciences. But the logic doesn't translate. Second, we should back off from exaggerated promises about "evidence-based policy," perhaps terming it "evidence-influenced politics," a framing that is more accurate descriptively (what happens) and prescriptively (what should happen). The prominence given to these two formulations gets in the way of an alternative positioning of social science as an agent of improvement. I discuss this alternative below, under the label of the Fourth Purpose.

The usefulness of useless knowledge. This catchy phrase we owe to Abraham Flexner, the legendary thinker behind the modern medical education system, and founder of the Institute for Advanced Study. Flexner insists: "throughout the whole history of science most of the really great discoveries which had ultimately proved to be beneficial to mankind had been made by men and women who were driven not by the desire to be useful but merely the desire to satisfy their curiosity." Astronomy, physics, biology, chemistry, each confirms Flexner, at least if we rephrase him—it is not that curiosity-driven science is useless; more accurate is that some portion of it is simply waiting to be used. The being used versus waiting to be used terminology tells us more than the tired basic versus applied. If usefulness of useless knowledge is a natural science truth, certainly it must be true of social science, which is so heavily modeled on natural science.

It is true only when talking to ourselves. Not so much when talking to nonacademics, and especially not when appealing to congressional appropriators. The reason is not the failure of basic social science to provide explanations of human behavior and social structures that become embedded in socially beneficial practices and policies. Pause and consider these concepts: GNP, social capital, unintended consequences, invisible hand, networks, institutional racism, moral hazard, early childhood intervention, deterrence theory, cost-benefit analysis, implicit bias, peer pressure, free riders, authoritarianism, deviance, gentrification, public good, stereotype. These concepts, and hundreds more, share two traits. All result from social science research. None are generally recognized as such.

Add to this list one more concept: obliteration by incorporation, introduced by Robert Merton, a sociologist and historian of science. In the natural sciences, he writes, obliteration occurs when the original authors of scientific breakthroughs fade from the record as their work becomes common knowledge among their peers. Something similar occurs in social science. But then a process unfolds that is missing for physical science. Our technical terminology is available not just to fellow experts, but also to parents, investors, legislators, teachers, lawyers, and comedians, where it appears as common sense, as "Well, we always knew that." At one level, then, a marvelous social science success story—a vocabulary for society that actually provides scientific explanation of human behavior and the social world we inhabit. Alas, social science gets little credit. This translates into weak claims for respect, funding, access. It lessens our capacity to function as a trusted authoritative voice.

The weakness is easier to identify than to fix. The terminology of basic natural science is available only to fellow experts. I am not in that club. But that doesn't block me from appreciating the pill that cures, the iPhone that delivers my mail, and the bridge that appears to deny gravity. Technology is visibly, tangibly present. I don't understand how quantum physics works, but I keep buying iPhones. It is a mystery that pain evaporates when I swallow a white pill; the pain that went away is not mysterious. I trust the bridge, and drive on. With perhaps some jealousy, social scientists watch the success of colleagues in the natural sciences—including their patent revenues. They have cleverly repositioned the

curiosity vs. utilitarian narratives, owning both. When money flows, but the government wants more justification for public funds, the utilitarian narrative is at hand. When demands for accountability and short-term results grow, the motivated curiosity narrative takes over. As nicely formulated by Wolfgang Rohe of the German Mercator Foundation, the natural science narrative was never curiosity vs. utility; it was, and remains, science alternating as conditions require.

Public trust in science is high and steady across time. These reasons are built into the way science's value is measured. The question doesn't distinguish between the scientific principle and its technological manifestation. For nonexperts, it is a single coherent package. You can literally hold many of the products in your hand. Or fly inside them. Or watch them, eat them, locate yourself by them.

And "public trust of social science?" We speculate (and complain), but have not managed to study it. So we don't know if we are trusted. I'm trying now, with NORC, to investigate whether the public has any sense of who we are and what we do. We know that game theory is the basis

If social science expects public funds, we cannot just assert our contribution; we will learn to be responsive to what the receiving end expects our contribution to be.

for a successful deterrence strategy, protecting the world from nuclear threat. This is no small gift. What percent of the public knows and appreciates that gift? (Test yourself: estimate that percentage before continuing.)

