Chapter 3
Board Game Immersion

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Abstract This chapter explores the nature of immersion, both as a concept and an experience, and considers the applicability of this phenomenon to board games. Through the chapter, I will be challenging the application of the term immersion to all forms of engaging experience, as is often the case in the literature on digital games and, more recently, board games, to argue that we need to reserve the term to refer to the more specific experience of game world habitation. This chapter ends with a consideration of the key aspects of board game immersion that leads to a proposed definition of the phenomenon that is both clear and specific to the experience in question.

Keywords Board games · Immersion · Transportation · Agency · Board game experience

3.1 Introduction

There is something utterly captivating about the experience of inhabiting a fictional world, even if that experience is fleeting. I have argued (Calleja, 2006, 2007) that one of the main reasons that fictional worlds have been created, inscribed, and shared through time is exactly to enable such experiences of otherworld habitation. Different media tend to be stronger at enabling different aspects of this experience. The most intense instantiation of this scenario is a fictional reality that is experienced in such a complete manner as to make it virtually indistinguishable from physical reality, sometimes total immersion, which has been popularized in film through the Matrix (Wachowski & Wachowski, 1999) trilogy. The closest we have come to such an experience are segments of certain virtual reality (VR) applications and installations; the more widespread versions of which have been pushed by the digital game industry through the recent increase in uptake of VR headsets. While less

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perceptually intense and immediate in facilitating a sense of immersion, non-VR digital games, or at least those that take place in virtual environments that afford a sense of habitation, are the most widespread, easily accessible, and captivating manifestation of immersion to date.

The appeal of immersive experiences has made them one of the holy grails of game design, especially in mainstream titles that have the large enough budgets and sprawling development teams to create richly simulated, sprawling virtual worlds for players to inhabit. Needless to say, this is not the only thread in design nor the only deeply involving experiences digital games enable, but certainly one of the more sought-after and discussed forms. As I mentioned above, other media forms also enable a sense of being in a fictional world, but digital games are particularly strong in making the player feel both spatially present and kinesthetically active in the world. The possibility to act meaningfully while embodied in an avatar that is spatially located in the fictional world makes the sense of habitation particularly powerful. It is not hard to argue that such experiences are both more easily attained and sustained and more perceptually powerful than their equivalent, imagined versions in other media.

Outside of digital games, live action role-playing games (LARPs) and immersive theater performances also enable powerful experiences of fictional world habitation, in this case by transforming the physical space and its inhabitants into a fictional world and having player and non-player characters act out interactions consistent with their character in the world. LARPs tend to require a substantial amount of effort to set up from the organizers as well as from the players to participate. The number of people that can participate in a LARP is also limited, and thus they are not as widespread an enabler of fictional world habitation as digital games, or even VR applications.

RPGs, on the other hand, require less effort to set up and run. Their main draw tends to be exactly the potential for immersion through collective imagination and communication between players and the game masters that both create the world and the stories therein, as well as act out the characters players meet (Fine, 1983). RPGs enable a form of collective storytelling and improvised acting that, together with the game mechanics and the game master's interventions, create a living world that players inhabit together. While this requires everyone around the table to sustain the imagined world and the specific environment the players find themselves in, when this harmony of imaginative faculties occurs, players tend to experience what Gary Alan Fine (1983) has termed engrossment, or the sense of enacting a fantasy self and losing themselves in the game (4). Engrossment is Fine's term for role-playing-based immersion.

While RPGs are easier to set up and run than LARPs, they still require that, at least one player, the game master prepares the session and runs it. In the case of campaigns, a series of linked sessions that can last anywhere from a few weeks to many years (Calleja, 2022) the amount of work involved for the game master is considerable, especially if they build their own world and design their own scenarios. Board games, on the other hand, do not require any preparation or, for the most part, a game master taking the role of a facilitator rather than a player. The group

simply takes the components out of the box, sets the game up, and learns the rules, and they can enjoy the game together.

