# Bleed-in, Bleed-out A Design Case in Board Game Therapy

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# ABSTRACT

The table-top play situation offers unique opportunities for approaching real-world personal problems in ways where the structures inherent in the problems can be deconstructed, examined, and understood. This paper presents design considerations from the ongoing development of a therapy board-game; how every-day issues can bleed in and out from framed play sessions, and how game rules in this context can benefit from being malleable. The paper also offers a tentative avenue towards how play sessions, in a combination of stances for the design of game mechanics with approaches to game mastering, can be constructed as safe-spaces, affording players to draw near deeply personal issues and find ways to support each other.

## Keywords

table-top games, game design, case study, reflective, therapy, bleed, well-being, mental health, therapy board-games

### Introduction

This paper describes game design challenges considered in the ongoing development of a table top game where players bring their real life problems into a the framed safe-space of a play session. The game, tentatively called Mind Shadows, is a game for two or three players who trust each other.<sup>1</sup> The main aim of the design is to create play situations where players in cooperation better can understand situations in their everyday lives that are emotionally complex or difficult, and by this understanding find ways to cope with the situations. In real life it is common to get a better understanding of a situation by describing it to someone else, and get another persons perspective on it along with friendly advice. The Mind Shadows board game aims to facilitate this kind of conversation between friends by offering tools in the form of a game. Playing the game can help take the conversation further by offering a structure for describing the problematic situation, a description which may become the basis for a solution-oriented play activity.

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<sup>1.</sup> The Mind Shadows game is being produced under the independent label Otter Play. A playable iteration is available upon request as a PDF file (email: info@otter-play.com). In order to play the game the following additional materials are necessary: A printer (black and white), paper (A4 or letter size), scissors, and a six sided die.

The design process of Mind Shadows has been slow and reflective. Over the course of three years ten iterations of the game have been considered in 18 documented participatory play-tests. During this time certain design-related topics have emerged that may be of wider interest to discuss:

- The framing of the play-sessions as safe-spaces.
- The tension between a gamist number counting approach to drive the play-session forward and the need to have the game state reflect the actual moods and emotions of the players.
- The transportation real life issues into a magic circle, where player reflect upon, and the consideration of how effects of the reflections may bleed back into players' everyday lives.

Players who often engage in role-playing in order to step inside the shoes of another person in a fictional reality that they consider "consequence-free." However, role-players sometimes experience moments where their real life feelings, thoughts, relationships, and physical states spill over into their characters' and vice versa. In role-playing studies, this this phenomenon is called bleed (Montola 2013). A key challenge for the design work reported in this paper is how to create game mechanics allowing bleed as an element of play, and how to frame play sessions accommodating this. This paper provides a tentative approach for how to combine the design of the game mechanics along with game mastering approaches for framing safe-spaces, that is, situations affording players to a sense of safety, allowing them to draw near sensitive and and important personal issues together in a constructive and supportive manner.

First, this paper provides a brief overview of approaches to game play in therapeutic contexts that can be promising for therapy board games. Second, the board game Mind Shadows is described along with brief observations made in early play-tests. Thirdly, an approach for framing safe-spaces for therapy board games is presented. The text concludes with notes on future work.

#### Background

Many may habitually associate play of digital games with enactments of competition and conflict, and indeed, a large part of the of commercial games for sale are geared towards shooting (first person shooters) and warlike territorial acquisition (real time and turn based strategy games). However, there is a long tradition play of where the narrative has a more important role, and that is in the pen- and paper role-playing that became popular in with the game Dungeons and Dragons in the seventies (Gygax and Arneson 1974). In such settings, a small group of people gather to co-narrate an adventure in a fictional setting. All players are partaking in the process, in particular by building up the persona of the character they 'play' during the session, characterizing the persona and acting according to their personality, traits and skills. While the group create the framing of the experience together, a key person is the game-master. He or she narrates more than the others, setting the stage, and has the last word when interpreting game rules and outcomes of in-game events. Already in the eighties

the framing of this play situation was used clinically for therapy purposes, although as, (Lieberoth and Trier-Knudsen 2016) points out, so many factors are at play in longitudinal therapy situations that it may not be possible to isolate play of fantasy games as a reason for any successful treatments.

