DESIGN
2024

Playing against the rules: a new perspective on the potential of games and play as convivial and critical tools for imagining futures

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Abstract

In recent years, we have observed an increased interest within the field of design research in both the concept of conviviality and playful approaches as a pathway to co-design and participation. While play is often associated with freedom of expression and creativity, the implication of rules and mechanics in games poses questions regarding the tension between player agency and designed gameplay. This paper aims to provide reflection on these topics through a lens of 'critical play' and presents a model to explore games' potential as convivial tools for imagining collective futures.

Keywords: game design, conviviality, design research, critical play, design analysis

1. Introduction

The use of games and play as tool for workshops, creative processes and engagement has a decades-long tradition within design (Brandt and Messeter, 2004; Habraken and Gross, 1987). In the past few years, interest in playful activities in a variety of contexts has increased, with game designers getting involved in participatory political projects (Lerner, 2014) and games and gamification being used in the context of political participation (Thiel *et al.*, 2016), education (Stoddard *et al.*, 2022) as well as social and participatory design initiatives (De la Pena *et al.*, 2017). This is often done in an effort to engage with diverse groups of people (Rüller *et al.*, 2022) or find more creative ways to have conversations, e.g. about desired futures (Coulton *et al.*, 2016).

While the advantages of games for encouraging creativity, more diverse modes of engagement, i.e. sensory and embodied, and their potential for increased participation in civic processes are praised, it seems that some questions relating to power and agency are underexplored. While the notion of play implies freedom of expression and a state of being outside of the usual constraints and power dynamics of everyday life, games have a paradoxical nature. In their classic work on the subject, Salen and Zimmerman define games as *"a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome"* (2004, p. 304). Hence, rules are central to the game format, which raises the paradoxical issue of rigidity.

To better understand the arising tension between freedom and restraint in games designed to encourage participation in future-making, we propose an analytical framework that examines the depth of agency provided by games and playful formats. In doing so, we hope to contribute to the effort of understanding their potential for enhancing democratic discourse and participation in civic processes.

In this paper, we will first look into some foundational understandings of games and explore the ways in which they can be used or framed as a means for critical engagement, and their complex relationship with player agency. Then, we will consider games' potential for bringing forth collective imagination

about the future and convivial interactions between people. In order to develop a framework for helping to position and explore critical, convivial games, we will introduce and structure some examples that challenge traditional notions of what games are. We will then synthesise the different theoretical perspectives into a framework for critically minded game-making and analysis. Lastly, we will discuss the framework's potential for application and make recommendations for future work.

2. Critical play and player agency

In their publication *Rules of Play,* Salen and Zimmerman (2004) draw a distinction between games as a system and the activity of play. While the former is characterised by *"artificial conflict, defined by rules, that results in a quantifiable outcome"* (Salen and Zimmerman, 2004, p. 80), the latter is understood as an act of finding *"free movement within a more rigid structure"* (Salen and Zimmerman, 2004, p. 80). This distinction carefully balances the tension between freedom and rigidity. Caillois (2001) discusses the issue of rules and contrasts modes of playing within set rules and outside of them, e.g. children's play with dolls. In his view, rules serve the same function for play that narration might if it were present in that instance of play: they create a space separate from regular life. Here, Caillois refers to the concept of the *magic circle* introduced by Huizinga (1994): a conceptual space for imagination, experimentation and thinking about possibilities (Coulton *et al.*, 2016), that can be conjured as effectively by establishing rules (real to the game, fictional otherwise), as by evoking narrative (Caillois, 2001).

