

### 13 Exploited or Engaged? Dark Game Design Patterns in *Clicker Heroes*, *FarmVille 2*, and *World of Warcraft*

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Playing digital games can be a captivating experience and in some instances a time-consuming affair. In the general public, spending too much time on games has been an object of concern, and the massively multiplayer online role-playing game (MMORPG) genre has often been publically criticized for being overly demanding of time, sometimes leading to excessive playing, with negative impacts on players' lives. Another game genre that has been criticized for being a "time sink" is the casual social network game, an example of which is *FarmVille* (Zynga 2009). In this case, it is claimed that people are duped into playing games without any real content by the deployment of alluring reward mechanisms—in this sense resembling the behavioral conditioning chamber known as the *Skinner box* (Skinner 1953)—and thus training the player to become hooked on the game. In this regard, Jonathan Blow, the designer of the acclaimed game *Braid* (Blow 2008), has stated, "If you look at a game like *Farmville*, there's actually no game there. It's just reward structure layered on reward structure layered on reward structure with a hollow center" (quoted in Makuch 2013). Even representatives of the casual-game industry question the status of such a design; for instance, Ken Rudin of Zynga infamously stated in reference to the company's practice of analyzing player behavior and tweaking the design to optimize engagement and sales that Zynga is "an analytics company masquerading as a games company" (quoted in Willson and Leaver 2015, 149).

This chapter analyzes game design patterns that stimulate players to invest more time in playing a game than they might have originally intended. The aim is to explore how potential effects of game design can be measured and to what extent designers are responsible for this effect. Because game designers do not directly design play experiences but are rather doing "second-order design" (Salen and Zimmerman 2004, 168) by creating the system within which the players interact, this topic is difficult to analyze empirically in a straightforward way. So I focus instead on specific game designs and what sort of play experiences they may enable. I tie this focus to a discussion

concerning to what extent this type of game design can be regarded as unethical or transgressive.

Broadly speaking, transgression means to overstep boundaries, including the action of “passing beyond the bounds of legality or right; a violation of law, duty, or command” (“Transgression” 2017). In the context of game design patterns and time spent on playing, the question is whether game designers overstep ethical boundaries rather than legal boundaries. Earlier ethical research within game studies has often been occupied with content viewed from a player perspective, or how games may “encode, express, and encourage ethical reflection and ideas through their systems, mechanics, and representational elements” (Nguyen and Zagal 2016, 1; see also Sicart 2009). Other research has focused on ethical dilemmas in online games that afford players the opportunity to perform transgressive acts against other players, including theft and treacherous play (Carter 2015b), player killing (chapter 8 in this volume), and other unwanted and toxic behavior (chapter 15 in this volume). This chapter employs a different perspective by focusing on how game design itself may work against the player’s “best interests.” Rather than following ethical philosophy, the analysis employs the concept of *dark game design patterns* and explores in what way such design can be said to be “questionable and perhaps even unethical” (Zagal, Björk, and Lewis 2013, 8).

The objects of analysis are three games in which the manipulation of the temporal aspects of gameplay is a core part of the design: the idle game *Clicker Heroes* (Playsaurus 2014); the casual social network game *FarmVille 2* (Zynga 2012); and the MMORPG *World of Warcraft: Legion* (Blizzard Entertainment 2016). These cases are staple games of three genres that have been criticized for how their design manipulates players into wasting time (and money) on mindless activities or into excessive gameplay or addiction. The comparative approach is used to discuss different ways the same game design pattern can be embedded in games and to evaluate how discrete design elements may function in the larger game setting.