## Psychological Effects

In the text "Psychological effects of fantasy games on their players: a discourse-based look at the evidence" Lieberoth and Trier-Knudsen (2016) examine the available 'hard-data' on what psychological effects fantasy games have had on players, limiting their study to peerreviewed publications reporting "evidence only through the most conservative scientific standards". The authors report that several studies (Shanun 2011; Zayas and Lewis 1986) have found role playing related to increased self-efficacy - that is, that players may find a private feeling of being able to act with efficacy in the world, affecting their own lives. Also, they state, the literature suggests that players experience increases in self esteem and engendered through role play stemming from factors such as camaraderie, a sense of accomplishment, and "the empowering characteristics of manipulating a symbolic framework of meaning". However, according to (Lieberoth and Trier-Knudsen 2016) it is not possible to, relying on previous research, to say that playing (fantasy) games have either good or bad effects on players' mental well being - many of the writings on the subject take a biased stance depending on what the author may desire to be true rather than what can be validated by empirical studies. Perhaps a question on whether games are 'good' or 'bad' in terms of psychological effects on players is too broadly stated. What can be said though, according to Lieberoth and Trier-Knudsen, is that *framing* of the fantasy games most certainly is a key aspect. (Lieberoth and Trier-Knudsen 2016) can also note that the role-playing activity, when confined to a clinical setting, indeed may become a "safe place to communicate emotions, gain release from anxieties, or play around with different identity facets" drawing upon results from several studies; e.g. (Ascherman 1993; Hughes 1988; Denman 1988).

Leaning on results from these studies of psychological effects of fantasy role play, the design work with the Mind Shadows board-game has had a special focus on framing the sessions as safe-spaces, and on understanding how individuals' sense of emotional and social selfefficacy can potentially by be increased.

Board gaming sessions are socially constructed, framed, in Goffman's sense (Goffman 1974) in that both the communication between players, and the thinking in interaction with game tokens, follows certain schema, and are filtered according to the context. With Fine's expression it can said that players momentarily, within the framing of a play session, are in a shared fantasy (Fine 1983), or in Huizingan terms, in a magic circle of play (Huizinga 1971), a space affording reflection and perspective change.

#### The magic circle and the frame theory

The theoretical constructs; "the magic circle" and "framing" are central to what any game are. The magic circle is the theoretical experience-space in which the rules, reality and consequences of the real world are temporarily void and replaced by the artificial reality of a game or "game-ish" world. It is an experiential place where feelings of transition and other hard to cope with emotions may be safely approached. When a group of people are sitting



Figure 1: A two-player session of the boardgame Mind Shadows.

down to play a table-top game an implicit social experience-contract arises there between the players.

Frame theory is a multidisciplinary social science research method used to analyze how people understand situations and activities, generally attributed to the work of Erving Goffman and his 1974 book Frame analysis: An essay on the organization of experience. Frame theory and framing concerns how the culturally determined definitions of the reality of an experience, allows people to make sense of objects and events. Mayer et al explored how frame theory and the method of frame-reflective discourse analysis can provide foundations for the emerging discipline of games for learning applied to e.g therapeutic situations, in connection with Wittgenstein's language games (Mayer et al. 2016), and have also applied frame analysis for developing a methodology for evaluating the learning from learning games (Mayer et al. 2014). (Lieberoth 2015) tested how the psychological engagement levels varied with framing an activity as a game or not. Lieberoths and Mayers explorations give valuable starting points for thinking about methods for framing the space in which respondents can experience a sense of safety which may allow the approach of emotional issues and constructive thinking around them.