2.1. Introducing a critical view

While the possibilities arising from the idea of the *magic circle* seem intriguing, e.g. from a perspective of participatory designers seeking to involve people in engaging activities, the idea of rules sits uneasily. On the one hand, some scholars make the argument that games have some inherently democratic qualities, i.e. through their highly participatory nature and emphasis on decision-making (Lerner, 2014). However, as power is what sits at the heart of democracy and participation, e.g. the question of how much decision-making power is held by or awarded to whom (Arnstein, 2019), the role of rules in specific must be critically examined. Lerner, whose work has provided rich insight into how games may be used to make democratic processes more appealing and fruitful (Lerner, 2014), and Secondo note that for games to be transformative in regards to institutional processes, e.g. in the case of his participatory budgeting project, it must be possible for participants to shape their rules so as not to repeat patterns of power dynamics present in regular day-to-day politics (Lerner and Secondo, 2012).

Flanagan brings forth the idea of *critical play* – she argues that there is as kind of playful activity that has the capacity of posing questions and fostering critical thinking (Flanagan, 2009). These questions may be directed at social, cultural, political or personal issues in players' lives. Building on the works of Sutton-Smith (2009), Flanagan links criticality in play and games to subversion: a means often employed by artists, referring to the twisting, transgressing or inverting of things, i.e. playing in ways that turn against expectations and rules. From there, one might view a critical game as a kind of game that provides space for transgression and subversion. While Sutton-Smith (2009) suggests that play may be closely associated with these two qualities, it remains unclear how games as rigid systems may encourage these types of critical activities.

Poremba (2007) uses the concept of the magic circle to localise a somewhat paradoxical critical and subversive potential for game design at the brink of the magic circle. She proposes *brink games* as a kind of format that points to the border of the magic circle in letting the rules of the game and the rules of real life collide in ways that draws players' attention to the boundary, creating tension and triggering reflective and critical thinking about the game or life outside of it. Another approach to understanding critical strategies in games is presented by Grace (2014), who suggests that game design can either focus on a reflective strategy of social critique, i.e. a critique directed toward society, or one of mechanics critique that points inward to the game and is thus recursive. Both authors draw attention to how games can not only go beyond the societal critique that a non-interactive medium may provide, but can also facilitate critical thinking both through its interactions and directed at the interactions themselves.

2.2. Player agency

The concept of (human) agency has been critically discussed in design theory over the course of several decades, in part through the incorporation of concepts from other disciplines such as Latour's actor-network-theory (2005, 1992) or more broadly through debate on the relationships between humans and the tools and technologies that they develop (Eggink and Dorrestijn, 2018). In seeking to understand how power is negotiated between humans and artefacts and how we may understand the influence designed things have on our ways of thinking, Verbeek points out that artefacts may *"reduce particular interpretations and forms of involvement, but also strengthen others and even create new forms of contact between human beings and their world."* (2005, p. 235).

A similar idea is often expressed through the concept of affordances which focuses on the ways in which it is possible to interact with a designed artefact (Norman, 2013). It is a concept that prioritises human agency over a kind of determinism that might emerge from emphasising the power of technologies, tools and human-made systems. Applying it to games, however, can lead back to a paradox: players do not have to follow a games' rules or desired interactions, yet such a refusal may disrupt the boundary of the game to a breaking point at which it may cease to be a game. Huizinga (1994) points out how even when one cheats in a game, one still engages with the illusion of it and so continues to play even throughout this transgression. This problem circles around the stability or fragility of games and play, from which approaches such as Poremba's *brink games* draw their critical and subversive potential. Hence, it seems that *tinkering* or experimenting with player agency may produce subversive game-play experiences that allow for meaningful critical engagement.

3. Collective imagination and conviviality

Games have been widely used in participatory design projects (Brandt, 2014), specifically since Ehn's (1989) work on the topic and the introduction of design games by Habraken and Gross (1987). Rüller et al. (2022) suggest that games can be used to find more engaging and creative ways to enter conversations, which in turn can be highly relevant for participation in collective processes in which futures are imagined and made. In their writing on the potential of speculative game design, building both on critical play as introduced by Flanagan (2009) and speculative design as proposed by Dunne and Raby (2013), Coulton et al. (2016) point out that games have a great potential for supporting future imagination due to their use of the magic circle. Herein, new possibilities are allowed and encouraged to emerge that would not have been considered in the realm of everyday life.