There is a vast variety of board games; some are completely abstract, such as Chess or Azul (Kiesling, 2017), while others contain sprawling fictional worlds that can take hundreds of hours to explore and complete, such as Gloomhaven (Childres, 2017) or Near and Far (Laukat, 2017) and a whole sea in between. Board games today simulate most imaginable situations and themes positioning the player in various perspectives ranging from an omniscient entity controlling the formation of planets to a society or people or an individual exploring a fictional world. As the experience of immersion, as I will be using the term here, is dependent on a fictional world that affords a sense of habitation through anchoring the player in a single entity at a time, not all board games have the potential to engender it. In fact, a relatively small portion of the board game universe allows for experiencing immersion. As Marie-Laure Ryan rightly argues, "For immersion to take place, the text must offer an expanse to be immersed within, and this expanse, in a blatantly mixed metaphor, is not an ocean but a textual world" (2015, p. 9).

By textual, Ryan is here referring to a designed work that is encoded in signs in a medium that can be interpreted by others, not simply alphanumeric, or verbal, text. Many board games do not contain a textual world at all. Just to give a few examples, Azul (Kiesling, 2017) or Codenames (Chvatil, 2015) does not contain a textual, fictional world beyond the most basic fictional wrapping that gives a bare-bones theme for the game divorced from its mechanics and gameplay. This is because this gameplay does not require a world to take place in, focusing instead on other operations such as solving puzzles or interaction socially with other players. Other games do represent space, but do not embody the player in a character, which makes it hard, if not impossible to have a sense of inhabiting the world.

Before I explore how this subset of the sprawling family of board games enable this experience, I will need to clarify what I mean by the term, as it has been one that has been rather problematic within both academic and industry discussions of the subject (Calleja, 2011). While still sparse, academic discussions of board game immersion are unfortunately rethreading the same challenges that surrounded decades of debates on digital game immersion. Given the fascination this topic has for players, designers, critics, and academics alike, it seems useful to address this confusion and forward a clear conception of board game immersion. The rest of this chapter will do just this. It starts with a brief overview of the concept as it has been used in virtual environments and digital games, along with an outline of its problematic dimensions. I will then explain why these problematic dimensions arose in the first place and then focus on research on immersion and board games, which is equally problematic in its conception of the experience. I will then work towards my own definition of immersion that is focused on the experience of fictional world habitation that the term was employed to refer to.

3.2 What Is Immersion?

In common parlance, the term immersion is either used in its literal sense of being submerged in a different material substrate, usually a body of liquid, or the metaphorical sense of being deeply mentally involved in an activity. Confusion around the usage of the term in relation to digital games—and now to board games—lies in the overlap of these two meanings of the term.

Janet Murray in Hamlet on the Holodeck (1998) adopted the first, literal sense of immersion (as submergence) and turned it into a metaphor for being transported into a simulated space—specifically, to account for the experience of virtual or fictional world habitation:

> The experience of being transported to an elaborately simulated place is pleasurable in itself, regardless of the fantasy content. We refer to this experience as immersion. Immersion is a metaphorical term derived from the physical experience of being submerged in water. We seek the same feeling from a psychologically immersive experience that we do from a plunge in the ocean or swimming pool: the sensation of being surrounded by a completely other reality, as different as water is from air, that takes over all of our attention, our whole perceptual apparatus. (p. 98)

Murray's formulation of immersion is the most-cited definition of the phenomenon across disciplines. Many players, academics, and designers use the term, as Murray does, to refer to the experience of fictional world habitation. However, one of the main sources of confusion about the term lies in the fact that others use the second meaning of the term, employing immersion to signify deep involvement in a medium or activity. To complicate matters further, the habitation sense of immersion requires deep involvement, but the latter only serves as a prerequisite for the former. A game of Azul (Kiesling, 2017) might capture my attention and involve me deeply, but it has no fictional world to transport me to, and thus I cannot experience immersion, as Murray (1998) or Ryan (2015) described it.

