



## Concept Note Detailing Anticipatory Social Research

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This young century has already seen several world-changing events that challenged baseline assumptions in many important areas including geopolitics, technology policy, inequality, and the resiliency of institutions. From climate change denial and fake news, to the regulation of artificial intelligence and the management of data privacy, the twenty-first century is a time of what Daniel Drezner in his book *The Ideas Industry* called “wicked problems.”

Researchers have responded to these challenges in part through a reorganization of the social sciences into thematic areas that cut across methods and disciplines. Studies of risk, disaster, disinformation, and digital sociality are just a few examples of the social sciences’ reorientation to a topics-forward stance supported by interdisciplinary research teams. While good work has resulted from this reaction—for example, we are learning more about the mechanisms and impacts of political polarization in social media and as a result also confirming many older theories on identity formation—social scientists increasingly find themselves playing catch-up as research subjects outpace their ability to develop sound theories or coherent data sets.

Part of the issue may be a focus on problem solving rather than a broader examination of goals. Or, as Kate Crawford put it in talking about the challenging state of Artificial Intelligence ethics: “We are beginning from the wrong direction if we ask, ‘What kind of technology is going to help us fix this problem?’ rather than ‘How do we want to live?’” The problem-solution perspective is understandable, given that many experts (e.g. scientists, engineers, policy specialists, sociologists, medical doctors, and data scientists), are trained and incentivized to view complex challenges as a set of problems in need of solutions.

One alternative to this approach is what the physicist and historian of technology Andrew Pickering calls “tuning.” Instead of organizing the world into discrete problems in need of solutions, one looks at the world as a constantly evolving system wherein groups decide on an ideal condition then monitor and respond to deviations. It is the difference between medical professionals developing a vaccine for a pandemic, and a team of public health professionals monitoring the general well-being of a population. What is urgently needed now is an anticipatory social research paradigm that is agile, nimble, and capable of “tuning” a complex set of variables rather than reacting to new problems as they arise. A central question for ASR will include how ideal conditions are defined and by whom.

Sociologist W.E.B. Du Bois, in diagnosing race or what he called “the color line,” insisted that we should attend to this “problem of the future world” through “the charting, by means of intelligent reason, of a path not simply through the resistances of physical force, but through the vaster and far more intricate jungle of ideas.” Inspired by Du Bois and others, Anticipatory Social Research (ASR), broadly conceived, would identify emerging social phenomena and direct research toward situating, contextualizing, and translating events into understandable concepts and, as necessary, actionable outcomes. What sets ASR apart from the work of marketing trend forecasters is not only the motivation (i.e. the general social good, rather than targeted marketing for profit) but the addition of theory and the deep well of prior social knowledge as both a scaffold and orienting tool for directing research and interpreting results. An ASR approach would endeavor to systematically weigh both the possibilities and



perils presented by social change, considering governance and policy as well as ancillary transformations in culture, institutions and economy.

In February of 2017 House Science Committee members introduced the Scientific Integrity Act, a well-intentioned bill that, in its own words, recognizes that “the scientific process, and the communication of science should be free from politics, ideology, and financial conflicts of interest.” It directed federal agencies that fund or conduct scientific research to create integrity policies that would first and foremost, ensure that “the scientific conclusions and personnel actions regarding scientists are not made based on political considerations.” Such attempts at shielding scientific inquiry from political interference introduce less democratic control over science when what is needed is more, better governance. Put another way, research programs on climate science and women’s reproductive health are already “based on political considerations” the moment they are responsibly carried out. An ASR approach would recognize this fact and build research programs that, rather than falsely assume that the best science is devoid of politics, would account for political realities in addition to scientific research goals.

There are several science and technology studies (STS) scholars that are already working in ways that we would identify as ASR. Andrew Lakoff has argued the humanitarian crisis that developed in Post-Katrina New Orleans was cast as a failure of disaster preparedness when there could have been a much more fruitful discussion based around “sustained attention to the welfare of the population.” David Guston, recognizing that too often regulatory frameworks are devised months or even years after a technology’s conception, has offered an “anticipatory governance” framework that may help manage innovations’ social impacts “while such management is still possible.” There is also, of course, the “precautionary principle” a governance strategy widely accepted in Europe that puts the burden of proof on the advocates of new science, technology, or policy to prove that what they are proposing has met a minimal standard of safety. And, in the US, emergent biomedical research increasingly draws on the ethical, social and legal implications (or ELSI) framework that we developed in the 1990s as a counterpart to the human genome project.