### **Method—the Implied Player’s Perspective**

Methodologically, there are several ways to approach the question of how so-called exploitative game design might affect people. I have chosen to conduct an analysis by playing the games in question, which is the most direct way to understand how a game functions from the position of the player (Aarseth 2003). The aim of this approach is twofold: (1) to analyze the games as “structure” and (2) to analyze the games as play experiences. The first aim focuses on identifying what kinds of dark game design

patterns exist in the games, and the second aim involves understanding how these patterns may be experienced in the larger context of the game. The motivation is to discuss whether game design patterns can be considered transgressive per se and to what extent the overall game experience and the motivation for playing may ameliorate the “effect” of certain design patterns.

In practice, my approach has been to play the games systematically and to log each play session through screenshots and written notes. I have been especially attentive to quests, missions, and other activities that rely on specific time requirements and hence stimulate the player to increase playing time. Because the games I analyze are known to gradually introduce more complex and time-consuming gameplay, I have not limited my data collection to a specific period but rather have played until the games seem to stabilize into predictable patterns without any new features being announced. However, the analysis is in no way exhaustive because the games gradually evolve through patches and expansions. My empirical data collection ended in December 2016, so my analysis refers primarily to the 2016 versions of the games.

### **Market Conditions and Shifting Concerns**

How games are designed is to some extent linked to the monetization model they employ. During the past decade, retail sales of games have dropped significantly, and digital distribution platforms such as Steam, Xbox Live Arcade, the Apple App Store, and Facebook have taken over a large majority of the market (Phillips 2016). The shift in distribution models and the huge amount of free games available on these platforms have also stimulated a shift in monetization and a “gold rush” toward converting traditional business models into the free-to-play model (Alha, Koskinen, Paavilainen, et al. 2016). In the free-to-play model, a game can be acquired for free but at the same time offers players the opportunity to buy virtual content during play; it is now the most common monetization model on Facebook and Apple platforms (Paavilainen, Hamari, Stenros, et al. 2013; Phillips 2016).

The free-to-play model has generally been criticized both by game designers and politicians for being exploitative and unethical. In 2014, the European Commission, for instance, raised concerns about the booming app industry, in which 80 percent of revenue was based on in-app purchases. For smart phone games, 50 percent of revenue was based on in-app purchases, and the European Commission was especially concerned that children were at risk of being exploited economically by games that were marketed as “free” (European Commission 2014). The criticism is directed especially at the most aggressive monetization strategies, aiming for short-term profits instead

of long-term player engagement—for instance, by the use of paywalls and pay-to-win features (Alha, Koskinen, Paavilainen, et al. 2014).

Although parts of the MMORPG market have also turned to the free-to-play model, many titles, including *World of Warcraft*, are still based on the subscription model. Subscription is an economic model that is designed to ensure a stable income and, in effect, to stimulate long-term loyalty. The criticism of *World of Warcraft* is therefore also different from the criticism of the free-to-play market and the casual market: public concern has instead focused on the huge amount of time players spend on the game and its “addictive” qualities, a concern also mirrored in a substantial amount of psychological research on this topic (King, Delfabbro, and Griffiths 2010; Karlsen 2013; Petry, Rehbein, Gentile, et al. 2014).

What is common for these monetization models is that time spent on the game is converted to money. Although noncommercial predecessors of MMORPGs, such as tabletop role-playing games and multiuser dungeons, are also known for being time-consuming, sometimes engaging players for years (Fine 1983; Kendall 2002; Karlsen 2009), a monetization model such as a subscription may be a way to take advantage of these qualities. I selected certain games to compare game design in different monetization models to see especially how short-term and long-term perspectives relate to each other.

### Dark Game Design Patterns

The concept of game design patterns is a description of reoccurring interactive design elements in games, for instance, certain types of quests (Björk and Hopolainen 2006). According to José Pablo Zagal, Staffan Björk, and Chris Lewis, a *dark* game design pattern is “a pattern used intentionally by a game creator to cause negative experiences for players which are against their best interests and likely to happen without their consent” (2013, 7). What qualifies as a “negative experience” and “best interests” is not further described, and their paper does not discuss how they should be measured. However, it is suggested that if a game seduces people to part with large sums of money or if the player’s expectation of the time commitment is “significantly at odds with the actual time requirement,” the design may be described as “dark” (2013, 3).

