Let’s Play
An analysis on social interaction and innovation in board games

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Abstract
This articles was written with the interest of revealing why board games have not been rendered obsolete by video games. Two main topics were discussed, namely the differences between board games and video games, and the trends in modern board games. The results indicated that board games cover a set of social elements that are absent from video games. There also seems to be a high degree of innovation in modern board games, which benefits the end users as well as the board game designers.

Keywords: Board Games, Video Games, Social Interaction, Board Game Mechanics.

1. INTRODUCTION
When people think about board games, there is a high chance they are thinking about Monopoly or Risk, two of the most popular board games of the last century. During the past few years, some might have seen a few different games in book stores, they might even remember a few names, like Carcassonne or Ticket to Ride, and definitely Settlers of Catan. We have all seen that game somewhere.

At the same time, video games (computer and console games) are more popular than ever. Players can be fighting terrorists and flying spaceships at the push of a button, and Massively Multiplayer Online Games (MMOGs) such as World of Warcraft let players form guilds and alliances to fight evil together from the comfort of their armchair. In this context, it seems obvious that board games would have become a thing of the past, or a niche hobby for the especially interested, some time during this past decade.

The fact is, however, that after the year 2000, the number of board games released and sold has increased drastically, and there has even been invented multiple new genres of games (Kleinfeld, 2009). Web sites like Sit Down & Shut Up (www.shutupshow.com) dedicated completely to board games have appeared, and the actor Will Wheaton is playing board games with celebrities in the internet show Table Top (www.tabletop.geekandsundry.com).

This specific article is focused on why the seemingly inevitable obsolescence of board games has not occurred. In order to find an answer, two main topics were explored. The differences between board games and video games, and the trends in modern board games in general.

2. METHOD
In the writing of this article, a literature study was conducted, utilizing a hermeneutical approach. When using a hermeneutical approach it is important to recognize any pre-understanding the author might have within the context, since a pre-understanding might influence the results of the interpretations (Creswell, 2007). My pre-understanding of the thematics has functioned as a motivation, because I have a personal interest in board games. By having a reflected and critical relationship with my
pre-understanding, I have attempted to keep my own experiences as suppressed as possible, and let the contents of the literature be in focus.

The study was conducted mainly through Google Scholar, and Bibsys, using the main keywords: Board, Games, Tabletop, and Design. These keywords have been used in combination with each other, as well as other terms with a relevance to smaller subjects in the article. The literature searching was restricted to mainly cover articles written after the year 2005, however, some articles released prior to 2005 were included as they were the primary sources of several other articles, and were therefore considered to be especially relevant.

While performing the literature study, a few issues became apparent. First of all, while there does exist a decent number of articles on board games, using general search terms resulted in multiple articles involving various other topics, such as game theory, how to digitize board games, corporate strategy (board of directors) and statistical mathematics. Secondly, a lot of the literature written on board games is written by gaming enthusiasts without using scientific methods, which made it challenging to find reliable sources. The literature cited in this article is mainly extracted from books and journals on board gaming, but some of the literature originates from other sources, such as newspaper articles, master theses, anthologies and other web sites.

In addition to a literature study, a limited amount of statistical data was gathered in order to display the amount of games released during the separate years following the year 2000, as well as the use of certain game mechanics. The data was collected from the online database boardgamegeek.com, which describes itself as:

“a website dedicated to the subject of physical board games. The site provides an extensive database of boardgames as well as an active community of users who discuss, argue, buy, sell, trade and play board games. The database contains over 59,000 board games (June, 2012) and each game has its own Game entry which gives information about a game, user ratings, forums for discussion and a great deal more.”

The site has been utilized in multiple scientific articles about board games (Lundgren and Björk, 2003; Aranda, et al., 2007; Berland, 2011, Drake and Sung, 2011; Linderoth, 2011), and contains nearly every game to be commercially published (a quick search reveals that the site contains entries for over 800 games that was released during the 1800’s). Because of this, I regard Boardgamegeek.com as a trustworthy source for the purpose of collecting data to get an overview of the trends in board games in this article.

The search was conducted using the sites advanced search feature, using the following search terms: Year Published, Filter Expansions, and Board Game Mechanics. To exclude prototypes of games, and games that have been cancelled, the search also included a limit of two on the minimum number of user reviews the resulting games were allowed to have. In a typical search, this would return every game released in the given year that incorporated the specified mechanic in any way, with minimum two user reviews. The search result would also not include expansions to previously released games. It should be noted that one game might include several mechanics, and will therefore show up as a result in all the searches made for a specific mechanic contained in the game.

