The Experience of Flow in Hobby Board Games

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Much has been written about the role of the state of *flow* in the experience of playing video games and exploring electronic hypertexts.[1] Flow, first defined by Mihaly Csikszentmihalyi as a deeply pleasurable state of heightened focus on a challenging activity,

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1. See Katherine Isbister.*How Games Move Us: Emotion by Design*. Cambridge, MA: MIT Press, 2016, pp. 4-9; Katie Salen and Eric Zimmerman. *Rules of Play: Game Design Fundamentals*. Cambridge, MA: MIT Press, 2003, pp. 336-339; Raph Koster. *A Theory of Fun for Game Design.* Sebastopol, CA: O'Reilly Press, 2013, pp. 98-100; Douglas J. Yellowlees and Andrew Hargadon. "The Pleasures of Immersion and Interaction: Schemas, Scripts, and The Fifth Business." *First Person: New Media as Story, Performance, and Games.* Noah Wardrip-Fruin and Pat Harrigan. Cambridge, MA: MIT Press, 2004, pp. 192-206, here pp. 202-204; Michael Nitsche. *Video Game Spaces: Image, Play, and Structure in 3D Worlds*. Cambridge, MA: MIT Press, 2008, pp. 204-205; Brian Upton. *The Aesthetic of Play.* Cambridge, MA: MIT Press, 2015, pp. 97-100; More generally, see: Alasdair G. Thin. "Flow experience and mood states while playing body movement-controlled video games." *Games and Culture* 6. (September 2011), pp. 414-428; David Ciccoricco. "Narrative, cognition, and the flow of *Mirror's Edge*." *Games and Culture* 7 (July 2012), pp. 263-280; Sean Baron. "Cognitive Flow: The Psychology of Great Game Design." (2012); Jenova Chen. *Flow in Games*. MFA Thesis.

seems to perfectly capture the almost hypnotic sense of immersion that high quality video games can arouse in their players.

And while flow certainly is not the key to interpreting all types of gratification that can be derived from video games, it still offers a credible description of at least part of the video gaming experience,[2] justifying the large application of the concept in game studies of the last two decades. Yet the time has come for an extension of the study of flow states to the world of analog board games, and of hobby board games in particular.

We certainly live in an age of Renaissance for the modern board game community and industry. Although these are thriving, game studies as a field has not nearly caught up yet, with critical essays specifically devoted to analog games still few and far between.[3] Video games certainly still lead the world of gaming at large and will continue to do so. They do not, however, monolithically dominate game practices and culture as they did in the 1990s and early 2000s. This new state of things makes it desirable to integrate video game studies with a serious consideration of analog gaming,

2. Jesper Juul. *Half-Real: Video Games between Real Rules and Fictional Worlds.* Cambridge, MA: MIT Press, 2005, pg. 113.
3. I am not talking here about manuals of game design, which routinely cover both mechanics of analog and digital games. What I am describing is the dearth of applied scholarly reflections on the unique characteristics of modern tabletop gaming. Notable exceptions are texts devoted to board games only like Drew Davidson and Greg Costikyan, eds. *Tabletop: Analog Game Design.* Pittsburgh, PA: ETC Press, 2011; Mike Selinker, ed. *Kobold Guide to Board Game Design.* Boulder, CO: Kobold Press, 2011; Stewart Woods. *Eurogames.* Jefferson, NC: McFarland, 2012; and Paul Booth. *Game Play: Paratextuality in Contemporary Board Games.* New York: Bloomsbury, 2015. Considerable attention to analog gaming can also be found in Mary Flanagan. *Critical Play: Radical Game Design.* Cambridge, MA: MIT Press, 2009; Miguel Sicart. *Play Matters.* Cambridge, MA: MIT Press, 2014; Greg Costikyan. *Uncertainty in Games.* Cambridge, MA: MIT Press, 2013; John Sharp. *Works of Game: On the Aesthetics of Games and Art.* Cambridge, MA: MIT Press, 2015.

in an attempt to better describe the varied and multifaceted cultural landscape of gaming of the present.

Studying the presence of flow in hobby board games enriches our understanding of recent game practices and helps us explain the expansion of the hobby by giving us a more detailed picture of board games becoming of ever higher quality. Board games are indeed increasing in quality, partially because modern hobby board games more and more often succeed at stimulating flow states of optimal experience in their players.