Zagal, Björk, and Lewis distinguish between three different types of dark design patterns: monetary, social capital based, and temporal. My analysis focuses mainly on design in the temporal category, but because all three types rely on each other to a great extent, I briefly describe all of them here. Dark *monetary* patterns are patterns that

deceive the player into spending more money than anticipated. *Predelivered content* is, for instance, a pattern in which game content exists upon purchase of the game but is not available until the player pays an additional fee. Dark *social capital*-based patterns are designed to make the player feel she has to play out of social obligation. One example is the need for “neighbors” in social network games such as *FarmVille* in order to progress. Dark *temporal* patterns may lead the player to experience that a game takes significantly longer than expected or to feel that she has “wasted her time” (Zagal, Björk, and Lewis 2013). *Grinding* is perhaps the most well-known pattern in this category, where simple activities are repeated endlessly to generate resources or to reach certain goals.

In my subsequent analysis, I identify the kinds of temporal design patterns that are implemented in *Clicker Heroes*, *FarmVille 2*, and *World of Warcraft: Legion*, sorted under the categories *grinding* and *play by appointment*. But, first, a description of these games.

### ***FarmVille 2*, *World of Warcraft*, and *Clicker Heroes*—Three Ways to Enthrall the Player**

#### ***FarmVille 2***

The original *FarmVille* was launched on Facebook in 2009 and quickly became the most played game on the platform, with about 80 million monthly users at its peak popularity (Jacobs and Sihvonen 2011). The company Zynga was a flagship in the development of the genre known as the casual social network game and released a long range of games in the same mold, including *FarmVille* (Zynga 2009), *CityVille* (Zynga 2010a), *FrontierVille* (Zynga 2010b), and *FarmVille 2*. *FarmVille* has also spawned many clones, including *HayDay* (Supercell 2012), which has been the biggest success in this genre in the past few years. A crucial part of Zynga’s initial success was its metric-driven game design, in which analyses of players’ behavior played a central role, rather than page-view-centric analyses that only counted views, which were more common at the time (Shiu 2015).

*FarmVille 2* revolves around developing and tending to a farm. While leveling, the player gradually gains access to more items, resources, and abilities. The player must grind resources such as grain and fruit to be able to acquire gold or other items needed on the farm. The gameplay is cyclic, and a typical cycle consists of growing plants that can be fed to animals, which provide materials that can be refined into food and sold for gold at the market, which in turn can be spent on upgrading the farm and make farming more efficient, resulting in more advanced food and more gold at the market, and so on. There is no gameworld to explore outside of the farm area, except for

neighbors' farms. The social interactions between players consist primarily of gifting and a leaderboard.

### ***World of Warcraft***

*World of Warcraft* (Blizzard Entertainment) was launched in 2004 and quickly became the largest MMORPG in the world, based on subscription numbers, and is allegedly the highest-grossing game of all time (Frederick 2017). The MMORPG genre can be traced back to text-based online games originating around 1980, so-called multiuser dungeons, and tabletop role-playing games such as *Dungeons & Dragons* (Wizards of the Coast 1974). The most direct influence on *World of Warcraft* is *EverQuest* (Sony Online Entertainment 1999), which was the first game in this genre to include three-dimensional graphics and game mechanics that later become staples of the genre, such as raiding.

In addition to raiding, *World of Warcraft* comprises many core features of the genre, such as avatar leveling, an extensive number of quests, and combat systems such as player versus player. The production company Blizzard releases expansion packs every other year, in which large parts of the game mechanics are revamped and new areas, avatar classes, and other features are introduced. The expansion pack that my analysis is based on, *World of Warcraft: Legion*, was launched in August 30, 2016, and introduced the new continent the Broken Isles, the new avatar class Demon Hunter, and a new level cap at 110.

