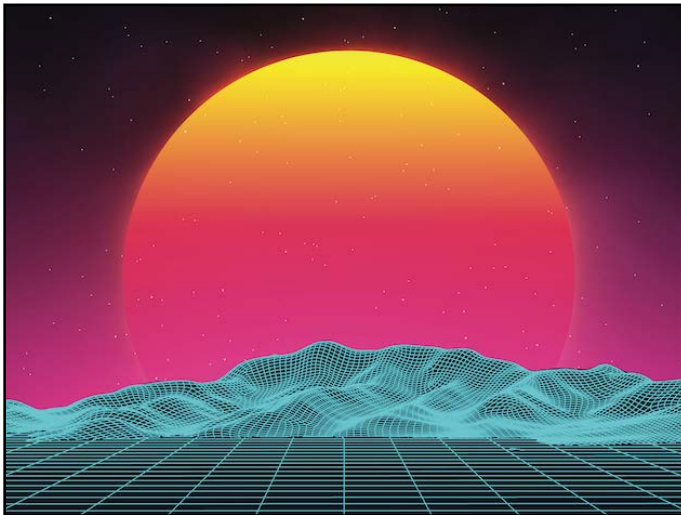

Applied Sci-Fi Project
Event #2 Summary and Report

Designing the Future with Applied Sci-Fi

September 29, 2022

Video of public event: <https://youtu.be/meALupEOPHw>



In this second panel in the series, held on September 29, 2022, we explore how the tools of sci-fi narrative are used in the field of design to better imagine, experience, and shape possible futures. Whether these emerging design practices are categorized as design fiction, sci-fi prototyping, useful fiction, experiential futures, or worldbuilding, there is a growing field of futurists and design professionals applying these science-fictional techniques to advise companies, governments, and nonprofits on how to prepare for the opportunities and challenges that the future will bring.

Our Speakers

Bruce Sterling (@bruce) is an internationally bestselling author, journalist, editor, columnist, and critic. He is perhaps best known for his ten visionary science fiction novels, as a founder of the cyberpunk movement, and as the editor of the quintessential cyberpunk anthology *Mirrorshades*. His much-heralded nonfiction includes *The Hacker Crackdown*:

Law and Disorder on the Electronic Frontier and The Epic Struggle of the Internet of Things.

Julian Bleecker (@darthjulian) is the co-founder of Near Future Laboratory and CEO of OMATA. He is a multidisciplinary engineer, product designer, creative technologist, and strategy-oriented futurist. He looks at the world a bit sideways, seeking opportunities to create digital products that are unanticipated, unexpected, and beautiful alternatives to the status quo.

Anab Jain (@anabjain) is a filmmaker, designer, and futurist. She is co-founder of Superflux, a pioneering speculative design and experiential futures studio, working for clients and commissioners such as V&A, Google, Red Cross, UNDP, IKEA, and Deepmind. She has delivered keynotes at TED, Skoll, House of Lords and House of Commons UK, and shown work at MoMA New York, V&A London, National Museum of China, and Museum of the Future Dubai. She serves as professor for design investigations at the University of Applied Arts, Vienna.

Alex McDowell (@worldbldg) is a narrative designer. He served as a production designer for more than 30 years of feature films by David Fincher, Terry Gilliam, Tim Burton, Steven Spielberg, and others, and he is the originator of world building as a disruptive design system. He is now creative director at Experimental Design Studio, designing storytelling for change in media, education, industry, and institutions. He is a professor at USC Media Arts + Practice, and director of the World Building Media Lab and Institute.

Radha Mistry (@radha_mistry) has a background in architecture, narrative environments, and strategic foresight. She leads the Americas Region Foresight

business at Arup, teaches speculative design at the MFA Transdisciplinary Design program at The New School (Parsons), and strategic foresight at the Design MBA program at the California College of the Arts. She spends most of her time exploring the impact of emerging signals of change and how they'll change the way we design and make things in the future. Her foresight career also includes time at organizations such as Autodesk and Steelcase.

Brian David Johnson (@BDJFuturist) has made the future his business. From 2009 to 2016, he was Intel Corporation's first-ever futurist. Currently, he is a professor at Arizona State University's Global Futures Laboratory and School for the Future of Innovation in Society. He also works in a private practice with a broad range of groups, including governments, militaries, corporations, nonprofits, and start-ups, to help them envision their future. He holds more than 40 patents and is the bestselling author of books of science fiction and fact (*Threatcasting*, *The Future You*, *WaR: Wizards and Robots*, and *21st Century Robot*).

Kevin Bankston (@KevinBankston) is a fellow at ASU's Center for Science and the Imagination, where he researches the relationship between sci-fi and real-world innovation. Kevin is also an accomplished executive leader in the arena of technology law and policy, having spent nearly 20 years working in the public interest sector as an attorney and advocate at organizations like the ACLU, the Electronic Frontier Foundation, and the Center for Democracy & Technology, most recently serving as the Director of the Open Technology Institute at New America. He is now a Director of Privacy Policy at Meta Platforms, Inc., where he leads Meta's AI Policy Team in developing policies and processes for ensuring responsible AI development.