Flow in Chess

That board games create flow should come as no surprise. Among activities that Csikszentmihalyi mentioned as particularly prone to inducing flow states, board games figure often and prominently, usually through the privileged example of chess. Playing games is somehow ranked higher than other activities such as rock climbing or motorbike riding. For Csikszentmihalyi, "games are obvious flow activities, and play is the flow activity *par excellence.*"[4] Games become not just one case among many, but an *ideal* model for flow activities. The intrinsic component of "fun" in games also gives them a privileged place among flow-inducing activities, because "the key element of an optimal experience is that it is an end in itself,"[5] and games are often played solely for the pleasure of playing.[6] Obviously

4. Mihaly Csikszentmihalyi. *Beyond Boredom and Anxiety: Experiencing Flow in Work and Play*. Hoboken, NJ: Jossey-Bass, 2000, pp. 36–37

5. Mihaly Csikszentmihalyi. *Flow: The Psychology of Optimal Experience*. New York: Harper, 2008, p. 67.

6. For this reason, Csikszentmihalyi mentions games to explain the difference between his crucial concepts of autotelic and exotelic motivation. Mihaly Csikszentmihalyi. *Finding Flow: The Psychology of Engagement with Everyday Life*. New York: Basic Books, 1998, p. 117.

not all games have the same potential to generate flow in the consciousness of the players. In Csikszentmihalyi's opinion, chess is a game that works well for this purpose, mainly due to a long tradition that has honed each element of the design through innumerable confrontations over the centuries. Countless players of chess have all contributed to make the game a flow-machine of superb terseness, to the point that the design can now be used to understand *all* flow activities:

> The example of chess is instructive because it begins to show the potential for structuring flow into other activities. Chess itself has evolved over a period of well over a thousand years. During this time, it has been given a form which provides a variety of challenges, and hence of enjoyment.[7]

Consequently, "the structure of chess is well-adapted to induce the flow experience. The rules, equipment, and organization of the game provide a clear-cut separation between 'normal life' and the activity,"[8] and "although the *content* of chess experiences is unique to that game, the *modality* of experience is shared with other intrinsically rewarding experiences."[9] My study expands the flow model of chess to include modern hobby games.

My own experience as a committed hobby board gamer inspired such an investigation. As soon as I became familiar with Csikszentmihalyi's concept of flow, I recognized how it perfectly captured a state I had experienced countless times. Looking for independent confirmation, I started a discussion thread on the topic in a forum of the website BoardGameGeek (BGG), where I linked an article containing a brief

7. Csikszentmihalyi, *Beyond Boredom,* p. 57
8. Csikszentmihalyi, *Beyond Boredom*, p. 65.
9. Csikszentmihalyi, *Beyond Boredom*, p. 72.

overview of the concept of flow and asked if other players of modern board games had ever experienced it. Respondents confirmed that the experience of flow does indeed occur among hobby board gamers, and that it can be of great intensity. BGG user Candace Mercer (candio) has even reported having used board games consistently to achieve flow as a form of self-medication for chronic pain:

> I have severe chronic fibromyalgia pain and games can definitely take me away from my pain state. This also involves gateway theory of pain control, where you substitute a "larger" more "important" stimulus than the pain signal … I can be in huge pain before and after a game, but if it is a good, engrossing game w[ith] little downtime, my pain will lose its dominance.[10]

Hobby Board Games / Hobby Board Gamers

To understand why there may be a special predisposition to flow in modern hobby board gaming, we should clarify what a *hobby board game* and a *hobby board gamer* are. With the expression "hobby board gamer," I describe a person who considers playing board games as a hobby of major importance in their life. This is someone who actively pursues opportunities to play games, organizes and/or attends events specifically devoted to board games, has one or more regular groups of equally committed friends to play games with, stays informed about the developments in the industry, and has the feeling of belonging to a community of peers. The hobby board gamer visits BGG at least once every couple of days; knows the creative philosophies of board game publishers and designers; reads, watches, or listens to reviews of board games with some regularity; travels to board game conventions or –– equally important –– regrets not being able to.