NORC presented 50 social science concepts to 100 respondents with some college education, asking them to indicate those they recognized, and when they did recognize them, to enter a brief definition. Deterrence theory was on the list. Four percent recognized the term, half of whom could provide a reasonable working definition. If nuclear deterrence is our gift to the public, we seem not to get any applause. Other terms fared better. Those recognized by at least 85% of the respondents included capitalism, discrimination, social networks, and some others; less known were self-fulfilling prophecy (64%), opportunity cost (44%), externalities (28%), and moral hazard (20%). Of course, even where the percentages are high, obliteration by incorporation reminds us that recognition of the concept does not mean recognition that the concept is based in social science research. (That is a later phase of the NORC project.)

This was a pilot survey, not ready for analysis. Don't draw conclusions based on these preliminary numbers, but do pay attention to how little we actually know about the standing of social science in the public mind. Indeed, I surveyed colleagues serving on the governing boards of major social science organizations, asking them to estimate what we would find in the study. There was considerable variability. On one board, for example, predictions on "externalities" ranged from 40% to 4% and on "moral hazard" from 75% to 10%.

If the "usefulness of useless knowledge" does not provide a strong foundation for making social science's case, can we count on social science's contributions to policy to do the job?

Evidence-based policy. The promise that inquiry can support policy ("evidence-based policy," in today's parlance) traces to social science's earliest beginnings: see Machiavelli, Montesquieu, Adam Smith, Marx. The premise is simple: here is a body of research; there is a policy in need of that knowledge; put them together and better policy will result. With such a simple model, and a huge supply of cases stretching across decades, social science must have measures and theoretical explanations of evidence-based policy successes, and disappointments, at least since Robert Merton, in 1949, laid out exactly that research agenda:

> [Social scientists] have largely neglected the study of their own situation, problems, and behavior…. Monographs document the problems and performances of the professional thief and the professional beggar but not the problems and performance of the professional social scientist.
>
> Although the application of social science to practical problems of policy and action is still in its early stages, a large body of experience has been accumulated. Social science has been applied, in diverse spheres—but it has not been systematically reviewed and codified. Consequently, no one knows the present status of applied social science or, more importantly, its potentialities.

Actually, a generation passed before the National Academy of Sciences (NAS) asked who benefits from the steadily growing public investment in social science. Its 1978 report, *Knowledge and Policy: The Uncertain Connection*, found that despite studies of policy interventions and steps to increase their relevance to and use in policy-making, "we lack systematic evidence as to whether these steps are having the results their sponsors hope for." The authors, as Merton before them, believed that "social science has been applied, in diverse spheres." But they could not confirm. I offer another distinction

between social and natural science; you will not find NAS reports about the benefits of the natural sciences concluding, "we think so, but we cannot document it."

Three decades later NAS returned to the question, instructing a consensus committee to review "the knowledge utilization and other relevant literature to assess what is known about how social science knowledge is used in policy making." The estimate for federal funding of social science research in 2011 was $1.3 billion; so it seemed reasonable to expect some measure of return on that investment. Reasonable, but not forthcoming. The committee's report, *Using Science as Evidence in Public Policy,* issued in 2012, disappointingly found that "we lack systematic evidence on the key question." The committee was confident that use is widespread, but could not document it. In these same years, a more detailed and ambitious investigation in the United Kingdom, which resulted in *The Impact of the Social Sciences: How Academics and Their Research Make a Difference*, came to a similar conclusion: "Yet the processes involved in social science research influencing wider decision-making have been relatively little studied in systematic ways, and are consistently under-appreciated by observers outside academia."

If policy use of research has been "little studied in systematic ways," then on what basis have we been complaining about being underappreciated?

So Merton has been ignored, for 70 years. We have not yet systematically studied the use of social science as evidence in the policy process. To be sure there are many thousands of case studies, among them persuasive examples of policy influence. It is the denominator that is missing. Ask yourself: Over those 70 years, in all the times and places where social science might have been beneficially used, do we know how often it was, and in how many places? Are all those case studies telling us something more general about social science's value and use? Or is society for the most part doing just fine without us? We have no idea. There has been no counting, no mapping.