The act of imagining futures, according to Glăveanu, is never done alone but rather always in relation to others (2018). While the way one engages with people may put more or less emphasis on dialogue, the act of imagining the future not happen in isolation. Yet, the question of *"how the collective came together in shaping [the future]"* (Glăveanu, 2018, p. 101) matters, for instance, in regard to power relations. Furthermore, Moore and Milkoreit (2020) argue that not only the existing power relations between participants have significance, but also how the process is designed, i.e. how it is facilitated, who is in control, what methods are used and what kind of sense- and meaning-making they encourage.

3.1. Conviviality and games

This connects back to the question of tools and agency introduced above. Specifically in regard to collectivity and society, this question has been illuminated by Illich (1973) who formulated the concept of *tools for conviviality*. Illich presents an analysis of modern society in relation to its (industrial) tools and criticises the lack of control people hold over these tools. While this ties into traditional streams in the philosophy of technology that viewed technology as a threat (Eggink and Dorrestijn, 2018), Illich also drafts an idea of what the alternative may look like: he conceptualises a society characterised by both interdependence and freedom, underpinned by tools that *"give each person who uses them the greatest opportunity to enrich the environment with the fruits of his or her vision"* (Illich, 1973, p. 34). Furthermore, the author emphasises human relationships characterised by friendship and joyfulness. Following this, convivial tools are often understood as a means that serve bringing forth such relations in which humans may engage with each other in a friendly, non-competitive fashion. In a convivial society, people can exercise control over how things are produced, which things they want and are able

to shape them. In contrast, the opposite state of conviviality is characterised by having no say over these aspects but being limited to merely consuming.

In applying this concept to games, on the one hand, it seems that games provide great examples of tools that bring forth conviviality in the shape of joyful, balanced interactions between humans that can engage in collective imagination – contributing their respective vision. Yet, among the many shapes that play can take (Caillois, 2001), competition has evolved to be one of the most popular modes in which humans playfully interact with each other (Flanagan, 2009). Competitive gameplay has the potential to undercut the emergence of interdependence through its frequent emphasis on individual success. While the concept of convivial tools seems to mesh well with collaborative games that encourage cooperation, collective imagination and interdependence, Illich's ideas call for a careful examination of the control that people actually do exercise over a game, echoing questions about technology and agency.

Even though we think of games as merely providing affordances rather than anything compulsory, it is important to note that material, non-human actors may shape human interactions, e.g. either reinforcing or leveling out power asymmetries (Khan *et al.*, 2020; Eriksen *et al.*, 2014). Hence, we find ourselves in a paradoxical situation. Whilst it seems that games may hold great potential for conviviality, the paradox of *"free movement within a more rigid structure"* (Salen and Zimmerman, 2004, p. 80) raises questions as to who can control this structure, how and by whom it might be shaped to support people in enriching their environment through their imagination.

4. Towards critical game-making for conviviality

Having discussed both critical play and conviviality in relation to games, we will now synthesise some of the insights through a lens of *critical making* (Ratto, 2011), in order to formulate a framework that may help making and analysing games addressing those two perspectives. Ratto has introduced *critical making* as a mode of critical exploration that combines critical thinking with embodied engagement in a creative process. It is a process in which such artefacts are created through which critical experimentation becomes possible (Ratto, 2011). This approach bears similarities with Brown and Douglas' (2010) description of the three dimensions of learning, i.e. knowing, making and becoming. The first two dimensions correspond with Ratto's concept of simultaneously thinking and making – Brown and Douglas also refer to these modes as *homo sapiens* and *homo faber*. The third dimension, becoming, is linked to play (named *homo ludens* in reference to Huizinga): it is in play that one can experiment and experience agency in ways that are not commonly associated with (traditional) learning environments that focus on knowing and (perhaps to a lesser extent) making. Brown and Douglas argue that it is in play that one can react to change and instead of arriving at a set goal, hence engaging in *becoming*, a mode that allows to respond to complexity and changes as they emerge.