10. https://boardgamegeek.com/article/22195504#22195504

A general profile of the hobby gamer is key to defining what "hobby games" are. Rarely would a hobby gamer of the kind described above commit much time, energy, or money to commercial games like *Jenga* (1983), *Operation* (1965), or *Clue* (1950). In contrast, I define hobby board games pragmatically as *the type of game that hobby board gamers mainly play and enjoy*. This community-defined standard is confirmed by user rankings on BGG, itself a community for hobby board gamers rather than traditional or casual board gamers. Games that receive the highest rankings from the regular users of the site include *Pandemic: Legacy* (2015), *Twilight Struggle* (2005), *Terra Mystica* (2012), *Caverna* (2013), *Through the Ages* (2006), *Agricola* (2007), *Puerto Rico* (2002), *Mage Knight Board Game* (2011), *Android: Netrunner* (2012), *Star Wars: Imperial Assault* (2014), *The Castles of Burgundy* (2011), *War of the Ring* (2004), and *Eclipse* (2011) – none of which are casual or party games that non-hobby board gamers tend to play. A visit to the board game shelves of any large retail store would confirm how little overlap exists between games such as the ones mentioned above –– mainly enjoyed by hobby board gamers –– and casual board games for the mass market. The overlap is also minimal between games for hobby gamers and traditional games. A game as widely played as poker is only ranked 749th on BGG as of this writing, and even chess, possibly the most famous game of all time, ranks merely 361st.[11] These rankings show that taste and practices among hobby board gamers differ considerably from those of the general population. In this sense, we can confirm that hobby board games define hobby board gamers, and vice versa.

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11. These rankings are constantly updated based on the input provided by the users of the site. By the time you read this essay, poker and chess will almost certainly have shifted to somewhere else in the rankings, but not, I believe, to the point of contradicting my general point.

But why study these games and gamers and not others? The reason is two-fold. First, it is of interest to take a look at the recent and unexplored environment of hobby board gaming to see if it has retained the potential for flow that chess –– the only game consistently mentioned by Csikszentmihalyi –– clearly has. Second, it is precisely in the deep connection between hobby board games and hobby board gamers that we can find the maximum potential for experiences of flow in modern analog gaming.

Hobby board gamers are, in a sense, a self-selected group that immerses itself in self-selected activities. As a group, they already tend to have the kind of psychological traits that we find in people who experience flow easily. To reach flow, a person must be willing to engage in an activity where one's "body or mind is stretched to its limits in a voluntary effort to accomplish something difficult and worthwhile." [12] Playing any sort of game against evenly matched opponents gravitates toward such a situation; the thrill of testing one's ability in a competitive contest is at the core of many games. Most hobby board gamers, however, also show a further preference for challenges through their tendency to constantly play new games. Hobby board gamers switch the games they play more often than casual players do – a tendency which the community nicknames "the cult of the new." They enjoy the challenge that comes from absorbing often complex new sets of rules that require time and energy to memorize, let alone to implement effectively. This factor alone means that the 'stretching' of one's mind in the play of a new hobby game is more likely to occur.

But it is not just a matter of hobby board gamers being the kind of person who is more likely to experience flow states. Hobby board

12. Csikszentmihalyi, *Flow*, p. 3

games themselves play a role, too. Modern hobby board games are often much more complex than casual games, and in this they present motivated players with opportunities to invest all of their attention in the game. As a BGG user wrote (Thi Nguyen – rorschah):

> The problems have to be *hard* … The games that induce flow-state in me are ones in which the decision tree is vast, beyond parsing simply. *Go* does it most of all … Recently, in boardgames, it's been this hyper-interactive, hyper-fluctuating, hard-to-parse games of markets and investments: *Food Chain Magnate*, *Imperial*, *Chicago Express*, *Greed Incorporated*, *Clippers*, *Brass*. It takes everything my mind has and more, and I lose myself in it.[13]

Hobby board games often come with sets of optional rules that increase the complexity of the design for experienced players desiring more variables or sophisticated decision trees. Hobby games that can be played in specific scenarios –– rather than according to a single, fixed script –– also can be easily adjusted in this sense, especially when the level of difficulty is explicitly given in the set-up instructions for the scenario. This way, the players can increase the challenge at the same rate of their growing mastery of the strategies of the game, preserving the gratifying correspondence between player skills and demands of the activity, which is a key element in the achievement of flow states.

Another factor that may lead to flow is that hobby board games can be accurately tailored to the taste of their very specific audience. Contemporary media allow the community to vocally participate in the shaping of their hobby board games both before and after they are published, making it more likely that the products will closely respond to the tastes of the intended audience. Csikszentmihalyi

13. https://boardgamegeek.com/article/22452255#22452255

explained that, over centuries of refinement, chess "has been given a form which provides a variety of challenges, and hence of enjoyment" to its players. That kind of polishing nowadays takes only years, or even months or weeks thanks to the immediate information exchange made possible by the Internet.

If a hobby board game comes out today and some of its mechanics appear to be weak, in a matter of weeks players notice, exchange ideas online, propose hypotheses, test alternative solutions, and, if the design can be salvaged, share effective 'fixes' online. In very little time, a flawed design can be 'debugged' by the community, and the new variants may even receive official endorsement from the publisher and designer.