The Social Science Research Council is proud of its long history at the forefront of social science research for the public good. During the Great Depression the SSRC was instrumental in providing support to the likes of Margaret Mead and George Gallup who would go on to work on the Committee for National Morale and forge the foundation of Americans’ political common sense regarding individuals’ identity as it relates to larger political norms. Indeed, interdisciplinarity itself, in the words of historian David Sills, began “life in the corridors and meeting rooms of the Social Science Research Council as a kind of bureaucratic shorthand for what the council saw as its chief function, the promotion of research that involved two or more of its seven constituent societies” and their respective methodologies and assumptions. If interdisciplinarity was the SSRC’s contribution to twentieth-century social thought, anticipation is our newest method-level offering with collaboration as its key mode of practice.

Labs, departments, foundations, and think tanks are all potential sites of ASR but with new methods comes a concomitant need for institutions and organizations that better support new work arrangements. An institution organized to conduct anticipatory social research should be just as agile and nimble as ASR itself, with teams working collaboratively with those closest to the issue under consideration. Organizations like MIT’s CoLab and the Mission Asset Fund, which collaborate with the communities that they serve, are good examples of institutions that could easily shift into the anticipatory mode.



Future institutions might include a “Science Corps” where graduate students and early career PhDs are given training in community organizing before being deployed to towns and communities to work for organizations that have indicated that they need professional assistance.

What follows are not necessarily subjects in need of anticipatory social science, but examples of emerging phenomena that we believe are excellent examples of topics that, by their very nature, remain elusive to present methods and are instead in need of a more anticipatory approach.

**Impending Decarceration** - US residents born after 1981 will be the most incarcerated generation in history if current trends continue. Although processes of decarceration are underway in some communities, given how contact with the criminal justice system impacts life chances, even a less carceral American society may be defined by a caste system composed of a tightly controlled plurality segregated from fully constituted citizenship. Extending beyond the literature on “re-entry,” ASR would illustrate what a controlled dismantling of this system would look like and what social architectures must be put in place for success on this front.

**Emergent Science and Technology:** Major science funding organizations earmark less than 1% of their budgets for societal impacts of new technologies. Biotechnology like CRISPR, which can rewrite genetic codes and is already in clinical trials in China, and breakthroughs in AI such as IBM’s Watson computer are already being licensed for use in the private sector but have little public accountability or ownership. Moreover, it is unclear if these technologies, by nature of their design and intellectual property protections, can be transparently governed in a democratic way at all. An ASR approach would forego regulatory regimes meant to only contain or mitigate the unintended consequences of new science and technology and instead investigate, test, and propose entirely new methodologies that closely interweave societal impacts, scientific advancement, governance, and technological change.

**New Methodologies and Necessary Ethics:** Social science methodologies evolve slowly and yet rapid changes in technology and social norms are having an impact on what is possible and acceptable research. Virtual and augmented reality, machine vision, algorithmic decision making, and the ability to send survey instruments to thousands of people very cheaply on social media platforms have been incorporated into research designs without a comprehensive review of the ethical considerations that these new technologies present. There is even a disturbing trend reported by Scott Desposato of social scientists shopping for countries with little-to-no ethical research criteria in order to speed along their research protocols. Some research groups meanwhile, including Stanford’s Virtual Human Interaction lab, have used VR to test increasing empathy and to better understand the fundamental changes in human behavior that will be necessary to diminish discrimination and to stem climate change. While several foundations and professional groups have published guides and best practices recommendations for research with emerging technology, little work has been done to design technologies such that they are more amenable to ethical research. Anticipatory Social Research is crucial here as both a call to study the ethical dimensions of technology *and* as a potential beneficiary of the new capabilities technology unlocks.