But if policy use of research has been "little studied in systematic ways," then on what basis have we been complaining, for decades, about being underappreciated? What is our evidence? It is anecdotal, more or less adding up to reciprocal blame. From the policy-makers: academics don't deliver research in the time frame necessary for effective policy-making, ineffectively communicate their findings, make technical arguments that are inaccessible, and lack credibility because of career interests or partisan biases. Policy-makers, as we social scientists see it, fail to spell out objectives in researchable terms, do not take time to understand research findings relevant to pending policy choices, and compared with other considerations (reelection, budgets, partisan advantage) have limited incentives to use science. In short, failure on both the supply and demand side.

Now that this double-sided failure is assumed to be the problem, social scientists propose solutions: translation research, knowledge brokers, boundary organizations, research partnerships, for example. These solutions, if implemented at scale, are relevant to retrofitting our enterprise.

Funders today plead with social science to more effectively communicate its value to society, retrospectively (what has been achieved) and prospectively (what can we expect). The bleak truth is that although there is a fast-growing science of science communication, led by social scientists who are providing guidance for natural sciences, it has generated little in the way of social science messaging that might recover what has disappeared into common sense, or that persuasively documents its promised delivery of "better policy."

Seven more decades of wishing that we were credited for our scientific achievements (though they are many) and over-promising on evidence-based policy outcomes (though they do occur) doesn't strike me as a foundation for asserting that we should serve as an authoritative voice adequate to today's conditions. There are interesting stirrings, however—perhaps laying the groundwork for a fresh foundation responsive to twenty-first century conditions.

The Fourth Purpose

A significant percent (maybe 100%) of the Association of American Universities' 62 members are worrying about how their research can have greater impact. I cannot document the exact percent, though I was in a room when 36 officials of leading research universities each insisted that his or her university was making great strides in meeting Grand Challenges or partnering with local governments or engaging commercial players or coproducing research with advocacy organizations, and so on. For these 36 universities I can report that 100% expect, soon, to be more impactful than they are now, with no obvious upper limit. Academies, think tanks, and foundations make similar claims, as does NSF. Charged with determining "whether the federal government should fund SBE [social, behavioral and economic science] research at the National Science Foundation," the NAS concluded in a 2017 report that, yes, "SBE research further[s] the mission of NSF to advance national priorities in the areas of health, prosperity and welfare, national defense, and progress in science; advance the missions of other federal agencies; and advance business and industry." Don't miss that "progress in science" is tucked away in this otherwise heavily

utilitarian, nation-centric agenda.

I start this section, then, on the assumption that America's research universities, and their flagship funder, the National Science Foundation, as well as other foundations and donors that support social science, are serious about putting social science knowledge to use for the benefit of society. At my institution, Columbia University, Lee C. Bollinger, its nineteenth president, has launched initiatives, agreed to by trustees, led by deans and senior administrators, and engaged by a substantial number of faculty and students, to implement what he describes as the "Fourth Purpose." This joins the three purposes traditionally associated with American universities and colleges: Education, Research, and Public Service. The latter is best described as being "a good citizen," engaged in volunteer work; it is an attractive feature of higher education, but not in any substantial manner present in the other two core purposes.

The Fourth Purpose is an altogether different vision. It institutionalizes what Ross characterized as a social science being in the "broadest sense practical and moral." It succeeds only by being fully present in education and research, for instance, including experiential learning in the curriculum and expanding processes that convert research findings into social benefits. This involves more than scattered centers across the university working on particular social problems. As Bollinger puts it, the university itself becomes a hybrid actor, at once academic and practical. "A university," he says, "is more than simply an infrastructure supporting schools, departments, and faculty in their academic pursuits. As research universities enter into the realm or realms of the outside world, the 'university' (i.e., the sum of its parts/constituents) is going to have capacities far beyond those of any segment, as well as effects (hopefully generally positive) radiating back into the institution."