This is distinct from most educational games that tend to fall either into the gamification or the serious games category (Dreimane, 2019). Only the latter category refers to fully realized games that include some type of domain content to be learnt whilst playing (Khaled and Vasalou, 2014). Therein, the focus is on acquiring *knowing* while playing – the act of playing itself is often framed as accompanying the learning, rather than an act of learning per se. This is in line with the goals of traditional education settings. Even though this may help create an experience of flow (Csikszentmihalyi, 2014) and improve learning results (Backlund and Hendrix, 2013), we find it hard to argue that either the modes of *homo faber or homo ludens* are being made use of in a meaningful way.

We believe both modes – making and playing/becoming – to be very fruitful for supporting conviviality, imagination and criticality in play. A combination of both approaches might be able to address the points and challenges that have arisen in our analysis of critical play and conviviality above. In regards to critical play, those include the challenge of balancing the illusion of the game while encouraging critical thinking. Concerning conviviality, it seems that a playful tool such as a game should meet a few criteria: (1) the game should promote interdependence and friendly joyfulness through such means as collaboration and shared goals, (2) it should allow players to have some degree of control over its structure or components, (3) it should encourage creativity and the contribution of players' ideas.

Having analysed the issue and through formulating these criteria, we have drafted a conceptual space in which such games may be conceived. To formulate a framework of how to approach and organise this conceptual space, we review some games and formats that demonstrate some of the principles that we

believe might be found in this space. We focus on analogue board or card games, for two reasons: firstly, because the materiality of these types of games allows for fruitful explorations of relations not just between humans but also with non-humans and tools, and secondly because we believe that the act of gathering around a game in a face-to-face setting in particular allows for the joyful, friendly interaction that conviviality envisions to emerge. We have collected examples of such games and suggest organising them along an axis between the end-points *narrative-focused* and *mechanics-focused* – depending which of those the players are invited to experiment with. Flanagan (2021) and Suter (2021) discuss the complex interplay between game mechanics (as in structure, rules, dynamics) and narrative (as in story or storyline) in regard to creating the game experience and to meaning-making. While Flanagan argues that these two sides are deeply connected (for instance, a game's structure shapes how a narrative is expressed and presented), we find using these two concepts as end points of an axis helpful for understanding how a game invites players to *shape* the game. Hence, we organise the selected examples accordingly. We will introduce the framework (Fig. 1) in detail in section 5.

4.1. Shaping narrative

At the narrative end of the axis, there is a rich tradition of games that put an emphasis on story and where the player mainly experiments with what happens in it. Examples range from interactive media in the form of choose-your-own-adventure books such as R. L. Stine's *Give yourself Goosebumps* series (Green and Jenkins, 2014) and their respective digital iterations, which allow the audience to make decisions at certain points in the storyline, to table top games like *Dungeons and Dragons,* that rely on content generated by a game master (Pearce, 2016). There is some discussion on how exactly to classify players' influence on the story in different game formats (e.g. Kreminski and Mateas, 2021), yet we would argue that merely exploring a narrative given by another person and choosing pre-defined options therein only offers a limited amount of control over the game and how meaning is made, while those games that call for player-generated content as input to the story do offer more agency.

Some games forgo such strategies as a pre-defined narrative or appointing a game master among the players, aiming rather at providing affordances for collaborative storytelling for the players. Some examples of this include the game *Untold* by Hub Games (2017b), which presents players with a blank, archetypal story structure to be filled, thus encouraging full authorship, creativity and collaboration. A similar strategy is used in the card game *Once Upon a Time* (Atlas Games, 1993), which provides players with story elements that they have to string into a coherent, shared story, or by *99 Chances* (Gorilla Games, 2015) in which players are given building blocks like genre or specific story elements to come up with a shared narrative. In leaving more than just decision-making, but rather the shaping or the whole creation of the narrative up to players, these types of games allow for meaningful, critical engagement with it and afford agency over the experience.