To illustrate the point, let's consider a board game that does afford the experience of immersion in its fictional world habitation sense: Captain Sonar (Fraga & Lemonnier, 2016). In Captain Sonar, two teams of up to four players each sit on either side of a dividing screen. Each player takes on a role as one of the specialized crew of a submarine: Captain, Chief Mate, Radio Operator, and Engineer. Each role involves its own mini-game that links to the others. Together, players navigate the submarine around the game area, trying to locate and shoot down the enemy submarine in real time. Captain Sonar has the ability to make players feel as if they are in the command room of a submarine and thus experience a sense of immersion in its fictional world. For me to have this experience, I first need to have learnt the game mechanics, so that I can interact with the game system and other players meaningfully. In order to do this, I must first pay attention to the game enough for me to involve myself in the relevant forms of involvement. In the case of Captain Sonar, I direct my attention to all the involvement forms outlined, until I have internalized its game play. Given the considerable cognitive load this involves, I am most likely deeply involved in the game. I will use the term involvement to refer

to this part of the experience since it is a cleaner and more accurate term that is consistent across nominal and specialist uses within fields that deal with human experience, like psychology. We can easily communicate the intensity of involvement—that is, the amount of attentional resources I am dedicating to the game—simply by stating the degree through adjectives such as high/low or deep/shallow. However, a higher degree of involvement does not automatically result in immersion. Just because I am deeply involved in the game does not necessarily mean that I feel immersed in the game world. That has the potential to occur if the process of playing the game allows me to generate an emergent narrative that roots me in the space of the game. Given that immersion has a more specific sense of simulated or fictional world habitation, I will reserve the term for that experience.

If we use immersion to refer to both the Azul and Captain Sonar experiences, we are going to have a hard time understanding what we mean by the term, resulting in conceptual confusion that undermines both our understanding the experience of fictional world habitation and designing for it. To make matters worse, the two senses of the term are often used interchangeably, making it hard, if not impossible, to figure out what phenomenon is being discussed. While one would expect such looseness of terms in general conversations on the topic, especially when it is such a subjective and ephemeral experience, it is surprising that such confusion also exists in academic work on the subject.

A popular paper on immersion written by Laura Ermi and Frans Mäyrä (2005), for example, starts by using the more specific formulation of immersion as habitation, citing Murray's conception, and then confusingly switches to its more general sense of involvement. This switch happens because they base their resultant model of immersion on interviews with children playing games. The research participants' interpretation of the term is obviously not informed by research or analysis, representing instead a general understanding of the term. The problem here is that Ermi and Mäyrä set off with an investigation of the experience of immersion as transportation outlined by Murray, and then end up defining the term as it is used colloquially, rather than the specific experience itself.

Ermi and Mäyrä acknowledge the variety of experiential forms present in gameplay by providing a multidimensional model based on three modes of immersion: sensory, challenge based, and imaginative. They hold that sensory immersion relates to engagement with the representational, audiovisual layer of games. Challenge-based immersion stems from the employment of both mental and motor skills in overcoming challenges presented by the game. Imaginative immersion seems to be a catchall category that encompasses all types of imaginative activity directed towards a game, from identification with a character to engagement with the narrative and game world. Given that Ermi and Mäyrä interpret immersion as a general form of involvement, it's worth noting that these categories describe various modes of involvement, not modes of inhabiting game environments.

Similarly, Brown and Cairns (2004) claim that the term immersion should be reserved for the "intuitive use of the word" (p. 1298), that is, to "describe the degree of involvement with a game" (p. 1298). This is a curious path to take, given that the term had already accumulated a more specific meaning in a number of fields at the

time they wrote their paper (Ijsselsteijn & Riva, 2003; Laurel, 1991; Murray, 1998; Ryan, 2001; Slater, 2003; Waterworth & Waterworth, 2003; Witmer & Singer, 1998). This adherence to the more general sense of the term as involvement is rather puzzling, if not counterproductive, since the more intuitive and clear terms to use would be literal ones such as involvement or engagement, not a metaphorical one like immersion. As Marie-Laure Ryan explains, immersion has been adopted so widely that it has lost its specific conceptual meaning:

> The term immersion has become so popular in contemporary culture that people tend to use it to describe any kind of intensely pleasurable artistic experience or any absorbing activity. In this usage, we can be immersed in a crossword puzzle as well as a novel, in the writing of a computer program as well as in playing the violin. Here, however, I would like to single out and describe a specific type of immersion, one that presupposes an imaginative relationship to a world projected by a text. (Ryan, 2015, p. 9)

Like Ermi and Mäyrä (2005), Brown and Cairns also base their model of immersion on interviews carried out with players, asking them what they understood by the term immersion. The resulting data is a snapshot of what players mean by the term immersion not an investigation of a particular experiential phenomenon. The problem arises when Brown and Cairns use the accumulated data to claim that they have mapped the actual experiential phenomenon and forward a model that claims to explain the experience.

Many studies that are aimed at clarifying the nature of immersion suffer from this lack of distinction between popular and technical uses of the term, expecting their participants to explain the meaning of a term that is an academic conceptual tool that helps us understand an ephemeral yet compelling experience. If a researcher asks a nonacademically informed participant to report their level of immersion in a game and then asks them what they mean by immersion, they cannot expect the participant to give a solution to understanding the experiential phenomenon being investigated. Instead, what they might learn about is what that specific participant, within their specific social and cultural context, understands by the term immersion. What is being explored is an individual's understanding of the term in its common, nonacademic, and nonspecialist sense, not the experience that such specialist terms were adopted to signify in the first place!

More recently, Timea Farkas et al. (2020) take a similar approach to Brown and Cairns in examining board game immersion. The aim of their paper is to "construct a theory describing how board gamers experience immersion" (para. 21). Farkas et al. base their model of immersion on interviews with five players and analyze online forums where immersion was discussed. Unsurprisingly, they found that players understood immersion in very different ways and proceeded to group different interpretations of immersion into five categories: engrossment, contextual engrossment, embodiment, contextual submergence, and submergence. These arbitrarily named categories are rather confusing, given that each of them refers to different aspects of board game involvement. Engrossment refers to involvement in problem solving, which the researchers characterize as the game's challenge. Contextual engrossment refers to engagement with the game challenge, informed by the game's fiction. Embodiment refers to the game's ludic challenges combined with

the role-playing aspect of the game. Here, the player feels like they are a character in the world. As such, what Farkas et al. refer to as embodiment is similar to engrossment, the character frame of RPG involvement described by Gary Alan Fine (1983), and has some overlap with the more specific sense of immersion I am using here. Next, we have contextual submergence, which describes engagement with the game's fiction and narrative, without needing to be present as active agents in the game world. Finally, submergence refers to involvement with narrative that is written into the game by the designers, at times in a passive way. Farkas et al. clarify that this form of immersion can occur without the player acting in the game world at all, only taking on the role of a passive spectator. Farkas et al. plot these categories of immersion along a continuum ranging from engrossment, and thus involvement with the game's mechanics, to submergence, or engagement with scripted narrative. What I am calling immersion in the middle of these two.

Aside from embodiment which aligns with the more specific sense of immersion I am adopting, there are already clearer existing terms to refer to the experiences pertaining to each of Farkas et al.'s categories. If engrossment is all about decisions relating to the game rules and mechanics, it would be clearer to label it as such. More problematically, as I have already pointed out, engrossment already has a specific and widely cited meaning related to role-playing and game world habitation, as established in the work (1983). Submergence relates specifically to pre-written, or scripted, narrative, and it would be much clearer to describe it as a form of narrative involvement. The fact that Farkas et al. claim that submergence is a form of immersion through narrative that can be experienced without even playing the game is even more problematic. Spectating a game rather than having the potential to act within it involves an altogether different form of engagement. As over two decades of research in game studies has shown, the set of relations between an object and an audience is of an altogether different type than that which characterizes engagement with cybertexts, of which board games are a part. Finally, if we had to take the model presented by Farkas et al. as a complete model of involvement, it would still be lacking, ignoring a series of key forms of involvement such as, among others, collaboration, competition and togetherness, materiality, and emotional affect.