# Psychodrama and Experiental Psychotherapy applied to table-top play sessions

Much of the work in the area of using role play for purposes of therapy can draw inspiration from work stemming from Moreno's practice of psychodrama (Moreno and Moreno 1959), and Hollander's Psychodrama Curve (Hollander 2002). Hollander divides a psychodrama session into three parts, the warm-up, the activity, and the integration. The warm-up would, in a table top framing, be the set-up of the game where a game master and players set up the game and go through the rules and mythos of a game. The second part is the activity, in table top terms; the actual play-session, using rule-sets and play-tokens as stimuli. In Hollanders terms, the third and final phase is that of integration; which in a table-top play session can be translated to the end of the game when the final counting is done, determining the results. In this end-phase the group can look at the tokens and the resulting narrative in a



Figure 2: Superpower cards selected for co-players in the startup phase of the boardgame MindShadows.

reflective manner - a phase comparable to the sort of debriefing that is used in psychodrama. Debriefing is also a crucial component in the practice of live action role-playing, as it is in other intense settings, such as search and rescue work. In all three stages, it may prove vital to approach players experiences from an experiental perspective, drawing upon knowledge from the field of experiental psychotherapy, that traditionally uses expressive activities such as role-play, and props such as arts and crafts in order to enact emotional situations (Foulkes 1964; Mahrer 1983; Corsini 2001).

## Mind Shadows

Mind Shadows is played in three phases, echoing the psychodrama curve; Set-up, Enactment and Reflection. In the Set-up, players start with describing something that is difficult to cope with emotionally on a card in writing, which then becomes the opponent in the game, the Shadow. In this phase, players recognize each other strengths by giving each other superpower cards that can be used in play (see Fig 2). In this initial set-up phase, players model what challenge they will meet, and doing so can be said to, in Banduras terms, (Bandura 1977) model a behavior that they and their co-players interact with in the next phase - both by observing what the Shadow does, how their co-players act, and reflecting upon how they act themselves. Figure 1 shows the set-up of a two-player session. In the *Enactment* phase each player has a board that represent their emotional state (see Figure 3), and a hand of support cards (see Figure 4). The Shadow has its own board, and when it is the Shadows' turn one of players rolls a dice, where the die roll determines what destructive cards it will put in play, or if it makes an action that is authored by a player. When the Shadow is in play, it targets either of the players when it is it's turn. This way both players experience the (simulated) actions of their friends' Shadows. Players monitor each others' wellbeing, finding ways make to each other happy, and lending each other support when in states of vulnerability. In play, players choose support actions from their hand, or author new support-cards to help each other. Players win together by either diminishing the strength of the emotion the Shadow represents, or the significance of the emotion. These are represented as bars on the Shadow's board (see Figure 5).



Figure 3: The Player Board representing the emotional state of the player.

During play a story-pile is created, consisting of the used cards and authored events, helping players to keep track of who did what. During the enactment phase, players talk; inventing supportive actions, describing them, and enacting them by for example hugging, applauding or giving context-relevant compliments. In doing so players partake in continuous authoring of the scenario they are playing. As observed in play-tests, players also spend a lot of time in conversation about how to respond to a Shadow's action, and asking the other player(s) about their state, reasoning on how they best can help each other. About three fourths of the players authored support cards that were specially aimed at helping their friend in their particular contexts, offering support and alternative solutions to the problem the Shadow represented. In doing this, players can be said to, as Nussbaum writes, engage in "critical, elaborative discourse" acting with compassion and empathy, and deepening their understanding of the issue at hand (Michael Nussbaum 2008). The player activities in this second phase can be described to be, with Shön's terms, to be Reflection-in-action (Schön 1983), eg occuring while someone does something, making an action, reflecting, and then continuing. In the end of the game, in the Reflection phase, the story-pile is a summary of how players jointly approached their Shadows. Here, players can select among the newly authored cards and add them to the deck. Doing so, they personalize the deck of support cards, making it possible for one friend's support card to help another friend, in a future game. This last phase could in psychodramatic terms be seen as the phase of integration. In Shönian terms, the players are in this phase, reflecting-**on**-action, inspecting the narrative which is a result of their play-session, and what methods might be useful in real-life, and what approaches might be useful to others in similar situations.

# **Design Considerations**

An important design consideration is that of the tension between a gamist play approach (in Kim's sense (Kim 2008)) and a more malleable narrative play approach. In a gamist rule-set, player's representation of their mental and emotional state is a result of calculated specific causes and effects, while in a more narrative rule-set the numbers of the mental state are malleable. For example, instead stating that a "hug" would give a 3-point increase on

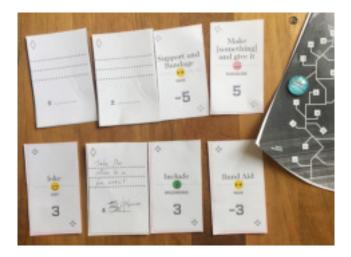


Figure 4: An example of the hand of cards at the players disposal in the enactment phase.

