

***Event Review: Can We Imagine Our Way to a Better Future?***  
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On October 2<sup>nd</sup>, the National Academies in Washington, DC hosted the event [\*Can We Imagine Our Way to a Better Future?\*](#) Bringing together speakers from NASA, DARPA, the White House Office of Science and Technology Policy, the Woodrow Wilson International Center for Scholars, the *Washington Post*, the SyFy Channel, and a cadre of accomplished science fiction writers to discuss how to create a future we most desire. The initial impetus for the event was sparked in 2011 during an exchange between sci-fi writer, Neal Stephenson, and Arizona State University (ASU) president, Michael Crow. Stephenson argued that the United States may still be operating at the frontier of science and technology, yet we are losing our collective ability to push the envelope further, above all, we are unwilling to do the big things Americans were known for. Crow responded that perhaps, sci-fi writers are partially to blame because they have failed to provide a future vision beyond a dystopian view of the world. This exchange drove the creation of the ASU [\*Center for Science and the Imagination and Project Hieroglyph\*](#); two initiatives to create, in my view, a new techno-optimism reminiscent of the Golden Age of science-fiction. The event featured seven panels with topics ranging from issues of science and technology governance, public/private partnership, space colonization, delivery drones, legal and ethical issues, democratization of science, Internet governance, surveillance, privacy, and the power of sci-fi to solve *wicked* problems. Even though, each panel had something interesting to contribute to the futures conversation, I will narrowly focus on two panels that caught my attention.

The first panel featured sci-fi writer [Neil Stephenson](#) and NASA's Chief Scientist, [Ellen Stofan](#). This panel made visible Stephenson's desire for further space exploration and NASA's search for a mission after the demise of the Space Shuttle program. Even though Stofan made a compelling argument for further space exploration, yet during the Q&A session she did not adequately address the onerous cost of running the space shuttle program when the nation faces gargantuan federal budget deficits, and a crushing public debt; leaving the public with little or no appetite for an expensive space mission to Mars. The conversation then shifted to the possibility of a public/private partnership or even the complete privatization of space with NASA playing a secondary role. For many, including Stephenson, neither Big Government nor Big Business are up to the task of digging ourselves out of what Stephenson refers to our *innovation starvation*.<sup>1</sup>

What perhaps went undetected in the conversation was Stephenson's possible solution to move the nation forward; the start-up entrepreneur. For instance, Stephenson refers to Elon Musk, founder of Telsa Motors and Space X, and Peter Thiel, co-founder of Pay-Pal and venture capitalist, as examples of entrepreneurs who are willing to take the inscrutable risk and uncertainty embedded in the process of pursuing breakthrough innovation. Musk and Thiel are perhaps, what Laura Cabrera (2013) refers to in her essay, *Visioneering and Our Common Future*, as *visioneers* embracing a brand of techno-

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<sup>1</sup> Neal Stephenson. "Preface: Innovation Starvation." In *Hieroglyph: Stories and Visions for a Better Future*, edited by Ed Finn and Kathlyn Cramer, xii-xix. New York: William Morrow, 2014.

optimism bordering on evangelism.<sup>2</sup> For one thing, in the case of publicly funded scientific research, this begs the question of the rightful place of science. More importantly, where is the best place with the best chance for the best outcomes for society-at-large? Perhaps Stephenson is up to something. Maybe, the production of publicly funded scientific knowledge should support technological innovation through novel arrangements between research universities, government, and start-up entrepreneurs in a concerted effort to stimulate breakthrough innovations. Innovation, undeniably, coupled with public engagement. Because, if we desire a society with broadly shared benefits, as Cabrera suggests, a commitment to democratic governance means that power resides with the people, not with a scientific-technological elite.<sup>3</sup>

The panel on sci-fi and *wicked* problems energized me the most. According to David Rejeski, from the Woodrow Wilson International Center for Scholars, the biggest challenge in government policy is the lack of long-term thinking. Moreover, Rejeski suggests that is difficult to get Federal executives to think beyond the next election cycle. Not surprising but a significant revelation because our modern economies are primarily based on high-consumption with a pattern of massive extraction of natural resources for the production of consumer products; and then quickly converted into waste. Furthermore, a model adopted by most emerging economies: Brazil, India, Indonesia, China, and others.

If we follow current trends, panelist [Vandana Singh](#) – a physicist and sci-fi writer – suggests, moderate growth for mature industrialized economies and accelerated growth for emerging ones, then we surely have a recipe for environmental disaster, acting as if natural resources were inexhaustible. Perhaps, this is where sci-fi could make a significant leap in imagination; because in truth, there are almost endless ideas than human beings will ever be able to conceive and probably much less produce so we can create a world that works for all. Yet, economists and politicians trap themselves into the conventional wisdom of leveraging science and technology for economic growth. Cabrera argues, and I agree, that this way of thinking leaves out of contention any other alternatives.<sup>4</sup> For this reason, the challenge for ASU’s *Center for Science and the Imagination* and *Project Hieroglyph* is to create stories that challenge our conventional thinking about economic growth, stories that create cognitive dissonance by imagining plausible future scenarios where societies organize themselves around a no-growth or at least in a steady-state sustainable economy. Equally important, in Singh’s view, bring new voices into the conversation; even more so, dissenting voices, specifically non-Western voices that have been traditionally ignored and overlooked.

Granted, few in the event would doubt the remarkable phenomenon of scientific and technological progress because both work in very tangible ways. For instance, its impact is felt through transformative technology in fields ranging from medical technology to air travel. Its cultural status hinges on the belief that it is a force for good in the world; and for the most part, science and technology enjoys a privileged status. Nevertheless, the

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<sup>2</sup> Laura Cabrera. “[Visioneering and Our Common Futures](#).” *Social Epistemology Review and Reply Collective* 2, no. 10 (2013): 1.

<sup>3</sup> *Ibid.*, 2

<sup>4</sup> *Ibid.*, 2.

idea of infinite progress is becoming a liability and in need of serious revision. Consequently, our current society is only one of many possible configurations of people, technologies, and institutions. Then, certainly, the global community definitely needs a gigantic leap in prosperity consciousness to achieve a modicum of sustainable prosperity; moreover, balanced growth that takes into account the needs of the emerging economies. Perhaps, we need a new narrative similar to the one delineated by Max Weber's 1905, *The Protestant Ethic and the Spirit of Capitalism*. For sure, a sci-fi version titled, *The Environmentalist Ethic and the Spirit of Sustainable Capitalism* that decouples economic growth from environmental degradation. For one thing, we learn from sci-fi that there is not *one* future, but *many* possible futures. Based on current trends, some future outcomes are more probable than others; of those probable outcomes, some are more desirable than others. Collectively, once we recognize this, as a nation we have a responsibility to choose wisely for the benefit of future generations.

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