### ***Clicker Heroes***

The idle or incremental game is a genre that started out as a parody of the “grinding loop” and click-based game mechanics of role-playing games (Deterding 2016). The word *idle* points to the fact that the game keeps progressing by generating resources without the player having to interact with the game. An early example in this genre is the game simulation *Progress Quest* (Fredricksen 2002), which mimics the game mechanics of *EverQuest*. The game has no graphical gameworld but consists of a text interface that informs the player about the progress of quests, the amount of gold being acquired, plot development, and so on. Apart from allowing the player to choose the class, race, and name of the invisible avatar, the game plays itself. At the start of the game, the avatar has low stats, equipped with feeble items such as a macramé hauberk, and the quests have names such as “Fetch me a toothpick,” but, typical of the genre, the avatar gradually becomes better equipped, and the quests more challenging with more impressive names.

A newer game in this genre is *Cow Clicker* (Bogost 2010), originally designed as a satire of social network games such as *FarmVille* and thus aiming to demonstrate repetitive and abusive game design. The only activity demanded of the player is to click on cows every six hours; alternatively, the player can buy out of the waiting time with so-called Mooney, bought for Facebook credits—which is bought for actual money.

During the past few years, idle games have gained popularity, moved from the sphere of satire, and become an ordinary genre of games, predominantly directed at the casual game market. *Cookie Clicker* (Thiennot 2013) was one of the first that gained broader attention, and *Clicker Heroes* is probably the most successful idle game to date. It even got traction in the hardcore game market and was listed among the top-ten games on Steam for several months during 2015 (Grayson 2015).

The main objective of *Cookie Clicker* is to kill monsters by clicking on them or to hire heroes to do the job. The heroes are hired with gold, which is accumulated by killing monsters. The game has no avatar, and the gameworld consists of one frame showing a monster on an island floating in the air, which the player can click on. The clicks can be enhanced by different power-ups, and the heroes can be boosted with *gilds*, which is a limited resource the player earns during the leveling process. There is also a game mechanism called *ascension*, which starts the leveling process over again but equips the player with hero souls, by which the player can enhance the heroes further, speeding up the leveling process.

### Grinding—a Versatile Game Design Pattern

Grinding is a design pattern that may be transgressive on several accounts. According to Zagal, Björk, and Lewis, grinding is “a way of coercing the player into needlessly spending time in a game for the sole purpose of extending the game’s duration” (2013, 3). This pattern resembles what Jaakko Stenros in chapter 1 of this volume calls *repetitive play*, which is composed of “routine and grind.” Stenros emphasizes that ordinary play is not always carried out in a playful mindset, but he also states that repetitive play may be transgressive when it is “lacking an element of playfulness.” This is in line with traditional theories of play, which emphasize that playing is a voluntary and autotelic activity (Csikszentmihalyi [1975] 2000). According to Johan Huizinga, play “is never a task. It is done at leisure, during ‘free time’” (1955, 8). Play is therefore also distinguished from work, a distinction that became more prominent after the Industrial Revolution, when work was increasingly moved from the household to the factory, physically and temporally distinguished from leisure time (Goggin 2011).

Today, work and play are again more intertwined, not least because of the convergence of work and leisure tools such as smart phones. In games, grinding is perhaps the game design element in which this boundary becomes most blurred. With this in mind, I focus on how grinding can increase the time spent on playing and reduce the autotelic aspect of playing.

### **Grinding in *Clicker Heroes***

The core gameplay in *Clicker Heroes* is grinding, which consist of clicking on monsters. The player can also activate power-ups and hire heroes to click on monsters on the player's behalf. Over time, the gameplay changes to more strategic thinking about which and in what order heroes should be upgraded to level most efficiently as well as about more advanced enhancement mechanisms (named "ancients"). The main reason for this change is that the hired heroes gradually outperform the player, making manual clicking superfluous. Keeping the gold coming in at a maximum pace requires grinding and frequent logging on, but because *Clicker Heroes* is an idle game, the player can also log on sporadically just to take the process a step further by spending accumulated gold, only with a few seconds or minutes of playing.