This method of collecting data might not be exact, because the database is maintained and updated by the sites users. It is still useful to get a fairly accurate estimation of the number of released games.

3. RESULTS AND DISCUSSION

In this section, the two main topics stated in the introduction will be discussed, in order to answer the main question of why board games have not been obsolescenced. First, the differences and similarities between board games and video games will be discussed. Then the evolution of modern board games will be explored.

3.1. Board games and video games

While video games are capable of producing increasingly more realistic and complex worlds for players to immerse themselves in, it would be easy to believe that video games sooner or later would make board games obsolete. There are, however, some key parts in which board games differentiate themselves from video games, that makes board games a valuable source of entertainment in their own way.

3.1.1. Social aspects

As explained by Xu et al. (2011), there are five
different social interactions that emerge from board gaming. Categorized based on how each interaction is initiated, the different interactions are: “chores”, “reflection on gameplay”, “strategies”, “out-of-game” and “game itself”.

In the article, the author states that “chores” are “activities needed to maintain or update game state”. Such interactions might manifest in players arguing over the right interpretation of the rules, shuffling cards or simply sharing the thrill of rolling the right numbers on the dice.

Social interactions resulting from “reflection on gameplay” might include praise or laughter in reaction to another players actions in the game, but it also includes discussing previous moves that have led to the current game state, or even discussions between games to reflect on particularly exciting actions.

“Strategies” was also found to be a common reason for social interactions. Interactions of this type includes advising team mates on strategies, as well as trying to bluff the opponents into making bad moves. Especially interesting was the fact that players sometimes would help, or give suggestions, to their opponents, in order to keep the game exciting. It was also revealed that players would regularly point at the game board, or move the player tokens around to experiment with the outcome of different moves, and that this helped the other players focus their attention to a small area on the board.

While playing the games, the players were also found to have social interactions not connected to the game, or “out-of-game”. Such interactions included talking about other subjects between turns, reacting to distractions, such as phone calls or people getting foods, or casual chat between play sessions.

Lastly, the social interactions resulting from the “game itself” would include commenting about the rules, artwork, and the language used in the game (ibid).

Board games are also mainly played with multiple players in the same room. This alone is a significant difference from modern video games, where most video games are designed for a single player only experience, or for multiple players across the internet. It is important to note that online gaming has become increasingly more popular as people have been getting faster internet connections. While the personal computer has been able to play games online for a long time, the first video game console with an extensive online service was Microsofts Xbox. The Xbox Live service was made available in November 2002 allowed players to play their console games with other players over the internet. Before this, players were limited to playing games on a shared screen. This so-called “split screen” mode separates the screen into multiple separate pictures, usually two to four, and has the players looking at their part of the screen. The number of games using split screen has decreased with the growing popularity of online multiplayer (Hinkle, 2012).

With studies showing that people experience greater psychological enjoyment from playing against co-located human opponents (Mandryk, 2004, Voida, 2009), it is not unreasonable to believe that part of boardgaming’s recent increase in popularity might have emerged to fill the void left by the disappearance of the split screen games, for people to get an opportunity to do something together in the same room.

3.1.2 Simulation

Video games are capable of simulating highly complex systems, with multiple interconnecting subsystems, the rules governing the systems are often concealed from the player in various degrees, making it difficult for players to deduct the consequences of their actions. In board games, the players are responsible for carrying out the rules, and whatever changes they make to the game state. The consequences of the players actions are, because of this, much more visible. According to Berland (2011), this causes players to engage in relatively complex computational thinking, and according to Prensky (2001), solving complex problems is, for many people, a large source of enjoyment.

In addition, because the players are responsible for maintaining the state of the game by interacting with the physical game pieces, the players will always be aware of any changes made to the game state. This is in contrast to video games, where the game state will continually update, requiring the players to pay attention to the game in order to maintain an awareness about what is happening in the game world (Pape, 2012).

The absence of a need to constantly pay attention to the game obviously allows for a more relaxed atmosphere, where it is easier to maintain social interactions while still being able to play the game skillfully.
3.1.3. Turn based games versus real time games.

Board games are turn based in nature. This means the games are played in discrete phases, and that the players are usually allowed to spend an indefinite time between these phases to strategize and socialize. Video games, however, tend to be “real time” games, or games where the game state is continuously being updated to reflect the actions of the player.