4.2. Shaping mechanics

Games that allow players to experiment with their mechanics – inviting them onto a meta-level of play – can range from elements such as inviting players to come up with a rule of their own, which may often be included in simple card or party games, to games that fully embrace openness and aim to explicitly involve players in the design of the game's structure as it is happening. Thus, they subvert the notion of the rigid structure discussed above. Examples include card games such as *Fluxx* (Looney Labs, 1997), a game in which players use cards to constantly change the rules, resulting in highly dynamic gameplay, or *Democrazy* (Descartes Edituer, 2000), where players also get to invent their own rules, yet they are encouraged to pick rules that will favour themselves – a satirical comment on democratic structures and a highly competitive game. The concept of player-generated rules is taken even further by *Blank* (Hub Games, 2017a), a card game that has players fill in their own rules and add new ones each round, producing a customized deck of cards over time and allowing for some reflection on the game mechanics themselves. These games offer different degrees of collaboration: whilst most of them favour competitive gameplay, *Blank* also allows for shared meaning-making through the co-creative evolution of the card deck. Even though there are also some board games that work similarly, e.g. a board game version of *Fluxx* (Looney Labs, 2013), it seems that challenging the rigidity of the game structure is

more common in card games. This may be due to their materiality which draws the focus towards individual actions and mechanics rather than narrative or structural representation as a board might.

4.3. Playing both sides

Finally, we would like to discuss the possibility of games – or, more broadly, playful tools and formats – that allow for player agency and say over both narrative and game structure. The games we have reviewed for this paper seem to fall into either one or the other category. We have not found games that both focus on letting players shape the mechanics *and* have strong narrative elements. The various iterations of *Fluxx* (Looney Labs, 1997) that have been developed over the years have a *theme*, i.e. science, horror or movies, but the themes seem largely interchangeable and for the most part lack deep connections with the mechanics. Perhaps games that attempt to give players deeper agency over both sides, narrative and mechanics, loose too much of the rigid structure that makes them what they are.

While specifically in the digital sphere, modding has been critically discussed as a potentially playful activity in which a wide array of experimentation happens (Thiel and Lyle, 2019), for the analogue sphere, we suggest broadening the scope and including formats such as game design and co-design workshops in the conceptual space. There are numerous examples of co-creative game making (e.g. Prax, 2016; Jimenez, 2018; Lanezki *et al.*, 2020) with varying degrees of emphasis on mechanics or narrative. We propose to include these types of formats in the conceptual space covered by the framework developed here because we believe that they have especially great potential in regards to empowering autonomy and critical thinking, making and playing.

We are especially interested in the possibility of positioning (co-)game design activities themselves as playful. Brooks *et al.* (2022) suggest framing "designing as play" and propose conducting workshops in ways that allow playing with prototypes, thus encouraging free-flowing activities and opportunities to connect ideas in new ways (Brooks *et al.*, 2022). Similarly, in participatory and co-design, approaches such as design games or playing with prototypes have been discussed (Brandt *et al.*, 2008; Robazza and Smith, 2022). This kind of a framing could also be applied to projects that aim for games as outcomes. For instance, this might be done through such approaches as Piedade *et al.*'s (2023) game design kit, which supports children in creating games – provided they emphasise playfulness *in the process,* making the latter feel more game-like. Whilst this idea might challenge the boundaries of games, it could be an interesting area for future exploratory design research.