In other cases, players create variants for games that are perfectly good in themselves. Players commonly share variants to increase or decrease the difficulty of cooperative games, to increase or reduce the complexity and realism of a design, to make it more appealing to a certain age group, and so on. Early drafts of a game can be shared online for playtesting, and producers may receive massive feedback prior to the publication, allowing the game to come out in a solid form from its very first printing.

For all these reasons, hobby board games closely reflect the desires of hobby board gamers. And if they enjoy the type of challenge that tends to trigger flow states, then hobby board games shaped by their intended audience rapidly become well-honed 'flow machines,' in a madly accelerated version of the process of refinement chess underwent over the centuries.

Flow and Hobby Board Games

How do hobby board games contribute to creating flow states? In answering this, we will also note the challenges hobby board gamers may encounter that would prevent them from experiencing optimal engagement with a design.

A good way to structure such analysis is to start from one of Csikszentmihalyi's most detailed descriptions of the various elements that contribute to an experience of flow, and to see how they relate to important features of contemporary hobby board gaming culture. In the quotation below, I emphasize these key elements , to use them as pointers in the following discussion.

> First, the experience usually occurs when we confront tasks *we have a chance of completing*. Second, we must be *able to concentrate* on what we are doing. Third and fourth, the concentration is usually possible because the task undertaken has *clear goals* and provides *immediate feedback*. Fifth, one acts with a *deep but effortless involvement* that removes from awareness the worries and frustrations of everyday life. Sixth, enjoyable experiences allow people to exercise *a sense of control* over their actions. Seven, *concern for the self disappears*, yet paradoxically the sense of self emerges stronger after the flow experience is over. Finally, the *sense of duration of time is altered*; hours pass by in minutes, and minutes can stretch out to seem like hours.[14]

This is certainly not a list of absolute requirements, but a description of frequently occurring factors that appear to be at play during activities that generate flow. An activity does not need to have all of these characteristics, but activities that do have all or most of them are more likely to generate flow states in people who seriously commit to them.[15]

14. Csikszentmihalyi, *Flow,* p. 49
15. Salen and Zimmerman, pp. 337–338.

A chance of completing: When applied to hobby board gaming, this refers to designs not too complex for a certain group of players to play. By definition, a game must be playable by *someone* for it to be a game at all, so the idea of excessive complexity is always a relative concept depending on the group. Board games do exist, however, of such complexity that all but the most committed players would be discouraged from even learning all the rules and playing a full game, let alone attempting to master the design in any significant way. *Advanced Squad Leader* (1985), *Star Fleet Battles* (1979), *A World at War* (2003), and *The Campaign for North Africa* (1979) are notorious designs of this kind, with extremely detailed rulebooks of over 100 pages. Yet several of these games have communities of highly dedicated players who even prefer them over other games. For those who have the patience and inclination, these supremely complicated games can represent a mental challenge like no other.

To be fully engaged with a design we must, of course, also have a chance of victory. Winning may not be the most important factor, but to fully experience a design we must structure our moves to progress toward an achievable victory. We must play to win or *as if* a realistic desire to win were the main motivation. If we are learning a new game and playing against a master, either we have no chance of winning, or the teacher may give us such advantages that victory, even when achieved, will lead to small satisfaction.

Able to concentrate: In flow activities,

> no excess psychic energy is left over to process any information beyond what the activity offers. All attention is concentrated on the relevant stimuli … This growth of the self occurs only if the interaction is an

enjoyable one, that is, if it offers nontrivial opportunities for action and requires a constant perfection of skills.[16]

In everyday life, many distractions and concerns entering our consciousness prevent a state of flow. To experience flow, often we must willingly abandon our usual frame of mind and devote ourselves to an artificially constructed activity: one specifically designed to transport us away from the drudgery of our daily routines. Hobby games are a perfect example of such 'cognitive teleporters,' and hobby gamers are enthusiastic travelers who enjoy beaming their consciousness to entirely different worlds, where they can concentrate all of their psychic energy on the task at hand:

> Enjoyment often occurs in games, sports, and other leisure activities that are distinct from ordinary life, where any number of bad things may happen. If a person loses a chess game or botches his hobby he need not worry; in 'real' life, however, a person who mishandles a business deal may get fired, lose the mortgage on the house, and end up on public assistance.[17]

The idea of games as separated from regular life is well-known and goes back to Huizinga's discussion of the gaming experience as a magic circle. Jesper Juul describes the self-contained nature of games by explaining that the rules of a game "add meaning and enable actions by setting up differences between potential moves and events … [They] set up potential actions, actions that are meaningful inside the game."[18] High quality hobby game designs both encourage and facilitate the transition from our usual state of disperse consciousness into the heightened focus of rewarding gameplay. *Puerto Rico* (2002),

16. Csikszentmihalyi, *Flow*, p. 53, 65
17. Csikszentmihalyi, Flow, p. 59
18. Juul, p. 19.

Race for the Galaxy (2007), *Agricola* (2007), and *Dominant Species* (2010) are just some of the countless hobby games whose interwoven mechanics draw the committed player into a separate, engrossing experience.