Like Ermi and Mäyrä (2005) and Brown and Cairns (2004) before them, Farkas et al. (2020) perform a survey of interpretations of the term and then go on to claim that they are describing the experience that the term signifies. In so doing, they relegate the term immersion to its general, broad use as a synonym for engagement:

> Based on our findings, many players' experiences could be defined as engagement as opposed to immersion. However, as found by Denisova et al., these terminologies overlap when defined by video game players also. We therefore accept engagement as a form of immersion. (para. 71)

Problematically, Farkas et al. collapse immersion, in the specific sense of the experience of fictional world habitation, into the far more general sense of involvement.

Sarah Lynne Bowman (2018) similarly aims to establish a model of immersion, this time more specifically for tabletop role-playing games. Like the above theorists, she conceives of immersion as a form of engagement or involvement. While Bowman acknowledges the problematic nature of conceptualizations of immersion, and briefly describes the relationship of absorption, engagement, and involvement to immersion, she does not clarify how these synonymous terms are different from immersion. Bowman's work is particularly problematic as the model of immersion she proposes is based on my Player Involvement Model (Calleja, 2011) in all but one of the dimensions of involvement, and conflates immersion with involvement, when the entirety of the book where the model is outlined stresses the importance of distinguishing between involvement and immersion. Bowman starts each section of her model by describing her version of one of the dimensions in my involvement model as an equivalent type of immersion. Aside from the problematic nature of mis-representing others' work, it is worrying that over a decade of discussions around the problematic nature of immersion, researchers like Farkas et al. and Bowman are still using terms that refer to the general direction of attention towards an activity like absorption or involvement, with immersion, a term that has more specific meaning within the fields these authors are contributing to.

It is crucial for researchers seeking to deepen our understanding of player experience in both digital and analogue games, to distinguish between involvement (or its synonyms engagement and absorption) and immersion. Immersion refers to a particular type of experience that is not adequately captured by terms like involvement. Immersion is neither equivalent to attention nor a form of involvement per se, but an amalgamation of various involvement forms, with the requirement of aligning the player with a character in a game world that affords habitation. In the following sections, I will forward my own conception of board game immersion that highlights the specific experience of fictional world habitation the term was initially recruited to signify.

3.3 Defining Board Game Immersion

Now that I have given a brief outline of the challenges of immersion as a concept, I will move on to considering the experience of immersion in board games in order to arrive at a working definition. In the rest of the chapter, I will be using immersion to refer to the experience of being in, or inhabiting, the fictional world of a game, not the more general sense of immersion as deep absorption, or involvement.

Board game immersion is a challenge experience to conceptualize as it lies somewhere between the experience of immersion afforded by digital games (or at least those that enable such an experience—not all do) and the sense of transportation in literary works. In In-Game (Calleja, 2011), I argued that the experience of fictional world habitation enabled by virtual environments, and thus digital games, is qualitatively different from the imagined sense of being in a fictional world afforded by non-ergodic media like film and literature, due to the fact that the player is

spatially and agentially anchored within the fictional world through the avatar in a way that is not just imagined by the player, as is the case with film and literature, but is acknowledged by the system and other players within the simulated world. This is not just a difference of intensity of experience, but of the type of experience altogether. Board games are in between the experience of transportation made possible by literature and film and the experience of perceptual and imaginative immersion made possible by digital games. Like digital games, board games are cybertexts where a mechanical system upholds the fictional reality beyond the imagination of the player or players involved, and where interactions with that world occur in a feedback loop with it. On the other hand, unlike digital games, the habitation of the fictional world, the players navigation thereof, and interactions and events therein are animated by the players' imagination in interaction with the game mechanics, physical components, artwork, narrative, and communication with other players. Thus, like digital games, the fictional world is not just represented, as is the case with non-ergodic media, but simulated, but the software that runs this simulation, so to speak, is the players' collective consciousnesses guided by the elements that make up the board game.

