

# Capturing hybridity: a comparative analysis of three hybrid digital boardgames

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boardgames, hybridity, digitisation, hybrid gameplay

## INTRODUCTION

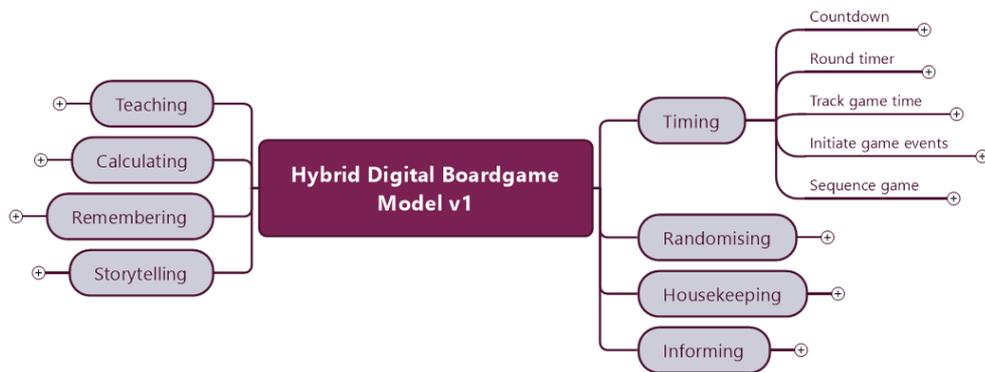
Although boardgames have existed as a cultural phenomenon for well over five thousand years, hybrid digital boardgames (HDBs) – which combine an app or website with material components – are a more recent development. As is seen with Role-Playing Games like Dungeons and Dragons, players of tabletop boardgames are increasingly showing interest in hybrid gameplay tools which combine digital and material components (Sidhu and Carter 2020). In this paper, we will use the Hybrid Digital Boardgame model (Rogerson, Sparrow and Gibbs, 2021) to examine and describe the properties of three popular modern HDBs – *The Search for Planet X* (O'Malley and Rosset 2020), *St Noire* (Bushnell and Ortiz 2019) and *X-COM: The Board Game* (Lang 2015).

We acknowledge that hybridity takes many forms. In prior work, the concept has previously been used to refer to hybridity of genre (e.g. to games that combine elements of American- and European-style games) (Arjoranta, Kankainen, and Nummenmaa 2016), to deep learning algorithms (Fong and Hong 2019), to games which can be played through a fully digital interface (Crawford, Gosling, and Light 2013), and to novel tangible controllers for digital games (Corso et al. 2015). Our work, however, positions hybrid boardgames as a novel form of artefact which is necessarily mediated through both digital and material interactions (Kaptelinin and Nardi 2012).

The HDB model comprises 41 functions performed by digital tools in HDBs. These are grouped into the eight domains of Timing, Randomising, Housekeeping, Informing, Storytelling, Remembering, Calculating, and Teaching (Rogerson, Sparrow and Gibbs, 2021). This paper will explore how each game uses selected functions within these domains to deliver a particular style of gameplay. For example, within the Timing domain (see Figure 1), the digital tool in *St Noire* – a skill for Amazon's Alexa voice assistant – uses a Countdown function to track the limited actions that are available to players. In *X-COM*, not only does the app restrict the time that players are permitted for performing each action (Round timer function), the game also tracks the times when the timer is paused (Track game time function). Moreover, the digital tool sequences and co-ordinates in-game player order in each round (Sequence game function). Contrasting with this is *The Search for Planet X*, where players use the game's physical components to track the progression of time within the game.

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**Figure 1 HDB Model, showing the functions in the Timing domain**

This form of analysis allows for comparison and contrasting of hybrid digital boardgames based not on their theme or on a single gameplay experience but on an empirical and robust model which describes the functions that such games implement. This work demonstrates that the model, as well as providing inspiration for game designers, can assist researchers in exploring and understanding the effects of digitisation within particular domains of the gameplay experience.

## ENDNOTES AND BIBLIOGRAPHY

### BIO

Melissa Rogerson is a lecturer in the School of Computing and Information Systems at The University of Melbourne. Her research examines the experience of playing boardgames in both physical and digital forms, as well as the characteristics and motivations of hobbyist boardgame players, designers, and developers, applying techniques from human-computer interaction to the study of games and play. She is currently researching the functions of digital tools in hybrid digital boardgames.

Lucy Sparrow is a PhD candidate in Human-Computer Interaction at The University of Melbourne. Focusing on ethics and technology, her primary research examines the overlapping norms and values surrounding online multiplayer games.

Martin Gibbs is a Professor in the School of Computing and Information Systems at The University of Melbourne, Australia. His research interests examine how people use a variety of interactive technologies (video games, community networks, mobile phones; etc) for convivial and sociable purposes in a variety of situations (intimate strong-tie relationships, local neighbourhoods, work-based occupational communities, online computer games); the social dynamics of digital and board games; and digital commemoration and the use of interactive technologies at end-of-life, including the future cemetery.

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