"Belonging" (when testing a gamist-approach), a player in a narrative rule-set would ask the other player how it feels to get the "hug". The player receiving the hug would move their emotion-pieces according to what feels right in the context. Tentatively, the narrative approach has appeared to give players a sense of more meaningful play once they have created a mental model of the game rules, while the gamist approach is useful when learning the game rules. Game design wise the rules and goals are what gives the sessions direction and forward-movement, but in play-tests it appears there is a need of interpersonal negotiation allowing for a malleability of the rules in order to make the play session, albeit fictional as a simulation or enactment of a real situation, feel "real" in an emotional sense. Another consideration regards the the framing of the play sessions, where one person (a game master, a care giver, or similar) presents and guides the session, creating a safe-space. It has seemed important to give ample time to the tactile practice of setting up the game board, placing the markers for emotions, and flipping through cards, considering "superpowers" and while doing so deeply considering the co-players as individuals - what superpower is "right"? Should a new super-power be added to the deck to be given to the co-player? This framing is what enables players to take a real world issue, bring it in to the magic circle of play, allowing it to "bleed" into the game, then enact it in the session. Players have reported that the enactment has helped them in their everyday lives, players having used approaches found in-game in their real-world situations and thereby allowing the game to bleed out. Bleed is a concept that has been discussed in live action role playing contexts recently, denoting how role-players have experiences where their real life feelings, thoughts, relationships, and physical states spill over into their characters' and the other way around (Montola 2013). In our context "bleed" is approached in a table-top context, actively inviting players to consider and reflect upon their real-life situations.

### An approach to framing play sessions as safe spaces

Design-wise, it is possible to strive towards creating a safe-spaces on multiple levels. *Firstly*, when designing the rules and mechanics, one can lean towards mechanics for tending and befriending rather than what is most commonly used, fight or flight (Taylor et al. 2000). This



Figure 5: The Shadow Board representing challenge of the a game session in the board game Mind Shadows

ties into the basics of games as a challenges - there needs to be something to win against, a challenge to meet. Most games tie into the metaphors of conflict and competition - winning a war, killing your opponent or getting fastest from one point to another in a certain manner. Much of this ties into the basis of human behavior. However - fight, flight and competition is not all the possible responses we humans have towards challenges. The tend and befriend theory suggests that many humans are motivated to bond together for safety and strength. We want to spend time preparing together against an uncertain future. We care for the weak and injured, and find this as important as hedonistically caring for ourselves. These are the types of metaphors used when designing the game mechanics for Mind Shadows.

Secondly, the game-play can be geared more towards cooperating to meet a common challenge, than towards competition against each other. In the case of Mind Shadows, this means that players win together, rather than win against each other. The reason for doing this is to create settings where individuals can think creatively around each others real world challenges, and doing so both getting other's perspectives on their own situations, as well as getting deeper understanding for persons who may be in related situations. This is closely coupled to a *third level* of the design space, that of concretely designing the affordances for players when it comes to what actions can be performed in play. Here, it is possible to design for growth and birth rather than killing, giving rather than taking, building rather than destroying, and supporting rather than competing.

In summary, the following three levels permeate the design of safe spaces, seeing a game as, with Salen and Zimmerman's words "system in which players engage in an artificial conflict, defined by rules" (Salen and Zimmerman 2001), and with Gee's terms, a "series of meaningful choices" (Gee 2007):

- 1. tending and befriending as response to challenges,
- 2. cooperation rather than competition as main game-play, and
- 3. constructive rather than destructive affordances for player actions.

Safe-space design can also draw inspiration from designer's practice on creating "cozy games" (Short et al. 2017), where where games are to evoke the fantasy of safety, abundance and softness. Especially the notion of safety is relevant for this context: "in a cozy game, nothing is high-risk, and there is no impending loss or threat. Familiarity, reliability, and one's ability to be vulnerable and expressive without negative ramification all augment the feeling if safety. To maximize safety, activities should be voluntary and opt-in so that players never feel the threat of coercion." This being said, in order for a game activity to get direction, some challenge is necessary, and the player actions afforded by the rules need to be taken in order to meet this challenge. This however can be done in cooperation.