In the first phase of the game, the gameplay consists only of clicking and lacks other typical signs of being a game, such as a win state, a goal, or activities that require skills to perform them. But the game gradually introduces features that trigger more strategic thinking and a curiosity about what the underlying math is and how the mechanics function. The game is, in a sense, stripped down to its mechanics in that grinding and progression are the main attractions. On a player-run wiki comprising walkthroughs for various computer games, we read that: "You've been working hard to get to this point. Lots of clicking and patience. Now you can choose which path (or a mix) you want to go on as you continue in your adventure" (Wei Jie 2018). As the quote demonstrates, some players find grinding to be both quite laborious and adventurous. What can be inferred is that although grinding in its pure sense may be experienced as futile, very few contextual elements are needed to make it interesting.

### **Grinding in *FarmVille 2***

All gameplay in *FarmVille 2* basically revolves around clicking on items, either to start a process or to collect the result. A central game mechanic is the scarcity of resources, usually water, and the only way to avoid running out is to buy water with "Farm Bucks" or to receive water as a reward for tending the neighboring players' farms. The game gradually introduces more activities, such as fishing and mining, which means that the



playing sessions gradually become longer. However, the scarcity of resources will eventually bring the playing to a halt, usually after some minutes of playtime.

The player has to make decisions about which plants to grow, animals to feed, and buildings to erect as well as about what these resources should be refined into for selling. The number of alternatives quickly expands, and at level 15 the player can choose among more than 130 different crops and vegetables, 240 types of trees, 160 types of animals, and 1,000 cooking recipes. Although the basic game mechanic is cyclical and grinding is the most common design pattern, the game provides the player freedom to combine different game elements, and, therefore, the player also has, to some extent, power over the game's pace and rhythm.

While progressing, the game also gradually becomes more demanding and missions more complicated. On Zynga's official player forum (Zynga Player Forums n.d.), a search using the keyword *grinding* brings up complaints about the game becoming increasingly "more industrial, and competitive" and being boring due to the need for "grinding quests with ridiculous amounts of items." The same site also includes a great deal of praise of the game and the creators for the "fantastic job they do to keep this game the most entertaining one that I have ever played!" Among the aspects players often comment on is the ability to decorate the farm, often with items that requires a high level and a lot of playtime.

Compared to *Clicker Heroes*, *FarmVille 2* is a much more complex game, but it relies on the same basic gameplay: clicking on items and gradual progression. It has a resource-management element that some players find fascinating, but compared to resource-management games such as *SimCity* (Maxis 1989), its game mechanics are much simpler and do not allow for emergent growth. The attraction of the game seems to be the accumulation of resources, which, according to Nick Yee (2006), is an important motivation factor for MMORPG players as well.

### **Grinding in *World of Warcraft***

Grinding is also a core mechanic in *World of Warcraft*, especially related to leveling the avatar. For early versions of the game, it took close to 50 full eight-hour workdays to reach the maximum level of 60 (Ducheneaut, Yee, Nickell, et al. 2006), but Blizzard has since then dramatically shortened leveling time, and various online sites offer guides on how to level using only a few days. However, grinding is now more closely integrated into the gameplay after a player reaches the maximum level of 110; for example, the player will at this point spend considerable time upgrading special weapons unique for each avatar class and ability specialization.

When the player wishes to level up in craft professions in *World of Warcraft*, such as leatherworking, cooking, and smithing, she needs to collect large amounts of materials, which usually involves grinding. Reputation grinding is another type in which the player solves quests or performs other activities that improve the avatar's alignment with different nonplayer character (NPC) factions in the game in order to get access to special areas or items. This will normally take several weeks to complete. In contrast to *FarmVille 2*, in *World of Warcraft* the player does not run out of resources but can literally grind forever. Players usually also have several alternative avatars (alts) that they level when their main character demands less attention, thus also increasing the time spent on grinding.