To enter the magic circle projected by hobby board games, one embraces the inner logic of the proportions, interconnections, and rhythms within the design, which requires concentration. To fully concentrate on gameplay, hobby gamers set up specifically designated events where play supersedes other forms of social interaction. Game nights are arranged in advance and eagerly anticipated. Areas of the house are temporarily devoted to the game session. Those with sufficient resources may have a permanent game room in their house. Preparations are made to reduce distractions and focus the gathering on gameplay.

Serious players also travel to faraway board game conventions not only to try new games and meet people in the industry, but to be able to concentrate on gameplay in a physically and psychologically distant position from their daily routines. The BGG user philreh gave a very insightful description of this phenomenon in the above-mentioned discussion thread about flow:

> I ran into something similar to this [flow] when playing *World in Flames* (1985) at a convention setting. You really don't have anything else to do for days on end, and you begin to understand yourself as the leader of the country. You focus so much on the board and pieces that you know where they are, even when there are hundreds of them to keep track of. And you completely lose yourself for those couple (well, eight, really) days.

Highly thematic board games establish a sense of deep immersion

in a parallel reality, in turn increasing the sense of psychological separation from ordinary life and encouraging concentration on the requirements of gameplay.

We most certainly owe the discovery of *theme* in board games to wargaming: a designer selects a military topic and then translates its significant elements into rules and procedures that will be then combined into a playable model. Serious players rarely focus on the elegance of a wargame engine *per se*, but appreciate games whose inner workings mirror the theme in an organic and realistic way. The idea that games could depict detailed and consistent worlds in time inspired wargamers Dave Arneson and Gary Gygax to adapt wargame conventions into a narrative system for adventure and exploration, creating in turn *Dungeons and Dragons* (1974) and kickstarting the entire genre of role-playing games (RPGs). Then designers of board games took notice of the narrative potential of gaming revealed by RPGs and brought ideas of immersion, identification and narrativity back to board games. This resulted in a tradition of board games with strong themes, a fictional setting filled with detail, and a sense of story that emerges from gameplay. Examples of heavily thematic games stemming from the immersive tradition of *D&D* include *White Bear & Red Moon* (1975 – later re-implemented in *Dragon Pass*), *Sorcerer's Cave* (1978), *Magic Realm* (1979), *Dragonhunt* (1982), *DungeonQuest* (1985), *HeroQuest* (1989), *Dark World* (1992), *Dragon Strike* (1993), *Descent* (2005), *Castle Ravenloft* (2010), *Lord of the Rings the Card Game* (2011), *Shadows of Brimstone* (2014), *Temple of Elemental Evil* (2015), among many others. Games like these provide a virtual experience akin to that of RPGs, but entirely constructed through the affordances of board gaming. As a result, games of this kind can create a psychological

sense of separation from conventional reality, and encourage the type of strong commitment to a task that is typical of flow-inducing activities.

On the other hand, some aspects of hobby board games may dampen their ability to create flow states. One such factor is social interaction. The more people are involved in an experience, the greater the likelihood of the event being disturbed by players with differing play philosophies or who are socially disruptive.

For a hobby board game to be an effective flow machine, the social interaction must be mediated by clear and straightforward game mechanics, with little or no possibilities for the players to make deals, bluff, or deceive each other. The ambiguity and blurriness of conventional human interaction must be replaced by a reliable system of clear-cut options. Understanding what the opponents may be trying to do still matters, but only insofar as that can be interpreted in terms of quantifiable positional advantages within the game system. This does not deprive the other players of their humanity, but simply ensures that all participants focus on the analysis of a specific set of abilities in their opponents and of the formalized ways in which those abilities will be expressed in a discrete range of game options.

Another factor that may prevent flow is downtime. Having to wait for too long before one can perform their next action in the game leads the mind of the player to wander, and pulls one out of the mental connection with the challenges of the game. Downtime may occur at the level of the design, with games that take a long time between turns even when played optimally, and that do not give anything to do to the non-active players between turns.