Five Powerful Insights and Examples

Several contributors were at pains to differentiate design fiction from science fiction writing or storytelling. One contributor was wary of applying a strict definition, but stressed that design fiction work requires some familiarity with, and careful engagement with, the theories and methods of design – that is, design fiction is not just a material-culture illustration of a story, but is a type of design practice. Another participant emphasized that making or producing an artifact is different than telling a science fiction story, which is more likely to be produced to sell to an audience (and even “science fiction prototyping” stories that are intended for other purposes take the form of commercial fiction and its imperatives of compelling characters and an animating conflict, etc.). Yet another contributor described design fiction as an engagement with material culture, creating a “symptom” of a possible future world, as opposed to a science fiction story that dramatizes characters living in and working through conflicts within the world. Other contributors referred to anthropology and the sense that design fiction allows us to discern deep structures within a culture or society, perhaps differentiating it from science fiction's fundamentally narrative mode of sharing and rendering information.

Several contributors discussed the fact that there is a definite feedback loop (in the sense of the “sci-fi feedback loop” we explored with technology in our first public event and workshop) between cinematic science fiction texts and design practice – for example, how Kubrick's *2001: A Space Odyssey* both included a design spec for a touchscreen tablet, and an interior design aesthetic that you can clearly discern in the Apple Store of the 2010s. And then design artifacts, from galleries to product design to architecture, of course feed back into science fiction films, which often use outré design touches from the present as part of their future worlds.

One participant pointed out that the economics of the strategic foresight consultancy business are often counter-cyclical, in the sense that when economic conditions become rocky, business leaders and firms often feel a fear of the future, and that is when they will make funding available to hire a futures consultant to come in and help them to prepare for uncertainty.

In the public event, one contributor argued that part of the role of the strategic foresight professional is

to create a vision of the future that includes a sense of agency for clients, a sense of ownership over that vision of the future and their part in it, and a sense of accountability in terms of their role in bringing a certain possible future into being.

Several contributors recommended the work of Afrofuturist futures thinking expert Lonny J Avi Brooks, particularly his “legendary” talk at The Long Now Foundation, “When is Wakanda: Imagining Afrofutures” (<https://longnow.org/seminars/O2020/jul/07/when-wakanda-imagining-afrofutures>), and his podcast, *The Afrofuturist Podcast: Democratizing the Future*, co-hosted with Ahmed Best (<http://theafrofuturistpodcast.com>).

Key Takeaways

Sci-fi storytelling can be used as a powerful tool for innovation and foresight in the field of design, and the intersection of narrative and prototyping can create powerful experiences of possible futures. By imagining and implementing objects and experiences from possible futures, designers can explore new ideas, challenge assumptions, and identify potential risks and opportunities. Here are some ways in which sci-fi storytelling can be used in the field of design:

1. **Design Fiction:** Design fiction involves creating artifacts and narratives that depict possible futures, allowing designers to explore and communicate new ideas and concepts. By creating tangible representations of future scenarios, designers can engage stakeholders and spark conversations about the implications of emerging technologies and trends.
2. **Worldbuilding:** Worldbuilding involves creating detailed and immersive fictional worlds, typically in multiple media, which can serve as a platform for exploring new ideas and concepts. By developing rich and complex fictional worlds, designers can explore the social, cultural, and technological implications of emerging trends and technologies, and identify potential opportunities and risks.
3. **Experiential Futures:** Experiential futures involve creating immersive experiences that allow people to engage with possible futures. By creating interactive and engaging experiences, designers can help stakeholders to understand and viscerally experience the implications of emerging technologies and trends, and identify potential opportunities and risks.

4. **Speculative Design:** Speculative design, closely akin to design fiction, leverages the tangible products of design processes to speculate and provoke discussions about alternative futures, often challenging assumptions and exploring unconventional ideas and concepts.
5. **Design Prototyping:** Design prototyping involves the creation of tangible representations of future products, services, or experiences, allowing designers to test and refine their ideas and concepts. By emphasizing iteration, design prototyping invites participants to reconsider and collaboratively reinvent the future together.