Grinding in *World of Warcraft* is often intertwined with long-term goals. One example is the requirements for the avatar to be able to use flying mounts on the new continent Broken Isles, which include exploring all areas of the isles, completing all the "story-line" quests, completing 100 different so-called world quests, and earning the reputation level *revered* with six different factions of NPCs. Most of these activities involve grinding, and although there are no time limits on these tasks, for a player making an average time investment, they are likely to take several weeks, if not months, to complete. This advancement process is also hampered by limitations on the number of quests the player has available each day. During my research period, in which I played approximately two hours a day for about four months and actively attempted to reach this goal, I did not complete the objective of being able to use flying mounts.

Compared to the grinding in *FarmVille 2*, the grinding in *World of Warcraft* is more varied and involves exploring, traveling, fighting (both alone and in groups), and learning about the lore of the game universe. Story-line quests are varied and captivating; for instance, they are filled with cutscenes and sessions in which the player has to reenact parts of the dramatic history on the isles from the position of past heroes. The general reliance on grinding prolongs many game objectives. As such, the objectives can be regarded as "unnecessary." It is, however, harder to judge whether the player will experience having "wasted time" because the grinding is tightly integrated into a variety of game mechanics and objectives.

### **Progress and Avatars**

Comparing these three games, we see that grinding is not one single activity. The games have very different interfaces and means to interact, meaning that how and what to grind naturally differ. More importantly, the context of the activity is quite different. In *World of Warcraft*, grinding blends together with activities that have other goals. Level

grinding, for instance, may be part of exploring new territories, earning gold, learning the lore of the game, or socializing with friends, often at the same time. In the larger context of the game, grinding is a vehicle for immersion and engagement.

If we look at *FarmVille 2* and *Clicker Heroes*, grinding is a more visible and dominating game mechanic, especially in the latter case. The social interaction is rudimentary, and the game universes are much simpler. In *FarmVille 2*, grinding is a main game mechanism, but because the game has limitations on resources, grinding will soon come to a halt. We might ask whether this design benefits the player. On one hand, it makes the playing less voluntary because the player cannot choose for how long to engage in a worthwhile playing activity. On the other hand, it may push the player out of the game or simply provide a nice break and prevent “coercing the player into needlessly spending time in a game” (Zagal, Björk, and Lewis 2013, 3).

Overall, the positive sides of grinding seem to be associated with achievement and progress. Much of the appeal of the level-based system for character progression popular in the role-playing game genre seems to be linked to the fact that characters can improve, much as a person would through the course of life (Zagal and Altizer 2014). The accumulation of power and resources and effective progress are also noted as central motivational factors for MMORPG players (Yee 2006), which explains some of the long-term loyalty found among players of *World of Warcraft*.

However, character advancement systems in tabletop role-playing games are also often used to describe progression elements in game genres that previously did not have them, such as first-person shooters (Croshaw 2009; Zagal and Altizer 2014). These elements are also found in *FarmVille 2* and *Clicker Heroes*, despite the fact that these games do not have any avatars to develop. Progression elements such as levels, points, and an increased array of choices therefore seem to hold value of their own. This valuation may be explained by a distinction made by the psychologist Jonathan Baron, who has stated that games can be sorted in two broad categories: those that can be won because of skills and those that can be won because of time spent, a difference that “may predict whether a player will be more likely to find competence satisfaction through blistering challenge or through patient earning of rewards” (quoted in Hilgard, Engelhardt, and Bartholow 2013, 10).

