

Speculative Games: Games Envisioning Possible Futures

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Keywords

speculative games, science fiction, story-world database, foresight games, TRPG

EXTENDED ABSTRACT

Summarizing the findings of the Speculative Games Project, this paper presents an overview of the ways games tackle with possible futures and key principles for designing speculative games. The paper also summerizes earlier findings on how TRPGs may facilitate speculative play. The Speculative Games Project investigates speculative world-building and design in games, and how social, ethical, and philosophical implications of present-day scientific and technological discoveries, and social and environmental trends are projected in them. We identify speculative games broadly as games featuring plausible, fact-based, mid- and long-term speculative future scenarios. In this regard, while primarily focusing on extrapolations from current trends, we also evaluate visions emerging under conditions beyond contemporary relationships.

Games offer imaginative spaces to explore systemic dynamics, social trends, and technological trajectories shaping future societies (Kelly and Nardi, 2014). Coulton et al. (2016) argue that game design functions as a form of speculative design encouraging reflections on the plausible futures. World-building and narrative elements also play a major role, as representations of technologies and their socio-cultural effects are usually embedded to games through them (Baur, 2012; Wolf, 2013). Kunzelman (2022) proposes the term “mechanics of speculation” to describe the relationship between games, speculation, and science fiction. While seemingly futuristic scenarios may repeat contemporary anthropocentric or techno-optimistic ideas (op de Beke, 2020; Frelik, 2024), game play can also help players to envision futures which go beyond the extrapolations and reconceptualization of the current trends.

Proceedings of DiGRA 2025

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The ways in which games are utilized to envision futures can take multiple directions. Foresight games bring stakeholders together and generate opportunities of doing politics on alternative futures (Dator and Gaming, 2017). As Inayatullah (2017) and Rumore et al. (2016) note, such foresight games serve as safe spaces that reveal not only possible directions but also bottlenecks and roadblocks in dealing with local issues. Games designed to facilitate futures thinking on the other hand aim to encourage players to envision plural futures beyond their current daily lives, such as alternate reality games engaging players in immersive alternative futures (McGonigal, 2011). When designed as playful foresight tools, games can invite players to collaborate and compete in describing and telling stories about alternative futures (Candy, 2018). According to Vervoort (2018), such games help players not only in imagining futures but also gaining greater understanding of their own biases. Another mode games represent futures is acting as tech-demos simulating future technologies and offering a sandbox for anticipating societal impacts based on our current knowledge (Lambert et al., 2019). Games' portrayal of the future technologies can help us to better anticipate the potential impact of new innovations on society, the economy, and culture (López and Casado, 2023). Finally, as Fors and Kvist (2024) underline, commercial games can have notable impact on individuals' abilities to interpret and produce future visions by simply immersing them in fictional worlds which roots can be traced back to contemporary trends and events, even if they do not take an explicit position on them.

Uncertainty is key in understanding our relationship with the future. Rooney-Varga et al. (2018) argues that games as simulations should also acknowledge their uncertainties to transcend social and political barriers in persuading their players on the significance of their future projections. Similarly, according to Makai (2024), instead of trying to be realistic and scientifically accurate all the time, games should aim to contribute to discussions on the future as fictional experiments that generate thought-provoking discourses. This uncertainty should also allow players to take diverse directions, even ones considered problematic, subversive, controversial, deviant, or tasteless, in other words as dark-play (Linderoth and Mortensen, 2015). Dark-play allows players to explore problematic scenarios, such as contributing to climate crises by melting polar ice caps. Players do not need to act climate-friendly to learn from climate politics and their potential consequences. The freedom to experiment with cooperative or non-cooperative in-game decisions is central to fostering critical engagement with the future (Makai, 2024; Meya and Eisenack, 2018). Furthermore, games uniquely allow players to experience future worlds through subjective perspectives shaped by characters' goals, traits, and societal roles (Rumore et al., 2016). As Kunzelman (2022) points out, combinations of being a specific subject experiencing effects of future trends, together with a broader context of systemic changes can create scenarios both subjectivating and transforming players' interactions with the game and the world.

One position speculative games can take is being setting documents for potential futures, influenced by futurism and design fiction practices. Bendor's (2017) concept of "worldmaking interactions" proposes to hint at unarticulated or unfinished futures when creating scenarios for interaction, instead of placing users on a track towards them. Fry's (2022) "second-order design fictions" present complex socio-political conditions around an issue to encourage the exploration, modification, and recreation of multiple solutions instead of promoting one. Both worldmaking interactions and second-order design fictions bear parallels with "story-world databases", or TRPG components describing the status and properties of the story-world, which play a

major role in framing and shaping player experiences (Mochocki, 2021), which authoritative voice can encourage or discourage certain kinds of play (Cross 2012). However, they also act only as supportive materials in the processual world-building process of playing TRPGs (Zagal and Deterding, 2018; Mochocki, 2021). While story-world databases function as setting documents for potential futures, game masters' role in adapting or generating adventures parallels the role of the facilitator in foresight and future thinking games, and players have a subjective perspective with dark-play opportunities. Meaning, if set in plausible future settings, TRPGs can function as platforms for flexible interactions between systemic and subjective perspectives on the future setting. While game masters can explore systemic issues in their campaign settings, players can experience and experiment with their direct effects through their characters. Earlier Speculative Games Project case studies on *Shadowrun's* speculative vision of wide-spread XR (Sezen and Sezen, 2025A), *Cyberpunk's* normalized, hyper-capitalist cyborgization (Sezen and Sezen, 2025B), and *Hard-Wired Island's* neo-liberal space colonization (Sezen and Sezen, 2024), exemplify how speculative TRPGs can be designed as setting documents. Future studies on the game-play sessions and post-game reflections should be conducted to further explore the players' experience of playing speculative games.

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