In my distinction between ergodic (digital and analogue games) and non-ergodic media (film and literature, among others), I have used the term transportation to refer to the imagined sense of inhabiting a fictional world where we cannot exert agency in. This term is a useful one to keep in mind, as it elucidates the difference between imagining being in a world and being in a feedback loop with a systemically upheld world. The concept of transportation was coined by Richard Gerrig in his book titled *Experiencing Narrative Worlds* (Gerrig, 1998). Here Gerrig uses the metaphor of transportation to refer to the literary equivalent to immersion. Gerrig describes transportation as the reader's movement from what he calls the world of origin to an otherworld projected by the text. The reader performs actions in their imagination in that world and returns back to the world of origin. While Gerrig acknowledges the active role of the reader, the actions he describes the reader doing are not equivalent to actions that change the state of the world in question, since the literary worlds he is focusing on do not have a mechanical structure that can be reconfigured, as is the case with cybertexts like digital games, board games, or RPGs. What he is referring to with actions is thus the process of decoding the text, not performing within the world.

Gerrig's concept of transportation is only useful where games are concerned to differentiate between games that invite us to imagine inhabiting the world without being embodied within that space or having the system acknowledge our presence, and those that do. An example of the former would be a football management game where we can imagine ourselves as the manager of the team having talks with the team, going home late to our families due to the stress of the job etc., without the system actually simulating that spatially and agentially. In a game like Fallout 4 (Bethesda Game Studios, 2015), on the other hand, we don't simply imagine ourselves walking around a post-apocalyptic wasteland looking for bottlecaps to buy a shiny new pistol, but can actually navigate the virtual space of the world and interact with it and its inhabitants to meet that goal. The system recognizes our

presence within it and our agency is bound to the avatar that we control, allowing us to take meaningful actions within the world, and thus reconfiguring its makeup. The first is an example of transportation in a digital game, and the second an example of immersion. While the sense of being in a board game world is facilitated by the imagination in similar ways to transportation, the fictional engagement is interwoven with the mechanical system and with other players' actions. The presence of a feedback loop between mind and fictional world creates a different configuration of mediated experience than one where the reader is solely an interpreter of a fictional world that cannot be reconfigured and, importantly, which does not allow for an exertion of agency within it.

In my exploration of immersion, I keep referring to the concept of agency. As this is a crucial part of the experience, it is worth taking a moment to clarify it. By agency I mean the ability to perform actions through game mechanics that affect the state of the game world and its inhabitants. Janet Murray (1998) defines agency as the "satisfying power to take meaningful action and see the results of our decisions and choices" (p. 126). While we often do see the results of our decisions and choices in board games, this is not always the case. Some games ask us to take certain decisions and then record our choices in some ways or other, like placing a face-down card into a particular deck without looking at it, as happens after certain narrative decisions in Detective: A Modern Crime Board Game (Przemyslaw et al., 2018) or The King's Dilemma (Hach & Silva, 2019). There are also consequences our actions might have for other players that we might not be aware of, such as when I select an action that blocks other players from taking it in a worker-placement game. I will thus use Anthony Giddens' (1984) definition of agency here:

> Agency refers not to the intentions people have in doing things but to their capability of doing those things in the first place (which is why agency implies power: cf. Oxford English Dictionary definition of an agent, as "one who exerts power or produces an effect"). Agency concerns events of which an individual is the perpetrator in the sense that the individual could, at any phase in a given sequence of conduct, have acted differently. Whatever happened would not have happened if that individual had not intervened. (p. 9)

Giddens defines agency according to the ability to act, decoupling this ability from the consequences thereof, which can be both unknown and unintended. C. Thi Nguyen, in his book on agency in games titled Games: Agency as Art (2020), argues that games are a method for capturing forms of agency and sharing them with others. In so doing, Nguyen argues that games give us a library of agencies, allowing us to develop ourselves by practicing them in a collective, social manner.

Board games that afford immersion thus provide a particular subset of the agential library: forms of agency mediated through a character in a game world. The types of mechanics, components, and other elements that structure the game fiction in such games thus revolve around this form of embodied agency. The social aspect of this agential experimentation and learning is an important part of this process. Board game agency is enhanced when other players are involved in the same game world, both because this reinforces the sense that the game world has a life of its own and because the player is aware that their actions affect others—and that they, in turn, are affected by other players' actions.