### **Play-by-Appointment Design—When Playing Becomes Routine**

According to Zagal, Björk, and Lewis, *play-by-appointment* design is a pattern whose darkness springs from the fact that players play at specific times or dates “as defined by the game, rather than [by] the players” (2013, 4). This type of design is found in

many other media—traditional television, for instance, where scheduling techniques are employed to encourage the viewer to develop routines revolving around certain programs, such as daily news or soaps, on a weekly basis (Syvertsen 1997). Correspondingly, play-by-appointment design is a way to encourage the player to integrate playing into everyday activities, sometimes with the result that the player puts aside other activities and social obligations (Karlsen and Syvertsen 2016). If the media activities become too demanding, other parts of life may therefore suffer as a result.

### **Play-by-Appointment Design in *Clicker Heroes***

*Clicker Heroes* does not employ play-by-appointment design in a strict sense but includes design with a similar effect. In the later stages of the game, the main game-play revolves around the game accumulating resources while the player is not playing. When the player returns, she will typically hire new and more powerful heroes and allocate some of the “hero souls” accumulated. The amount of money needed to hire heroes grows exponentially, so each new hero costs roughly ten times more than the previous one. This means that resources generated on one level will rapidly diminish the value needed to reach higher levels. This pattern invites frequent log-ons, wherein the player spends a few seconds or minutes to allocate resources, bringing the leveling process one step further. Because the game requires little time each play session, players typically play on the bus, during a coffee break, or before going to bed.

### **Play-by-Appointment Design in *FarmVille 2***

*FarmVille 2* has a large range of play-by-appointment schemes. Waiting time for harvesting crops ranges from 1 minute to 48 hours, and resources such as water are fully replenished in 90 minutes. At the beginning of the game, the player only has fast-growing crops available, minimizing the waiting time. The player gradually gets access to other, more time-demanding plants and crops, and, thus, the cyclical process gradually shifts from minutes to hours and days.

The game stimulates the player to schedule rendezvous with the game at certain hours—for instance, logging on and starting processes before going to bed and then harvesting or starting new processes in the morning. The use of events, quest chains, and the large number of expensive decorative items also present the player with long-term goals that may increase loyalty to the game.

### **Play-by-Appointment Design in *World of Warcraft***

The play-by-appointment pattern is integrated into *World of Warcraft* in several ways. One type of design implemented quite early in the game’s history is the so-called *daily*

*quest*, wherein the player solves the exact same quest day after day to advance skills or to acquire unique items such as cooking recipes. Although there once was a cap of 25 daily quests, the cap has been removed, and now, in principle, the player can complete several hundred daily quests. The total amount of quests available is currently around 9,500, and more than 400 of them are daily quests (*World of Warcraft Wiki* n.d.). The different crafting professions available in *World of Warcraft* also give the player the opportunity to create especially valuable materials at set intervals—once each day or each week, for instance—provided that she has the needed material.

In the *World of Warcraft* expansion *Mists of Pandaria* (2012), Blizzard implemented a *FarmVille*-style farm area, uniquely available for each player. Here, the players had access to a few plots where they could grow different plants usable for crafting professions such as cooking and alchemy. In the expansion *Warlords of Draenor* (Blizzard Entertainment 2014), this game feature was expanded to a garrison fully equipped with tanneries, gardens for gathering and creating resources, as well as NPCs with whom the player could trade. It also included a set of followers who could complete quests for the player. These quests could take from 30 minutes to 12 hours to complete, stimulating frequent log-ons.

In the latest expansion, *Legion*, the developers have replaced the garrison feature with a slimmer construction, the *class-order hall*, available for all avatars within the same class on a given game server. Here, the player also has NPC followers who can complete missions for her, with completion times ranging from a couple of hours to several days.

Reflecting the reliance on long-term goals, *World of Warcraft* also includes play-by-appointment patterns with larger time spans—for example, raiding dungeons that reset every Wednesday, giving the players the opportunity to defeat all raid bosses and acquire their loot on a weekly basis. Accordingly, raid guilds usually have a weekly schedule, with raids on set evenings every week. The game also has a calendar that keeps track of the dungeons that each player has accessed and when they will be refreshed.