Downtime of this kind can be prevented by selecting games that

proceed at a good pace, with short turns and a small range of options. Games with longer turns may also give the non-active players reasons to be engaged while the active player is taking their turn. In *Tower of Babel* (2005), for example, every time the active player intends to acquire a new resource, the resource must be preliminarily offered for auction to all players. In *Runebound* (2005), when the active player's hero must fight an enemy, one of the opponents takes control of the enemy and makes decisions for that character, becoming another active player for all intents and purposes. Downtime in games of this type is therefore limited, because the design assigns tasks to the players outside of their main turn, allowing them to remain constantly involved.

Even games in which one does not actively do anything during the other players' turn can still allow participants to preserve a state of concentration as long as the game provides interesting information to process. A typical example would be a wargame where a player's turn may be divided in a movement phase for all units controlled by a player, followed by a combat phase involving units of the two sides that are adjacent to each other after this player has completed their movement. As the opponent moves one piece after the other, one may see a side of the enemy line retreating, or another one advancing; one may see units concentrating around a certain location, possibly planning an attack; one may see a group of enemies dashing to cut supply lines, and so on. Every time the opponent performs an action, the non-active player is given a non-trivial new bit of information that must be factored into their ever developing strategy. As a result, the players can remain focused on the design thanks to the constant stream of material to analyze that the opponent's actions generate.

There are also games in which downtime is virtually eliminated by the fact that all players perform many of the in-game actions at the same time, like *7 Wonders* (2010), *Karuba* (2015), *Stellar Conflict* (2015), or *Piratoons* (2015). Solitaire games, finally, have no downtime, because the single player is the only human agent in the design and is therefore involved in all operations of the game at all times.

In sum, downtime can definitely prevent players from experiencing states of cognitive flow, but design remedies are abundant and easily accessible.

Clear goals:

> Flow tends to occur when a person faces a clear set of goals that require appropriate responses. It is easy to enter flow in games such as chess, tennis, or poker, because they have goals and rules for action that make it possible for the player to act without questioning what should be done, and how. For the duration of the game the player lives in a self-contained universe where everything is black and white. [19]

Clear goals are certainly a key element of most games in general and all board games. In the sense of the victory conditions that the players strive to meet, clear goals are in fact part of most definitions of games elaborated by scholars interested in the topic. Salen and Zimmerman, for example, define a game as "an activity among two or more independent decision-makers seeking to *achieve their objectives* in some limiting context."[20]

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19. Csikszentmihalyi, *Finding Flow,* p. 28
20. Salen & Zimmerman, p. 6, emphasis mine. This is an elaboration of a similar definition that was proposed in Clark C. Abt. *Serious Games*. New York: Viking Press, 1970. See Salen and Zimmerman also for a useful examination of the most influential definitions of games in the 20th century, pp. 71-82.

The long-term goal of achieving victory is of course not the only one in a game, and it always works in conjunction with multiple smaller goals throughout a game session. Each turn, the players give themselves the goal of moving as close as possible to victory within the affordances allowed by the design in that specific segment of the session. Optimizing one's resources, completing intermediate steps toward victory, denying opportunities to others, preventing disadvantages that the opponents may be planning to inflict, are all minor goals that constantly emerge during gameplay and keep the players focused by giving motivation for one's psychological involvement with the game.

Immediate feedback: "Another characteristic of flow activities is that they provide immediate feedback. They make it clear how well you are doing. After each move of a game you can tell whether you have improved your position or not." [21] Immediate feedback seems to be, indeed, one of the characteristics of games, as Clark Abt also pointed out: "Game-playing provides an immediate reward to the individual who makes a correct decision." [22] Yet not all games –– especially not all hobby board games –– generate feedback in the same manner or amount.

In many cases, a player obtains immediate and direct feedback, like when the player makes a move that impacts the game, and the game system actively produces a response: by rolling dice, for example. In this case, numbers rolled both alter the state of the game and at the same time inform the player of the result and consequences of the move. With this kind of feedback, the game constantly provides the

21. Csikszentmihalyi, *Finding Flow*, p. 29.
22. Abt, p. 66.

players' consciousness with new material to process, helping one to stay engaged with the game.

What may not be immediately apparent is that a game can produce flow-inducing effects even in cases in which it does not accurately inform the player. Let's say that in a Napoleonic wargame my cavalry is charging an enemy infantry unit; I roll the dice and the result informs me that the enemy infantry piece has been obliterated. This is immediate feedback, and it also appears to tell me that my position in the game has improved. However, maybe the rules of the game now force my charging cavalry to keep moving because of the momentum of the charge, and as a result the enemy may later surround and destroy that now isolated unit, or exploit the gap caused by the advancing unit and trigger a devastating breakthrough. The feedback the player received when the enemy infantry was eliminated may turn out to be, in the aggregate, completely misleading – a short-term victory leading to a massive defeat.