To oversimplify a bit, the Fourth Purpose has three steps. The first occurs in the lab, library, or field—resulting in fundamental findings. The second ventures into settings where nonacademic players and judgment come into play, actions are taken, and ethical choices confronted, that is, practices of the kind mentioned earlier: translation research, knowledge brokers, boundary organizations, coproduction. Academic and nonacademic players should both come away from these settings with enriched understanding and capabilities. For academics, the skills required for this step differ from, but complement, the more familiar skills of teacher and researcher. The new skills will have to be built into the fabric of the university if the Fourth Purpose is to succeed.

The third step cycles back to the campus. It involves scholarly understandings not previously available. It requires learning something new about the original research findings as a result of how they are interpreted, used, rejected, modified, or ignored in settings that, in fact, are controlling whether the research findings will be implemented as hoped. This itself is new knowledge. If paid attention to, and the cycle is repeated, endlessly, a new form of scholarship is added to our tool kit.

Medical, engineering, and agricultural schools have long pioneered the movement of basic knowledge along two tracks. The first into disciplinary peer-reviewed journals, and tenure criteria; that is, the familiar world the faculty has created to advance their research. The second (made possible by the first) leads to social benefit, broadly conceived.

Both tracks are, with mixed success, what professional schools build into their mission statements. Not so much for the social sciences and humanities. As argued above, social science—waiting for credit as its knowledge is used, and stuck with its evidence-based policy terminology—is yet to find its bearings with Fourth Purpose goals (this even includes some of its policy schools); and the humanities were sidetracked by their deconstruction decade. In recent decades, both have dodged social responsibility, finding corners where they could do their (impressive) track-one research in their own terms, subject only to the judgment of their peers. Yet we also find that the 36 universities noted above are keen to claim that they are acting as well as explaining. A lot of retrofitting is under way, often responding to pull factors, which I illustrate in the next section.

"The human dimensions of ..."

This phrase came into use in the context of sustainable development. The United Nations–sponsored Brundtland Commission of the mid-1980s is a convenient starting point, in its assertion that "the environment does not exist as a sphere separate from human actions, ambitions, and needs." This reads as a cliché today, but did not three decades ago when environmental risks were narrowly focused on the planet's lands, waters, forests, and other natural resources.

The commission propagated the simple truth that all those concerns had people in the mix—consequently, a "human dimension." The range and complexities of this truth have since multiplied manyfold, especially as twenty-first century technologies have swept across everything we know about the human condition: what we eat and how we procreate; our geographic mobility and demographic future; things that entertain us and frighten us. There is no end to this list. And it brings with it the crumbling of the old boundaries separating social and natural science. There is also greater interaction at the social science-humanities borders, largely because today's issues pose significant ethical challenges, where the humanities bring expertise undeveloped in social or natural science, as I will discuss later.

Not since its birth in the late nineteenth century has social science been faced with such a massive opportunity. This opportunity requires retrofitting at scale. I started with the Brundtland Commission to underscore how far and fast

the term "environment" has traveled in a few decades, now relabeled as climate change, with supporting evidence from every longitude and latitude marking the earth and also its vertical dimension, from its atmosphere to its interior.

It is not an accident that research universities turn their attention to climate change and, simultaneously, blur the boundaries across the three spheres of knowledge. Neuropsychology or reproductive technologies hasten the blurring too. But climate change is too big, too multifaceted, too frightening to reside only in its specialty corner. No doubt everyone feels its urgency. Columbia, for instance, intends to open a new professional school, provisionally called The Climate School, that will consider everything from melting glaciers to the arts portraying the immorality of what our species is doing to planet Earth. The school is being designed with Fourth Purpose commitments at its core—"Don't just study it; do something about it, asap."

There are sectors other than climate change that underscore "the human dimensions of …": cyber-terror, gene editing, disinformation campaigns, artificial intelligence, the surveillance state, robots. The "human dimensions of …" opens more doors than there are adequately trained social scientists to walk through. Expansion will inevitably occur, especially at the borders with natural science and humanities and accelerated by retrofitting that reaches to the "do something."

