38 Design Fiction

Design fiction is the creation and use of real-seeming hypothetical objects, and other media, to explore imaginary narratives and contexts.

The key difference between design fiction and ordinary prototyping is that it is not a matter of exploring functionality, but imaginability: what might it be like if a certain thing existed, or if a particular cultural or historical situation were the case?

In design fiction, the designer typically produces an artifact or film showing part of a story-world as if that world were real. High-fidelity, polished, real-seeming representations of not-yet-possible or counterfactual propositions are a hallmark of the method. Some classic examples can be found in certain props or interactions from cinema, like the gestural interface in *Minority Report*.[1] This example also shows how such speculative and narrative exploration may help uncover possibilities for affecting design and change practically too: after the film's release, that interface, as well as other, then imaginary technologies from it, ended up being pursued in real life.[2] There are many instances of fictional representations influencing actual designs, sometimes years or decades later.[3]

A popular recent addition to the toolkit, design fiction can be connected to the longstanding practice of concept design (exemplified by the sleek "concept car" unveiled at an auto show, usually not intended for production). It is also related to an array of methodological developments around the exploration of imaginary contexts or longer-range futures than practical design for the "adjacent possible" traditionally considers, such as speculative design,[4] experiential futures,[5] worldbuilding,[6] and critical making.[7] Design fiction is a central example of discursive design, an area of practice where "the primary design intention is not utilitarian in the typical sense but rather to communicate particular ideas and to rouse reflection. The material language, traditions, and characteristics of design are employed for immaterial aims."[8]

For designers, this embrace of speculation involves relaxing one or more of the traditional human-centered design constraints of desirability, feasibility, and viability (or desirable, buildable, and profitable).[9] This opens up an enormous range of possibilities. If a designer can use design fiction to tackle the telling of just about any story imaginable, then she will want to focus careful attention on which stories to tell: not all such explorations are equally appropriate, generative, or useful. How far to push into territories different from the present—temporally, thematically, and narratively? The answer depends on factors including the nature of the design space (e.g., how fast it is changing); the context for the conversation (e.g., the purposes of enabling public debate or artistic exploration might require entirely different approaches from product development or organizational strategy), as well as the imaginative openness of the intended audience.

Chapter contribution by Stuart Candy

1. Bleecker, Julian. "Design Fiction: A Short Essay on Design Fact and Fiction." *Near-Future Laboratory.* (2009, 17 March).

2. McDowell, Alex. "Storytelling Shapes the Future." *Journal of Futures Studies* 23, no. 3 (2019): 105–112.

3. Shedroff, Nathan and Chris Noessel. *Make It So: Interaction Design Lessons from Science Fiction.* New York: Rosenfeld Media, 2012.

4. Dunne, Anthony and Fiona Raby. *Speculative Everything.* Cambridge, MA: MIT Press, 2013.

5. Candy, Stuart and Jake Dunagan. "Designing an Experiential Scenario" *Futures* 86 (2017): 136–153.

6. See note 2 above.

7. Hertz Garnet. What Is Critical Making? Current 07. 2016 http://current.ecad/ca/what-is-critical-making

8. Tharp, Bruce M. & Stephanie M Tharp. *Discursive Design: Critical, Speculative and Alternative Things.* Cambridge, MA: MIT Press, 2019.

9. Sterling, Bruce. *Design Fiction: Anticonventional Objects.* (2013, October 10) Wired.com. https://www.wired.com/2013/10/design-fiction-anticonventional-objects/

10. Candy, Stuart and Jeff Watson. *The Thing from the Future.* 2nd ed. [Card game.] Pittsburgh, PA/Los Angeles, CA: Situation Lab, 2018.

11. Candy, Stuart. "Gaming Futures Literacy" In: Riel Miller, *Transforming the Future: Anticipation in the 21st Century.* New York: Routledge/UNESCO, 2018.

Players from the NASA Jet Propulsion Laboratory use design fiction card game The Thing from the Future (2nd ed.)[10] at a workshop in May 2019, with contents modified to reflect their operating context, in order to scaffold imagination and generate future artifact ideas around possible space missions

Design Phase:

① ② ③ ④ ⑤

Image Courtesy of Dylan Vitone

Part of a design fiction project set in 2030, *U.S. Earth Force.*[11]

Project by Stuart Candy, commissioned by Institute for the Future (IFTF) and World Bank Climate Investment Funds (CIF).

Behavioral	Quantitative	**Innovative**	Exploratory	Participatory
Attitudinal	**Qualitative**	Adapted	**Generative**	Observational
		Traditional	Evaluative	Self reporting
				Expert review
				Design process

See also How Might We • Prototyping • Transition Design