Playing table-top role playing games can be considered an art or a craft in it self, and different persons and groups have different approaches to this process. As noted, Kim described the mainly used play approaches as the threefold model (Kim 2008), where a 'gamist' approach, where players are very focused on winning by numbers and stats, can sometimes be in conflict with a narrative stance, where rules are more malleable for the sake of creating an interesting story together. This is relevant in our context in that, for the sake of allowing players' real world stories to get a place in the play sessions, it is important to not only design the game-mechanics themselves as safe spaces, but also design the framing of the play sessions to allow for more malleability of the rules, when needed. Another important play-approach is that of how players in a session relate to the magic circle, whether it is acceptable to 'break it'. In a fantasy setting, breaking the magic circle can be detrimental to players immersion in the story. For example, if a player enacts a male hero and all of a sudden, in a critical situation fighting a dragon relates to a work-meeting, that may break the immersion and illusion of the moment for the whole play-group. In the setting of Mind Shadows however, where the very subject of play sessions may relate to real-world dragons such a reference, perhaps relating to a colleague behaving strangely in a work-meeting, might be what the game is actually about.

Figure 6 summaries the design space for Mind Shadows aimed towards play sessions as safe spaces from the perspective of design of the game, and from the perspective of game mastering.

#### **Future work**

A relevant concept for this project is that of games as cognitive structures (Klopfer et al. 2009). In the planned iterations of Mind Shadows players will have a high level of agency in that not only the the content and the challenges that are enacted in play are authored and defined by players themselves, but also having the rules being malleable in the enactment phase. Ideally, in consecutive participatory workshops, players together with the designer experiment with variations of the rules, along the line of creative 'what-ifs'. By varying the level of freedom of changing the rules between games and game sessions, it may be possible to, when observing and analyzing the resulting play, determine whether

	Approaches to design- and play elements	Safe-space Design	Conventional Design Space
Game Design: Rules and game mechanics	What human response to challenge to evoke by design?	Tend and Befriend	Fight or Flight
	Main game play. What rules governs interactions?	Cooperation	Competition
	Affordances. What actions can be performed in play?	Supportive actions, eg: Hug, help, make, give, grow, create, birth	Confrontative actions, eg: hit, take, destroy, smash, conquer, battle, war, kill
Framing Play: How caregivers or game masters guide sessions	Approach to Magic circle	Open - things can bleed between everyday life and play	Closed - in order to not break immersion to fantasy
	Play style (of the threefold model)	Narrative. Rules can be malleable	Gamist. (winning by numbers)

Figure 6: Framing game play sessions as safe-spaces by design of game mechanics, and by game mastering approach.

there may be differences in the experience of users self efficacy and other factors relevant to coping with challenging life-transitions.

The play-tests conducted so far has been of an informal nature. Future design of the playtesting sessions entails careful consideration of what types of interactions need to be observed, in order devise methods for capturing a suitable level of granulation of play session data.

The games to be produced need to be comfortable to use in a group setting, allowing for the safe framing as described above. In future work, special emphasis will be placed in creating instructions for game masters and players regarding this framing, instructions that will need to be throughly tried out in practice. Additionally, in order to make the game more feasible to play, and for logging purposes, some digital applications aiding the table-top board game play will be necessary. In order to suit the play situations these will be developed for tablet computers or cellphones, potentially with use of inbuilt cameras in the devices in order to recognizance cards or other tokens (stimuli) used in the sessions. These applications will be limited, but as well-produced as possible with the resources at hand.

### Conclusions

This paper has described game design considerations concerning a therapy board game where players bring in their real life problems into play sessions. Key design choices concern tension between gamist and narrative play approaches, the concept of bleed and the magic circle, and ways of framing play sessions as safe spaces. The paper provides a possible avenue towards framing play sessions as spaces where participants may approach sensitive and and important personal issues together in a constructive and supportive manner.

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