Science fiction, Economy and Innovation

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Science fiction is often presented as a source of entertainment conveying an abundant technical imagination. It also seems that in recent years it has become a particularly relevant prospective tool in organizations with the managerial modes of design fiction, science fiction prototyping and speculative design, among others. Several dozen of these fictions tend to optimize the strategic and future visions of armies, companies, think tanks, and universities and are the subject of multiple analyses. Placed upstream of the innovation process, the use of science fiction makes it possible to prototype new objects, or to test the incursion of innovations into sociotechnical systems. Thus, this axis of the RNI will focus on five main directions:

- 1) How science fiction shapes organizations: This issue is particularly central, insofar as it seeks to define the modalities of contribution of the imaginary to the life of organizations, to the construction of their identity through storytelling, sensemaking, and the development of their strategic discourses. This research is based on the analysis of works of institutional science fiction, but also on the study of the discourses of actors creating and using them, in order to better understand the institutional mechanisms at work in the development and dissemination of these fictions with an innovative vocation. The research of Smith et al (2001) is at the origin of this issue aimed at determining the impact of the imaginary in the construction of meaning and visions of the future of organizations.
- 2) The history of science fiction and its relationship with innovations: This research aims to analyze different particularly visionary science fiction works and authors who have subsequently inspired engineers, researchers and entrepreneurs in their quest for revolutionary innovations. This sub-axis involves an analysis of the history of science fiction and relating it to the history of technosciences for about two centuries. Many studies on the origins of this imaginary allow for increased knowledge of the history of utopian technologies. The goal is to determine the nature of the joint influence between science and science fiction. We will question ourselves in line with Steinmueller (2017) on the relationships between science fiction and innovation.
- **3)** Science fiction, economics and management: This sub-axis will involve developing a theory of the contribution of science fiction to economic phenomena. This approach will be in line with Robert Shiller's narrative economy, which presents discourses as viruses that spread from one individual to another in the manner of an epidemic, causing major economic events. Thus, we will ask ourselves to what extent science fiction has participated in the last two centuries in the diffusion of technical concepts that have given rise to clusters of innovation, radical and incremental innovations.
- **4) Science fiction and prospective:** We see the imaginary as a way of knowing the future, and therefore as a decision-making tool. Such a sub-axis is interesting insofar as it raises the question of the use of science fiction for pragmatic purposes. Indeed, organizations

increasingly tend to use the imaginary to create new products upstream and downstream of the innovation process.

5) Science fiction and marketing: Marketing is a set of techniques aimed at satisfying a company's customers and marketing a good or service. This discipline can use science fiction for advertising purposes, but also to develop products upstream of the design process. Capturing the imagination of the general public to realize it thus ensures a certain future success. Marketing therefore has an interest in studying the SF imaginary, which is particularly influential on markets in technology sectors, in order to assess the discourses that could facilitate or hinder the incursion of a new product onto the market. Trévily (2023) has shown that the "dark utopias" of science fiction could have harmed the mass diffusion of the communicating home. Our research is currently focusing on the contribution and limits of science fiction in the acceptance or possible rejection of the metaverse by the general public.

Since awareness of the contribution of science fiction, and more broadly of the imaginary, to technical innovation is relatively recent in the business world (Zaccarato et al, 2024), it is highly likely that design still has a bright future ahead of it. The Gartner curve of innovative practices thus placed it in 2024 at the very beginning of a growth cycle that could last at least ten years. It is therefore appropriate to devote a research axis to this innovative practice, in order to understand its usefulness and its limits. We will also be able to propose optimization avenues and launch a reflection on the ethics of this creativity technique. Indeed, are all imaginaries always good to disclose? Some organizations could indeed turn out to be driven by the desire to realize certain science fiction nightmares for the purpose of economic enrichment or the conquest of military or political power. Others, on the contrary, will seek to realize technological utopias. We have named "hyperreal entrepreneurs" these industrialists who, like Elon Musk for the conquest of space and Mark Zuckerberg for the metaverse, seek to realize science fiction.

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