Of course, these developments are not of interest only in universities. Well-trained social scientists also make careers in foundations, academies, think tanks, advocacy organizations, businesses, museums, government agencies, the military, and the financial industry—in larger numbers than in universities. There they seek relevance, in some cases more fervently and successfully than they could with a university appointment.

There are good reasons, however, to want research universities to be the primary authoritative voice—access to basic research, commitment to public good principles, educational responsibilities, traditions of independence, and, especially, their universality, covering the full range of academic subject matter—which is why we endlessly promise, and gradually practice, more interdisciplinarity. But academia's competitors have personnel with skills insufficiently present in universities intent on the Fourth Purpose. This skill-set grows from firsthand experience in settings that reposition knowledge to increase its social benefit. Research universities have some of those personnel—professors of practice, research scientists, fellows. But not in abundance and not with all the expertise called for in Fourth Purpose efforts. Expanding that skill space will to some extent be internally resisted. When universities, already critiqued for an excessive administrative layer (unfairly for the most part), add yet more titles, requiring new appointment and retention criteria, they invite more criticism. The university culture, defined by faculty-controlled tenure criteria, is at risk of treating its Fourth Purpose skill-set as second-class and offering less secure positions. The universities taking that route will find themselves in a lose-lose situation, and likely forced to retreat in their Fourth Purpose ambitions.

Final challenges

In moving forward, the nation and its universities will need to address what I see as two final challenges.

Escaping the charge of partisanship. There is a murky border between analytics and advocacy. Earlier I drew attention to US social welfare policy debates without noting that the shift in policy followed changes in the White House. In the early 1960s the Democratic Party drew on social science to design welfare programs; by the 1980s, with Republicans in power, social science was actively involved in dismantling some of those programs. Does this make the social science partisan? The political scientist Charles Lindblom, famous for his theory of incrementalism, advised "thoughtful partisanship," pointing out that social science cannot be helpful to public policy unless we "enter into the partisan discussion, rather than obscure it with a pretense of neutrality." Of course, all social science is partisan to the extent that it studies the successes and failures of policies that have emerged from a partisan political process. In this context, Lindblom's "pretense of neutrality" should get our attention. The "neutral" social scientist can too easily be viewed as deceptive, with all the problems that ensue. The Fourth Purpose, with its emphasis on taking action, will be vulnerable to the charge of partisan bias. The way out of this trap may combine Lindblom, who counseled that social scientists present options that go beyond narrow partisan framings, with our familiar "this is what our research found, and we let the chips fall where they may as far as partisan advantage is concerned." As Fourth Purpose initiatives gather momentum, much thought will be given to how "thoughtful partisanship" can find its place.

Stimulating moral reasoning. The Fourth Purpose fails if it has no ethics experts. Such expertise must go beyond, though should include, the analytic logics most often found in departments of philosophy (which sometimes describes itself as a science). The need for ethics expertise presents a huge challenge but also opportunity for the humanities. For centuries ethicists have unpacked the complexities of right and wrong, have brought understanding rather than explanation and interpretation rather than prediction, have not asked "what is life" but "what is a meaningful life." They will bring this expertise to the Fourth Purpose, a responsibility and opportunity that arrives at an opportune time. We read of "the threatened humanities" as science, technology, engineering, and mathematics—the STEM fields—attract students; and we read of resistance, sometimes pushing

the humanities into a weak version of qualitative social science, arguing its utilitarian value (How many people visit museums? What signage will tempt more to visit?).

Though some of this is inevitable, what can happen at the borders of the humanities and science (natural and social) goes way beyond counting museum goers. There are examples: bioethics has been an influential academic field since the Hastings Center (founded in 1969) aggressively brought it to our attention, and inserted it into medicine and public health; international security research, getting a strong start with Michael Walzer's seminal *Just and Unjust Wars* (1977), now turns to wars fought by drones, terrorism by nonstate actors, and disinformation strategies tilting voters to strong leaders not given to democratic nuances and international cooperation. Bioethics and the ethics of war are models for dozens of new "ethics of …" research fields. Earlier I quoted Nussbaum: the humanities "most special contribution is to be the sort of thing that goes beyond instrumentality." Socratic inquiry, she writes, serves society in its "capacity for revealing, delineating, refining goals and ends in themselves." This is a complicated story, but even in its uncomplicated version there is a message to a social science determined to serve the Fourth Purpose at universities. Social science must examine its goals and ends, must answer why now should America's research universities strengthen their capacity to connect their research to the goals and ends of society.