Because of this, many real time games require a certain numbers of skills from the players. Such skills will vary depending on the game being played, but might include hand-eye coordination, quick reflexes, and an ability to make multiple successive actions in a determined order. Depending on the type of game, the players might also be required to keep a certain degree of focus on the game for an extended time. This is especially true for competitive multiplayer games, but does also apply to single player games (Avontuur, 2012). When the players are required to maintain an elevated level of focus over extended periods of time, it is natural to assume that their engagement in social interactions will be limited.

There does exist video games that are turn based (for example: Sid Meier’s Civilization, Heroes of Might & Magic, Advance Wars etc.), and while these games share many of the characteristics of regular board games, they are way too complicated, and there is too much data to keep track of, for the games to be played manually. Turn based video games will not be taken into consideration in this article, as every game can be related to board games in various degrees.

3.1.4. Technical aspects

Video games are mainly played on a personal computer, or on a dedicated video game console, like the current generation Xbox 360, or the PlayStation 3. However, the highest rated game of all time (according to Metacritic.com), The Legend of Zelda: Ocarina of Time is only available on Nintendos old console Nintendo 64. In order to play the game, one would need such a console available, which most people do not have. This is the case for numerous other video games as well. Different video games require different technologies in order to be playable, which is a limitation for almost all video games. For computer games, this mainly applies to games released for old versions of Microsoft Windows, which can be fixed using certain programs. However, there is a whole other issue when trying to play computer games, namely the system requirements. New PC games are constantly pushing the limits in how many polygons can be displayed on the screen at the same time, as well as complex physics calculations and lighting effects. This cause the games to require increasingly more from the computer, which in turn requires the players to buy increasingly more expensive computers.

Buying new computers can also become a problem when some game publishers limit the number of different machines a game can be installed on. This is one of many types of digital rights management video game developers have implemented, in order to prevent criminals from illegally downloading their software (Singleton, 2007).

In order to make a long story short: These problems do not exist within board games. Once someone buys a game, they can play it whenever they like, and wherever they want to. Board games do, however, have certain issues that video games do not have. First of all, the size of a boxed board game is usually larger than that of a video game cover. Sizes can of course vary, and a pack of playing cards will always be the size of a pack of playing cards, but in general, moving board games around can be a hassle. Secondly, board games are physical objects, which means that tokens can get lost under the couch and cards can easily get bent or scratched if someone is not careful. The impact of an event like this is naturally variable, depending on the game, but it is easy to realize that in a game of poker, where secrecy is highly important, a scratched card can be a big deal to the point of ruining the game.

3.2. Trends in modern board games

While many of us grew up with board games like

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<tr>
<th>Year</th>
<th>Number of Board Games</th>
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<tr>
<td>2000</td>
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Fig. 1: Number of board games released each year (www.boardgamegeek.com)
Monopoly and Ludo, the board games designed today are of an entirely different caliber. There are grand-scale war games, with deep, complex mechanics, and tiny portable games, designed for 15 minute matches while waiting in the airport, and as shown in Figure 1, the number of released board games have increased every year since 2000. In this section, a few of the trends in board games during the past decade will be explored, in order to explain one of the reasons why this increased popularity has occurred.

3.2.1. Eurogames

Björk (2006), defines a game mechanic as “part of a game’s rule system that covers one general or specific aspect of the game”. In Monopoly, we define Roll and Move as a game mechanic, where the player rolls a die and moves the corresponding number of spaces. The game mechanic does not mention that the player gets to move again by rolling double, or that he collects money when passing the start space, as this is more closely defined in the games detailed rules. A board game is not limited to containing a single game mechanic however. Monopoly contains the mechanics Auctions, Set Collecting and Trading (notice that buying and selling is not considered a separate mechanic, and is only the means to how a player can collect a set of streets).

Before 1995, most games could be split into three categories: Abstract strategy games, war games and family games.

Abstract Strategy Games, such as Chess or Checkers, are defined by Thompson (2000) as the “purest of games”. These are games with no theme or story, no reliance on luck and perfect information (every player has access to all the information available on the game board when deciding his move). Because of this, Abstract strategy games are extremely reliant on skill, and the more experienced player will almost always defeat the less experienced one. Abstract strategy games are usually played with two players on opposing sides.