5. Framework and discussion

Inspired by critical making (Ratto, 2011) and the possibilities opened up by participatory design (Lanezki *et al.*, 2020; Khaled and Vasalou, 2014), we have developed a framework (Fig. 1) that structures the conceptual space in which critical, convivial games that aim for imagining collective futures and that fuse the modes of making with playing/becoming may be conceived.
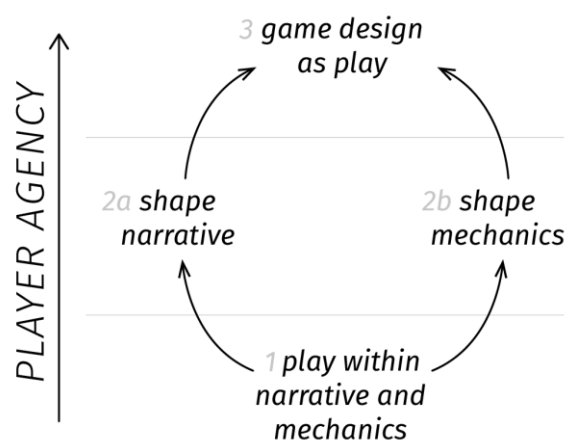

Figure 1. Critical game-making and agency framework

The space is organised vertically into three levels with ascending degree of player agency and horizontally along the aforementioned axis of *narrative-focused* and *mechanics-focused*. On the lowest level, we put traditional games that allow players to experiment within the structure of a given narrative and set game mechanics. These types of games follow the established understanding of games as rigid structures and afford players limited agency within those. On the second level, we place those games that allow players to (a) get involved in shaping the narrative in a meaningful way. This goes beyond just choosing between pre-scripted options, but rather encourages player creativity and input, e.g. coming up with a part of a story. We also place on this horizontal level those games that allow players to (b) shape the game mechanics and rules, thus tinkering with their structure and consequently challenging its rigidity. Based on how closely narrative and mechanics can be intertwined (Flanagan, 2021), we argue that both of these types of games afford similar depth of experimentation and player agency even though they may feel and look very differently. We suggest (2a) and (2b) as subcategories to reflect this difference. Games or playful formats that make both strategies in a deeper, meaningful way would be placed on the uppermost level. There, we place those kinds of formats that position game design *itself* as play. This may include a variety of co-design activities that centre game design and experiences of critical making, i.e. the making of games. We believe this space in particular to be potentially very fruitful for generating experiences of conviviality and collective future imagination.

However, we recognize that with increased agency for players and increased emphasis on their input come certain challenges. Specifically, it seems that games and playful formats will have to be carefully designed in ways that enable and empower people to experiment with the *making* aspect of it. This requires the games and formats to be structured in ways that do not presuppose domain knowledge on game-making that participants and players may not have. Especially towards the upper end of the conceptual space that we have drafted here, the mode of learning and experiencing the game gradually shifts and bleeds from merely playing into making. Hence, it is unclear to what extent those activities may still feel playful or what the relationship between *homo ludens* and *homo faber* may look like here. We believe both modes to be important and useful for bringing forth conviviality.

This conceptual space and the questions it poses seem a fruitful area for experimentation in future studies. Therefore, we would like to position the framework introduced here as a tool for organising and structuring experimentation through the generative means of *research-through-design* (Findeli, 2010). Future projects might use a desired degree of player agency as a starting position for exploring game design strategies that allow for and support players in experimenting with narrative, mechanics or both to varying degree. For instance, design researchers might position their game project on the second level and use that position as starting point for conceptualising games that either take narrative as fixed and focus on design strategies that allow for experimentation with game mechanics – or vice versa, depending on their goals. They may use the framework to reflect on the depth of agency and experimentation they desire and formulate design strategies to support players appropriately. Furthermore, the categories represented in this framework – agency, mechanics and narrative – may be used as basis for analysing existing games or design research projects by exploring the relationship between player or participant agency and the applied design strategies.

We conclude that the experimental approach proposed within the framework seems particularly suited to studying the dynamics of playing, making and constructing ideas about the future. We suggest using this framework as a guiding map for positioning, conceptualising and analysing design research projects that aim to use games as a tool for encouraging collective imagination about the future while being mindful of criticality and player agency.

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