

Your Move: Lessons Learned at The Interstices of Design, Gaming, And Futures

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When human beings create and share experiences designed to delight or amaze, they often end up transforming society in more dramatic ways than people focused on more utilitarian concerns (Johnson, 2016, p. 12).

In *Wonderland: How Play Made the Modern World*, Johnson maps an alternative history of innovation that focuses on how play has led to major societal shifts. This sentiment echoes the work of many scholars who have examined the ‘play’ function of human behavior as related to social organization (Huizinga, 1949), the creation of culture (Caillois, 2001), and building essential social and cognitive skills (Dewey, 1938). It may come as little surprise then that at the dawn of the printing press, second only to the Gutenberg Bible, the most popular printed book was Cessolis’s *The Game of Chess*, propelling the game into a global phenomenon that continues to exert an influence on a variety of spheres from strategic studies to computer science (Shenk, 2011).

Gaming and simulations have been used by futurists for decades, but there has been a veritable explosion of game-based and design-driven approaches and tools in recent years. Inclusive and accessible approaches to foresight are critical to the alternative futures method and theory as practiced at the “Manoa School.” (Dator, 2009; Jones, 1992). The indeterminate and open nature of a plurality of possible futures — “the future does not exist, but alternatives futures can and should be forecast...” (Dator, 1995) — makes seeking out diverse perspectives, political and ethical positions, and imaginaries a necessity for equitable and representative foresight (Inayatullah, 1998). This diversity of perspectives encourages the use of different media to communicate about futures, and we have found that different aspects of play and games — ambiguity, universality, and social creation — makes them a widely applicable mode of conducting futures-oriented research. In projects with governments, international agencies, and various civil society and educational organizations, we have made it a point to reinforce the necessity for more participatory modes of examining and/or exploring futures and action learning (Ramos, 2002). Our primary aim is not to design games and experiences *for* people, but rather to find dynamic and collaborative ways to design games and experiences *with* people.

Games are spaces of possibility, with participants navigating and acting according to the boundary conditions of a rule set (Salen & Zimmerman, 2004). It is the freedom of movement within this bounded space that excites and inspires playful activities. The act of play relies on these boundaries to refine its otherwise ambiguous nature — discerning both telos (purpose) and pathos (mood) from the parameters of the game (Sutton-Smith, 1997) — and those rules must be agreed upon by all participants (Huizinga, 1949; Fullerton, 2014). In terms of futures research, the world-building that accompanies gameplay (bounding a space with rules and entities) aligns nicely with the processes of creating an image of the future (Dator, 2009). Implicitly, games are social compacts, requiring an agreement between participants in order to be played. As such, they can be understood as negotiated systems of governance, and it is this aspect that ties our work in the co-development of game systems more closely to the goals of foresight. Working with governance institutions and agencies, we have found that game development allows our partners to imagine new modes of governing in regards to long-term futures.

In the past five years or so we have designed and developed a range of card-based tabletop games, an online gaming platform, numerous live action role-playing (LARP) experiences, and a hybrid game featuring mobile augmented reality and experiential futures — all aiming to evoke the deep-seated inclination that humans have toward play in various forms (Huizinga, 1949). For one project, part of a research grant on the relationship between communication technologies and power relations, specific data outputs were necessary; knowing this dramatically shaped the construction of *Gaming Futures*, a hybrid game featuring experiential scenarios and mobile augmented reality (Dator, Sweeney, Yee, & Rosa, 2013). There is a well-documented precedence for such games' efficacy in creating socially transformative experiences and generating collective intelligence (McGonigal, 2003, 2008). Such work has also inspired attempts at a more formal design language for ARGs or alternate reality games (Dena, 2007; Montola, Stenros, & Waern, 2009; Stewart, 2006), though constant evolution in this area has made consistent terminology elusive. For *Gaming Futures*, play centered on the exploration and deepening of four alternative futures, which were transcribed into one-act dramatic “experiential scenarios” (Candy, 2010), which the players acted out after navigating the city on a virtual pathway to learn about their specific scenario (cf. Walz, 2010; Alfrink, 2014). We developed a series of “street artifacts” built using mobile augmented reality, which is to say that we layered alternative futures for Honolulu over the present cityscape (Dator et al., 2013). (See Figure 1.)



Figure 1. Gaming Futures (Mapped locations for Set 1 Experiences) (2012)

This led to the emergence of an “experientially augmented toolset,” raising a number of key questions and insights for us as researchers, practitioners, and designers (Candy & Dunagan, 2017). Getting the language or phrasing right when designing a game is everything, and we are firm believers in iterative processes that enable this. Many of our projects have been dual-language, requiring careful attention to both translation of both critical terminology and cultural sensitivities. While working with the United Nations in what is now The Republic of North Macedonia, for example, we had to use the moniker “enhanced survey tool” rather than game; even “serious game” was to be avoided due to concerns that the government might not take to such playfulness.

Acquiring essential information about the target player group helps narrow design parameters and create a better overall experience. In line with insights from research into learning (Dewey, 1938; Gee, 2004), fostering a positive experience for players reinforces engagement and aids in their retention of information. As our work usually centers on designing engagements for specific audiences, we conduct a scoping mission with our partners before commencing the design process, focusing on who will be playing the game, and who will be looking at the results (Inayatullah, 2006). In the project *RIPPLE*, we knew that our players would be civil service professionals in Singapore, and results would be viewed by multiple futures research groups. As such, content and mechanics had to be designed with different audiences in mind, even if they shared the same general purpose.

Designing a complex versus a simple game is not a black or white matter. It is often the case that less is more, and we have seen what happens when the “expansion pack” mindset takes hold. One of the best metrics for measuring, or at least considering, a game’s complexity is *time*. A game that can be learned, or even played, in under 10 minutes clearly needs to be simple. We have benefited from designing games that use a simple pattern (card-tokens-card-repeat), and this cadence has allowed relatively complex data outputs to be generated for planning and policy development. For a project with the United Nations Development Programme in Tonga, we devised a game revolving around the placement of cards, but the first person to place a card exercised a great deal of power, so we used this to challenge gender norms by having a young female player commence the exercise.

Addressing game mechanics — the rules by which play is conducted, the formal definition of game objects, and their relationship to one another — must always be balanced with player experience (Koster, 2013). Experiences, however, are never homogeneous. They are subjective, anticipatory, reactive, and highly emotional, especially when dealing with futures-related content. As many of our designs feature an “in-casting” approach, we often give players a wide degree of latitude to push the boundaries of what is possible with regard to both content and form, but this does not suit all audiences and engagements (Dator, 2009). This is where game design, as with futures practice, is as much an art as a science. Game mechanics set things into motion (and also preclude some things from happening), and player actions are always accompanied by expectations as to how those mechanics function (Schell, 2014). When mechanics and expectations align well, players can engage in a high level of strategy, which is extremely useful for futures-oriented engagements (Salen & Zimmerman, 2004).

The only real way to find out if your design is operable — if the player experience is aligning with your goals; if it is producing the desired outputs and learning outcomes — is to test, refine, and repeat (Fullerton, 2014). Play with novices. Play with experts. Find fresh sets of eyes and ears. After each testing session, be prepared to rethink your approach, and leave your ego at the door. We have had to make major shifts pretty late in the design process, and while this is not desirable or advisable, it is sometimes necessary and can lead to a better play experience. We have benefited immensely from the insights of colleagues as well. Different configurations of players will likely reveal things that you would have never discovered on your own — exploits, surprises, and seemingly off-the-wall suggestions that could radically change the game (often for the better). We view the increasing number of engagements blending design, gaming, and futures as a move in the right direction.

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