The situation is even more nebulous in games with asymmetrical and secret victory conditions, such as *Ticket to Ride* (2004). Each move in these games still informs you of how well you are doing in comparison to where you were just before taking an action – as in "now I have more gold coins than I had a moment ago." With secret victory conditions, it is however hard to determine if a certain amount of progress is sufficient to truly alter one's position in the game at all. And yet, even in this type of situation, players will still study other players' moves and behavior, make hypotheses about what their goals may be, and attempt to gauge in some form what everyone's present standing in the contest may be.

Acknowledging the slippery nature of feedback in games does not

contradict the idea that games give feedback keeping participants engaged. In practice, hobby board gamers are quite proficient at handling reliable immediate feedback ("my attack succeeded" / "my move gave me gold coins") while also dealing with the uncertainties surrounding the long-term impact of each bit of feedback ("will this action *truly* help me win?"). The ambiguities of feedback in board games do not detract from gameplay, but simply encourage players to formulate hypotheses and create alternate mental scenarios in response to possible future developments. In so doing, feedback establishes an intriguing balance between certainty and uncertainty,[23] giving us enough of the former that we want to commit to the task of identifying desirable moves, and also enough of the latter to keep our attention sharply focused and to preserve a pleasurable sense of suspense.

Deep but effortless involvement: That depth is a vital element of modern hobby board games should be clear by now. Most such games tend to be more challenging to learn and play than casual or mass-market games, and are appreciated by their fans when the increased level of complexity represents a means to allow nuanced, multilayered, and in a word deep gameplay. In turn, hobby board gamers are likely more willing to invest time and energy to learn a deep design than casual gamers would be, and since they do so on a regular basis, they end up developing conceptual tools and mental stamina that makes it easier to embrace new games. The almost symbiotic relationship between hobby board gamers and hobby board games affords the possibility for flow-inducing deep and effortless involvement. Hobby board gamers are the best-trained people to actuate complex procedures effortlessly and experience

23. On the importance of uncertainty in games, see Costikyan.

them as an organic and seamless stream of gameplay. Hobby board games, in turn, provide their players with the most perfect training tools to hone their gaming skills, as well as with the rewards for the acquisition of such skills.

A sense of control: "The flow experience is typically described as involving a sense of control – or, more precisely, as lacking the sense of worry about losing control that is typical in many situations of normal life."[24] This point builds on the previous one. As hobby board gamers learn not only to implement the rules of new games but also to develop effective strategies in them, a growing sense of control sets in. The players may not be in absolute control of the overall experience due to random events, secret information, and other players' actions, but they still have a clear sense of what they can and cannot do in any given situation. They can usually control, if nothing else, their own reaction to new inputs in the form of the moves they select.

After all, to be a game, an activity ought to allow players to make some significant choices, no matter how vast the amount of luck that surrounds those decisions. Randomness in this sense does not prevent the emergence of some sense of control, but simply offers a specific type of challenge in the form of risk management.[25] Csikszentmihalyi himself writes that a gambler may have no great objective influence on the outcome of a game, and yet a state of flow may still be reached when the gambler *believes* she is in control. This is possible because flow is in the consciousness and not in the outward activity, which

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24. Csikszentmihalyi, *Beyond Boredom*, p. 59
25. Peter L. Bernstein. *Against the Gods: The Remarkable History of Risk.* Danvers, MA: John Wiley & Sons, 1998.

means that in any conflict between perception and fact, perception tends to prevail.[26]

The sense of control gamblers experience in casinos is even more prominent in the case of hobby board gamers playing hobby board games, mainly because such players usually *do* have a considerable saying in the direction they imprint on a game through their moves. Many modern hobby games involve little to no luck, which maximizes the sense of control in the players. Even in the presence of considerable random factors, good hobby games usually allow their players to make relevant decisions concerning the amount of risk they take. A textbook example comes from push-your-luck games like *Ra* (1999), *Incan Gold* (2005), or *Dice Heist* (2016), where the players may choose to settle for an immediate small reward or try to go for a larger reward at the risk of not getting anything at all. In games of this type, players make conscious decisions about the exact amount of control they choose to relinquish to luck. As long as a player can elect when and to what degree not to be in control, even the most unexpected results will be the natural consequence of perfectly controlled actions. Randomness can therefore peacefully coexist with control without endangering the players' psychological connection with the design.