This exertion of agency reconfigures the world both for the acting player and others in that world, which creates a very different sense of being in a fictional world than what is possible in media like literature and film. There is a fundamental difference between the experience of imagining oneself within an imagined scene and being able to act within that imagined scene in a way that is systemically validated, with mechanical consequences for one's actions. The presence of others within that mechanically structured fictional world further strengthens our sense of habitation, since the imagined reality is shared and upheld by other minds. Sharing a common fiction requires a negotiation of, and agreement on, what is going on in that fictional world and how actions taken within it will change the state of that fictional world not just for the actor but also for others inhabiting it. The mechanical system acts as a mediator of this negotiation, serving as a form of reality engine that establishes how things function in that world.

Gathering the threads discussed so far in this chapter, we can now formulate a definition of board game immersion as follows:

> Board game immersion is the imagined habitation of a mechanically structured, spatially represented fictional world through embodiment in a single entity that is able to exert agency in accordance with the rules of that world.

3.4 Conclusion

Several designers interviewed for a book on board game experience and design (Calleja, forthcoming) commented on the creation of immersive experience as being a source of great satisfaction. This is not to say that games which afford the experience of immersion are inherently better than games that do not. Board games are incredibly varied in nature and they afford a variety of different experiences. In many ways, though, the design of board games that not only afford, but try to create rich immersive experiences, is its own beast, and a challenging one at that. Generating the sort of mental images in players' minds that make the game world feel alive and rich with the potential for creating an ongoing narrative is tough. Doing so while embodying a player in a single entity tends to be much harder than aligning them with a group or nation, since the latter are more abstracted positions that are less demanding in terms of the tight weave between mechanics, fiction, and narrative. Embodying a player in the position of a single character becomes more and more challenging the more finely one aims to simulate time and space. If time is represented as passing minutes or seconds at a time, the mental images in players' minds will tend to be richer as long as the rules do not get in the way and the mechanics and fiction remain consistent with each other. However, this becomes harder to achieve the more actions need to be simulated to give the players a convincing sense of agency in a particular represented situation. The more fine-grained the simulation needs to be, the more rules the designer needs to implement to generate those mental images, making the game rules harder to internalize and the game turns more complex, taking up attentional resources from the formation of

mental images in the player's minds. The tightness of representation between fiction and mechanics also becomes harder to sustain as players are more likely to experience inconsistencies between them as jarring than, for example, a game where turns represent weeks or months in the life of a nation.

A system which has a strong potential for providing a sense of immersion is one which has streamlined rules that are easy to learn, or at least intuitive enough to remember and put into play once learned, which give players a great sense of agency while generating a rich fiction and emergent narrative, all without creating clashes between mechanics and fiction, or preventing players from acting in the ways they would want to act in that particular situation in the fictional world. A great example of this is X-Wing (Little, 2012). X-Wing creates a sense of immersion so effectively because the mechanics simulate the fiction in an intuitive manner, while still giving interesting choices and zooming in to time in slow motion. X-Wing simulates what players expect from piloting a spaceship, mostly informed by movies and digital games, and it does this with a high degree of imaginative fidelity.

Immersion is not afforded by all board games. In fact, the number of board games that have the potential to create this particular experience are in the minority when one considers the totality of board game titles that are published every year. Nevertheless, the experience is one which is highly sought after and many designers aim to create a focused sense of immersion in a particular situation or slice of fictional reality in the game world.

Board games that afford immersion do so by simulating a more focused situation or slice of a game world, ranging from the specificity of a contained micro-experience like drowning in Deep Sea Adventure (Sasaki & Sasaki, 2014) to the intensity of collaboratively piloting a submarine in Captain Sonar (Fraga & Lemonnier, 2016), all the way to the sprawling adventures of Gloomhaven's (Childres, 2017) fantasy world. As Gary Alan Fine argued in Shared Fantasy (1983), the sense of inhabiting a fictional world supported by a mechanical system and shared with other players is often fleeting and requiring effort to achieve, but a magical and unique experience that players will seek and return to time and time again.

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