War Games, on the other hand, are games that attempt, to a higher degree, to simulate a generals experience during real wars. According to Thompson (2000), such games differ from abstract strategy games in that they might include one or more random elements, such as dice rolls, or deployment locations, they might have a more concrete theme, and the players might not have access to all the information when deciding on their move. Another important difference from abstract strategy games is the fact that some war games are played with more than two players, which opens up for diplomacy and alliances between players. War games are usually considered lengthy experiences, with games lasting over several hours being the norm rather than the exception.

The third category, family games, is a more diverse category, that includes games such as Scrabble, Monopoly and Ludo. Many family games were designed with the players age difference in mind, which made luck an important factor during the game. Mayer (2010) tells us that games that rely too havyly on luck, lack the possibility of allowing the players to make important strategic decisions, which limits the enjoyabilty and replayability of such games.

This all changed with the release of Settlers of Catan (referenced as Settlers in the remainder of the article), a board game that was released in Germany in 1995. Settlers managed, while still relying heavily on dice, to be a game that rewarded players for thinking strategically and using diplomacy, and a single match could be completed in as little as 30 minutes. The game became a huge success outside of Germany, selling millions of copies, and is considered having caused a major change in how board games were designed (Schreiber, 2011). According to Schreiber, Settlers “is the boardgame that first proved to [people] that well-designed games can actually be fun for children and adults” and it is known as the game that established the market for Eurogames in America.

While earlier games had a high degree of randomness, Settlers constrained this randomness by using a deck of cards with a known distribution. This allowed players to play the odds in a strategic manner rather than just rolling and moving (ibid). This one of the trademarks of board games known as “Eurogames” or “German board games”.

Eurogames are games that typically favour skill and strategy over luck, and have rules that are easy to learn, but hard to master. Most Eurogames have economical themes rather than military or other violent themes, and rarely let players get eliminated from the game before the game is finished. Waiting time between turns are usually shorter than in typical American board games, and games usually have a shorter timespan. (An affinity for rules?, 2008).

3.2.2 American board games

American board games were, at least up to that point, known for their focus on the theme of the game.
While “Eurogames” have mundane themes, like farming or trading, with only a faint connection to the gameplay, American games usually have closely connected themes and mechanics, and usually feature themes that are considered more exciting, like zombie outbreaks, or space combat. The themes are often tied to movies or TV-series, like Lord of the Rings, or Battlestar Galactica. Typical American games usually contain more direct conflict between players, and have a higher degree of randomness (Costikyan, 2011).

3.2.3. Cross-pollination in game mechanics

When Settlers became popular in America, game publishers wanted to copy some of the features that made it so popular. This led to a number of new games that incorporated features from both European and American board games. Games with an exciting theme as well as deep gameplay mechanics. During the 2000’s, numerous new games were invented with new game mechanics that the audience had not seen before. In this section, three of these mechanics will be discussed, namely Roll and Move, Hand Management, and Deck Building. While there are numerous other mechanics worth mentioning, these three mechanics have been specifically discussed in other articles (Mayer, 2010; Gold, 2011) as examples of how board game trends are evolving.

Roll and Move games are classified as games where the players roll dice, or use a spinner in order to decide how far the player is allowed to move each turn (boardgamegeek.com). This mechanic has been popular for a long time, and has been the norm for many childhood games. Mayer (2010) compared this to players drawing a random card from a playing card deck, where the player with the highest card won. He stated that “games of pure chance can grow boring because there is no opportunity for improvement”.

According to the statistics that were collected from boardgamegeek.com (Figure 2), about 80-90 games were released every year from 2000 to 2004 using the Roll and move mechanic, and the use of the roll and move mechanic reached its peak in 2005, with a total of 104 games released using this mechanic. In the years after, the use of Roll and move games have steadily declined, to the point where in 2011 there were only released 37 games that incorporated a Roll and Move mechanic. These data indicate that Roll and Move games are becoming less popular as new mechanics emerge, which might be connected to the issues Mayer is mentioning.

Because a die have the same probability of landing on any given side each time the die is rolled, there are no ways players can “save up” the high rolls, or spend a low roll when the situation is calm. Some games try to fix this using a mechanic known as Hand Management. According to boardgamegeek.com “Hand management games are games with cards in them that reward players for playing the cards in certain sequences or groups. The optimal sequence/grouping may vary, depending on board position, cards held and cards played by opponents. Managing your hand means gaining the most value out of available cards under given circumstances. Cards often
have multiple uses in the game, further obfuscating an “optimal” sequence”.