Retrofitting social science, revisited

I chaired the NAS committee that produced the 2012 report *Using Science as Evidence in Public Policy*. Our job proved difficult. It took not the three years expected, but seven; it ran out of money; its initial product failed NAS review; it had to negotiate a fresh statement-of-task with its funders. We were finally successful (it does exist), but only because we got past the evidence-based policy terminology, basically rephrasing it as evidence-influenced politics. That too is a weak framing, but it started a project (Future of Scholarly Knowledge, funded by the Sara Miller-McCune philanthropies) that led me to ask what are the barriers to retrofitting social science. These are described above. The Fourth Purpose answers what we should do once the barriers are set aside.

It has three features. First, loosen the attachment to frameworks that impede fresh thinking. Then replace those frameworks with a clearer, more forceful (thus risky) purpose: notably, reestablish a social science for the sake of society, reasserting its authoritative voice, initially established in the 1880s and sustained for a century, but losing its edge in recent decades. Finally, and going back to our roots, firmly institutionalize this retrofitted social science in research universities, directing it along the two tracks emphasized above. The first feature is straightforward; the second is a much greater challenge, but doable; the third is difficult, really difficult, requiring hundreds of person-hours just to design the Fourth Purpose, let alone implement it. Maybe we academics will have to give our home universities a little more time, and our disciplinary associations and conferences a bit less.

What will make those hours palatable, even fun, is the intellectual/institutional puzzle on the table. Social science will get help from the humanities, especially in attention to ends and goals and in situating moral reasoning at the center of the effort, and from the natural sciences, especially in their search for answers to "the human dimension …" in the context of technologies with significant power to benefit society, but, inevitably, with unintended consequences: burning fossil fuels doesn't just fly airplanes; it melts ice, dramatically, at scale.

And finally: we have to find a concise, shared way to talk about all this. The term "academic freedom" became important to higher education more than a century ago. It has been hugely important since. If the term "Fourth Purpose" is picked up (no attribution required), it will facilitate interuniversity exchange and cooperation, much as the term academic freedom has. I urge it, if only to prevent us from endless debates about what impact means. But perhaps a better term is available. If so, put it in play.

Kenneth Prewitt *is the Carnegie Professor of Social Affairs at Columbia University's School of International and Public Affairs, where he is also director of the Scholarly Knowledge Project. He was director of the United States Census Bureau from 1998 to 2001.*

Recommended reading

Simon Bastow, Patrick Dunleavy, Jane Tinkley, *The Impact of the Social Sciences: How Academics and Their Research Make a Difference* (Thousand Oaks, CA: Sage Publications, 2014).

Charles Lindblom, "Who Needs What Social Research for Policymaking?" *Science Communication* 7 (1986): 345.

Robert K. Merton, "Technical and Moral Dimensions of Policy Research," ch. 1.4 in *The Sociology of Science: Theoretical and Empirical Investigations* (Chicago, IL: Chicago University Press, 1973).

National Research Council, *Using Science as Evidence in Public Policy*, edited by K. Prewitt, T. Schwandt, and M. Straf (Washington, DC: National Academies Press, 2012).

Martha Nussbaum, "Historical Conceptions of the Humanities and Their Relationship to Society," in *Applying the Humanities*, edited by Daniel Callahan, Arthur Caplan, and Bruce Jennings. (New York, NY: Plenum Press, 1985).

Wolfgang Rohe, "The Contract between Society and Science: Changes and Challenges," in "The Future of Scholarly Knowledge," edited by Kenneth Prewitt, *Social Research* 84, no. 3 (2017): 739–757.

Dorothy Ross, *The Origins of American Social Science* (Cambridge, UK: Cambridge University Press, 1991).