Some Examples of Sci Fi Influencing Design

Science fiction has had a significant influence on real-world design, inspiring real-world innovations and shaping the way we envision the future. Here are some examples of how science fiction has influenced technology and design in the past:

1. **Star Trek:** The iconic science fiction series “Star Trek” has been credited with inspiring numerous technological advancements, including tablet computers, voice-activated computers, and handheld communication devices resembling modern flip phones and smartphones. Star Trek continues to inspire: The X Prize Foundation’s Tricorder Prize awarded millions of dollars to medical device manufacturers to create devices inspired by the show’s fictional medical diagnostics tool.
2. **Minority Report:** The film “Minority Report” depicted futuristic user interfaces and gesture-based interactions, which have influenced the development of gesture-controlled interfaces and predictive analytics in technology and design.
3. **2001: A Space Odyssey:** Stanley Kubrick’s film “2001: A Space Odyssey” showcased advanced space technologies and artificial intelligence, influencing the design and development of space exploration technologies and robotics.
4. **Science Fiction Literature:** Science fiction literature, including the works of authors like Isaac Asimov, Arthur C. Clarke, and Philip K. Dick, has presented visionary concepts of robotics, artificial intelligence, and space exploration that continue to inspire real-world research and development in these areas.

Some Practical Applications of Design Fiction & Prototyping

Design fiction and prototyping have practical applications in shaping the future across various domains. Here are some practical applications of design fiction and prototyping:

1. **Idea Exploration:** Design fiction and prototyping can be used to rapidly explore and communicate new ideas and concepts. By creating tangible artifacts and narratives that depict possible futures, designers can engage stakeholders in envisioning and discussing potential innovations and scenarios. Even very simple prototypes can create thought-provoking and inspirational conversations about desirable futures.
2. **Scenario Planning:** Design fiction and prototyping can be employed in scenario planning to anticipate and prepare for potential future developments. By creating prototypes and narratives that illustrate different future scenarios and explore use cases and failure modes, organizations can better understand the implications of various outcomes and make informed decisions.
3. **User Experience Design:** Design fiction and prototyping can inform user experience design by allowing designers to envision and test future products and services. By creating prototypes and narratives that simulate future user interactions, designers can anticipate user needs and preferences, leading to the development of more user-centric solutions.
4. **Innovation and Research:** Design fiction and prototyping can drive innovation and research by inspiring new ideas and approaches that transcend specializations and technical focus areas. By creating speculative prototypes and narratives that address broader social and technical challenges, researchers and innovators can explore unconventional concepts and push the boundaries of what is possible.
5. **Policy and Governance:** Design fiction and prototyping can inform policy and governance by illustrating potential societal and ethical implications of emerging technologies. By creating artifacts and narratives that depict future scenarios, policymakers can better understand the potential impacts of their decisions and regulation and invite public participation, deliberation, and anticipatory governance.

Process and Aspects

Design fiction methods create speculative narratives and tangible artifacts to explore and communicate potential future scenarios. It often begins with envisioning a future world or technology and then crafting a story around it. This narrative is then used to inspire the creation of physical or digital artifacts that represent elements of the imagined future, such as prototypes, concept sketches, or even fictional products. The goal is to provoke discussion, explore possibilities, and stimulate innovative thinking about the impact of emerging technologies or societal changes.

Design fiction is not about predicting the future, but rather about exploring and understanding the implications of different possible futures. It is typically a collaborative and iterative process, involving multidisciplinary teams and engaging stakeholders in discussions about the implications of the imagined scenarios.

Key aspects of the design fiction process include:

1. **Storytelling:** Crafting compelling narratives that illustrate the context, challenges, and opportunities of the imagined future.
2. **Artifact creation:** Developing tangible representations of elements from the fictional world, such as prototypes, visualizations, or documents.
3. **Engagement:** Using the created artifacts and narratives to engage stakeholders, provoke discussions, and inspire new ideas.
4. **Iteration:** Refining the narratives and artifacts based on feedback and insights gained from the engagement process.

Key Steps

Here are some more detailed steps for doing design fiction or prototyping, as explored by the panelists:

1. **Identify the problem or opportunity:** Start by identifying the problem or opportunity that you want to explore. This could be a technological challenge, a societal issue, or a business opportunity.
2. **Imagine the future:** Envision a future world or scenario that addresses the problem or opportunity. This could involve imagining new technologies, social structures, or economic systems.

3. **Develop a narrative:** Craft a compelling narrative that illustrates the context, challenges, and opportunities of the imagined future. This could involve creating characters, settings, and plotlines that bring the future world to life.
4. **Create artifacts:** Develop tangible representations of elements from the fictional world, such as prototypes, visualizations, or documents. These artifacts should be designed to provoke discussion and inspire new ideas.
5. **Engage stakeholders:** Use the created artifacts and narratives to engage stakeholders, provoke discussions, and inspire new ideas. This could involve presenting the artifacts to a group of experts, conducting user testing, or hosting a workshop.
6. **Iterate and refine:** Refine the narratives and artifacts based on feedback and insights gained from the engagement process. This could involve making changes to the prototypes, adjusting the narrative, or exploring new scenarios.

Workshop

After the public event, we had a private workshop with 15 practitioners/consultants, experts, and science fiction writers that delved into this topic in more detail. Findings from the workshop are being incorporated into extended synthesis documents that will be released in the coming year.

Editorial Note

An initial draft of this summary was generated using [ChatPDF](#) from the transcript of the public event, and then significantly edited by the Applied Sci-Fi project team.