Unlike Roll and Move games, Hand Management games allows the players more control over both their current actions (what card they will play this turn), as well as over their future actions (what cards they are saving for later turns). When the composition of the cards are known to the players, they are able to make strategical descisions based on the odds that a given card will appear in their hand when needed. Thus a game using the Hand Management mechanic has a larger potential for rewarding skilful and strategic play, and therefore has a higher replay value (Mayer, 2010).

As Mayer (2010) explains, this is a mechanic that is better suited for allowing the players to make strategic descicions. Statistics collected from boardgamegeek.com (Figure 2) are suggesting that games featuring Hand Management mechanics have been continually increasing throughout the 21st century, as a result of designers and players having increasingly recognized this as a viable mechanic.

The year 2008 saw the release of the popular board game Dominion, a game where the players are monarchs, trying to buy more land than their opponents. The game featured a brand new mechanic called Deck Building, in which the players start with a pre determined set of cards that they use to buy three different types of cards: money, actions and victory cards. In Dominion, money are used to buy more cards, while the player with the most victory cards at the end of the game is the winner. The action cards gives the player various abilities, like the abilities to draw extra cards or take extra actions. While the game was released with 25 different action cards, only 10 of them were picked at random and used during a single match. This meant that every game would include different cards with different possible strategies (Gold, 2011).

Dominion was the first game built solely around the Deck Building mechanic, and was a huge success, selling over 1 million copies in its first year (Riograndegames.com). In the following years, more designers started using this mechanic in their board games. The very next year saw the release of the game Thunderstone, a game that had a relatively similar gameplay to Dominion, but a completely different theme. In Thunderstone, the players are heroes fighting monsters in a dungeon, and will find new weapons and allies during the game. In 2011, the deck building mechanic was integrated into a strategic war game called A Few Acres of Snow, that has the players fighting for control over Canada. The players deck contains cards representing all the units the players have recruited, but it also contains cards for all the territories the player controls, and the territory cards are relatively useless. This means that the more land the player has, the less control he has over his forces, which simulates the logistics of warfare over large territories.

According to boardgamegeek.com, there were released 29 games using this mechanic in 2011, which is notable considering it is a 2800% increase from 2008 (with 1 game released). This does by no means indicate that Deck Building will be the predominant mechanic in the future, but as the above examples illustrate, a single successful innovative game mechanic can heavily influence the board game scene, and there is still a lot of room for innovation. When innovative games achieve high sales, designers and publishers are willing to take higher risks to innovate, and consumers enjoy a more diverse range of games. The high level of innovation present in the board game market is also in contrast to the video game market, where games cost millions of dollars to produce, and publishers are less inclined to take risks, and make changes on traditional gameplay.

### 3.2.4. Collaborative games

Traditional games are usually competitive in nature, which means there is one winner, and the players are actively trying to complete the goals of the game while sabotaging the other players. Some traditional games also feature cooperative elements, like trading between players, or the formation of temporary alliances. This, however, is only as a mean to further their own goals, and not to share the victory (Zagal et al., 2006).

The first purely collaborative game to receive public attention, and successful sales was Reiner Knizias’ Lord of the Rings, released in 1999. Lord of the Rings is a game based on J.R.R Tolkiens novel series of the same name, where the players play as Hobbits attempting to carry the ring to Mount Doom, without getting caught by Sauron, the antagonist in the novels and the game. Sauron, however, is not played by any of the players, but is governed by the rules, and the playing pieces in the game, using a so called “scripted game system”(Knizia, 2004). For the hobbits to successfully win the game, they need to work collaboratively, and make personal sacrifices for the good of the team (Zagal et al., 2006). This makes Lord of the Rings a game that can be played by players
of different skill levels without one player having a significant advantage over other players.

Following the release of Lord of the Rings, an increasing number of collaborative games got released, and the number of collaborative games released per year has been steadily rising, to the point in 2011 where 44 collaborative games got released (Figure 2).

4. CONCLUSION

This article focused on why the seemingly inevitable obsolescence of board games had not yet occurred, however after reviewing the literature, it may seem that the obsolescence may not be that inevitable after all.

On the whole, it seems that board games provide an experience that is not yet provided by video games. There are certain social aspects of board games that are not present in video games, and the increasing absence of an easy way to play co-located with your friends seems to have revived board gaming for the foreseeable future. In addition, the merging of the American and the European board game cultures seem to have created a new culture of board games with the best elements of both worlds. Innovative games enjoy a relatively high success, which means that more innovative games get released, and with the myriad of innovative games that reach the market every year it seems likely that board games will continue to be popular for at least a while longer.

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