Other play-by-appointment patterns include periodic events, such as the monthly “Darkmoon fair” and the annual “Feast of Winter Veil.” These events offer the player access to unique items, quests, achievements, and avatar titles. In sum, *World of Warcraft* includes play-by-appointment patterns that provide the player the opportunity to pursue goals on an hourly, daily, weekly, monthly, and yearly basis.

The three games include different types of game design patterns that encourage the player to return frequently and at specific intervals. This design is most explicit in *FarmVille 2* because most activities have a timer. *Clicker Heroes* has no explicit play-by-appointment design, but for the player to level fast, frequent log-ons are encouraged.

In *World of Warcraft*, the huge amount of different activities the player can engage in requires a substantial amount of time, and, for most players, completing these activities is just a means to get access to the really interesting aspect of the game—raiding. Advancement of crafting professions and logging on at least once every day to acquire certain materials may, for instance, be necessary to be able to craft high-level weapons or armor for raids. The overall effect is that the player is stimulated both to incorporate game activities into her daily routines and to develop long-term loyalty. Even in periods with little activity in the guild, the player will accumulate important resources by logging on frequently. This mix of different activities also caters to different strata of players: some prefer to log on to complete a few quests and to chat with friends, but others aim at reaching more demanding goals.

## Conclusion

The design patterns analyzed in this chapter illustrate the importance of seeing discrete patterns in a larger context. In the analysis, I have distinguished between two different types of context: the context of the discrete game design pattern in the overall game universe and the context of the overall gameplay experience from the position of the player.

If we look at discrete game design patterns, we see important differences between the three games discussed. The stereotypical grinding, which involves endless killing of the same monsters or other such repetitive action, is certainly part of these games, but there are many mitigating elements. Even in *Clicker Heroes*, where grinding is the key element in an otherwise simple game, it is embedded in more complex gameplay. Because the underlying math of the game is concealed, players experiment with different strategies for their progression.

Interestingly, in *Clicker Heroes*, the circularity of the gameplay is also a key element of the game because the player can “ascend” and start all over again. But instead of ending up on the exact same spot she was at before ascending, she is equipped with resources that make it possible to advance a little farther than during the previous round. The small variation in gameplay in *Clicker Heroes*, compared to *FarmVille 2* and *World of Warcraft*, seems to be enough for the player to find grinding worthwhile. It seems that the accumulation of resources and perhaps the curiosity about whether something more drastic will change if play is continued patiently are enough for the player to find the game intriguing.

However, perhaps more commonly, the repetitiveness of grinding may overshadow any attempts by the designers to conceal the cyclical design by embellishment and

small variations. In a given context, the grind may be experienced as a chore rather than play, as boring rather than fun, and as compulsive rather than voluntary. In the sense of not offering an experience of playfulness or freedom, or, in Stenros's words, in offering *repetitive play*, playing these games may arguably be transgressive.

But for game design patterns to be *ethically* transgressive demands more than merely being boring. One way is to look at the consequences of the game design: how much excessive playing affects the player. There is, arguably, a sliding scale where on one end the player logs on more frequently and plays for longer stretches than planned. On the other end of the scale and in the most severe cases, such design can contribute to compulsive and problematic gaming habits. The perpetual grinding on which MMORPGs are based, combined with their long-term play-by-appointment design, is arguably a pattern that contributes greatly to the amount of time spent on MMORPGs and may therefore be regarded as contributing to game addiction. It is in the latter sense that the game design can be considered unethical.

A limitation in this argument is that it is difficult, maybe impossible, to evaluate exactly what part of a game or what combination of design elements may cause problems or whether the main problem lies in the game at all. It may be just as important to see game design in an even larger context than is explored in this analysis because the motivation for playing a game, for investing time and changing routines, is seldom found in the game alone but is also found in the status and significance the game has in a social and cultural space.

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