Concern for the self disappears:

> Perhaps the clearest sign of flow is the merging of action and awareness. A person in flow has no dualistic perspective: he is aware of his actions but not of the awareness itself. A tennis player pays undivided attention to the ball and the opponent, a chess master focuses on the strategy of the game.[27]

26. Csikszentmihalyi, *Beyond Boredom,* p. 61.
27. Csikszentmihalyi, *Beyond Boredom*, p. 38.

> The absence of the self from consciousness does not mean that a person in flow has given up the control of his psychic energy … but in fact the optimal experience involves a very active role of the self … A person who pays attention to an interaction instead of worrying about the self obtains a paradoxical result. She no longer feels like a separate individual, yet her self becomes stronger … Because of this union of the person and the system, the self emerges at a higher level of complexity.[28]

Once again, Csikszentmihalyi finds that a board game provides a perfect example for this idea: "A chess player could not enjoy the game if he were unable to retrieve from his memory, at will, previous positions, past combinations."[29] The same can be said for hobby board gamers, who have a well-developed familiarity with the norms and conventions of modern hobby board gaming, and connect their planning of future actions with their knowledge of the rules of the game and of generally effective strategies. When the players' consciousness is absorbed in the analysis of all of these factors during gameplay, little psychic energy is left available for other endeavors. In that sense, our perception of the self recedes temporarily to the background. We are still completely ourselves —which is why others can take our play style into account in their strategy, and we theirs— but we do not linger on particulars and inessentials, and we commit at a very deep level to the task of analyzing new developments and constructing possible scenarios.

Sense of duration of time is altered: When playing an engaging hobby board game, experiencing a distortion in one's time perception is common. Several BGG users have left comments about this aspect of their game experience in the discussion thread I referenced above. John Wilder (desmothenes) wrote:

28. Csikszentmihalyi, *Flow,* p. 64, 212
29. Csikszentmihalyi, *Flow*, p. 64

When playing a game of *Eldritch Horror*, when playing with other experience[d] gamers familiar with the rules, the game was going so smoothly and the story was engaging, so we really got into it. It was hard to believe when we looked at the clock that 4 hours had passed (the game took another 2).[30]

Another user (Marius van den Merwe – Sciurus) reported: "When it comes to board gaming I sometimes lose track of time and achieve a state of enhanced focus, but only while playing a complex game solitaire (e.g. *Navajo Wars* or *Fire in the Lake*)."[31] Another user (Jeff – Maximuss) wrote: "When I first bought *Pandemic* … my brother and I played the game again and again. Probably 10 times in about 12 hours, and that was with a sleep period in there too …We couldn't get enough, and the time just disappeared."[32] For user Marie Anne (Mafster) the time distortion produced by hobby board games acted even at the biological level, temporarily dampening her addiction to smoking:

Just yesterday I experienced this "flow" in a two player game of *Le Havre*, my fifth play of the game. I was so completely immersed in the game and so extremely focussed, [sic] that I forgot that the demon nicotine runs my life. The game ran for what may have been close to two hours (though it's difficult to say, given that there was a definite distortion of time) and though nicotine usually demands my attention every 45 minutes at the very least, I actually forgot to take a smoke break.[33]

Concluding Words

30. https://boardgamegeek.com/article/22194744#22194744
31. https://boardgamegeek.com/article/22194792#22194792
32. https://boardgamegeek.com/article/22194242#22194242
33. https://boardgamegeek.com/article/22199455#22199455

To avoid any misunderstanding, we can certainly acknowledge that not all pleasure that can be derived from hobby board games has to come from flow, just like flow is not all that video games have to offer.[34] Hobby board game participants may experience the joy of socialization, the game being little more than an alibi for people to get together to enjoy each other's company. There may be a visual and tactile pleasure coming from attractive game components. In historical wargames, we may have the joy of learning about the past and testing historical hypotheses. Board games can be used in enjoyable and yet useful forms in teaching and business environments. Incidentally, none of these reasons for interest in board games excludes flow necessarily; rather, aesthetically pleasing components, historical exploration, mediated social interaction, and pedagogical benefits may simply act as incentives for psychological commitment, which in turn may lead to states of flow. Still, for hobby board gamers playing games designed to provide deep and multi-faceted challenges, flow (although rarely identified as such) remains one of the reasons for attraction toward this kind of game experience. When the environmental conditions are right, the design is complex without being overcomplicated, and the other players work with us to keep the game moving, flow can be achieved with all the gains usually associated with this mental state.

By analyzing this potential in the modern hobby board game world, my hope is not just to further our understanding of a still very young and mostly unstudied culture, but also to help more players identify the conditions that may lead them to improve their gaming experience and enrich their connection with the self.

34. Upton, pp. 99–100.