GAMING A NON-GAME? A LONG TERM (SELF)-EXPERIMENT ABOUT FARMVILLE

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Abstract

The rise of Social Network Services was accompanied by a huge success of Social Network Games (SNGs). SNGs show specifics which distinguish them from traditional video games. Especially remarkable is the system architecture induced option for a continuous and seamless game development and the extensive use of timer-based game mechanics. These unique features led to an experiment where I played for 4 years *FarmVille*, a genre-coining SNG, to experience its limits and development trajectory. This paper discusses findings from this game play and discusses the effects of selected game design elements. Though SNGs are not well-received in traditional game communities and this experiment partly witnesses reasons for this reception,

I conclude that they are a noteworthy phenomenon in the field of video games. They can contribute to the evolution of video games through some of their specifics both in the negative (DON'Ts) and in the positive sense (DOs).

Introduction

With the rise of social network services (SNS) such as *Facebook* (FB), SNGs have also gained a huge audience. FB based and Zynga provided *FarmVille* (*FV*) (2009) became one of the first genre-coining SNGs with a peak player base of 80 million daily active users (DAU). Providing a high accessibility via web browser and later by mobile apps, SNGs opened up to a new target audience with a higher percentage of female players and older players in general compared to traditional video games (DataGenetics, 2010; Snow, 2010). SNGs are played in a casual manner; cycles of play can be short. Usually, the Free-To-Play payment model is utilized: Starting the game is free, but certain in-game items have to be paid for.

FV's game play consists of trivial, basic actions: The player starts by placing items on a farm – an isometric playground with grid-bound positions. Items can be plots, animals, trees and decorations. Plots are used for seeding and harvesting crops. Animals and trees are harvested by clicking on the item. This click restarts a timer – often a main game mechanic of SNGs – when the timer elapses the item can be harvested again. Harvesting an item results in a *Farm Coin* reward, which are an in-game currency. Experience Points (*XP*) are the level-determining, accumulating resource: for seeding crops and placing items on the farm, the player is rewarded with *XPs*. The placed items are either rewards for missions or have to be bought from the market. Currencies needed for market purchases are *Farm Coins* and *Farm Cash*. *Farm Cash* is the rare "hard" currency which urges the players to invest real money in in-game transactions (Kelly, 2010). Missions mostly consist of placing or

harvesting certain items. Another type of mission are resource-gaining interactions with neighbors, often posting a help request to the player's FB news feed. The help request is confirmed by a neighbor's click. Neighbors are also *FV*-playing FB users, who get their neighbor status by an invitation-approval procedure. In general, this is a rough but complete description of the elementary rules of play in *FV*.

Figure 1. FV: Basic elements (Arrowed explanation boxes added by the author)

Such game play, in connection with no required synchronous interactions between players, almost no story and relatively simple graphics and sound effects, seems not to be appreciated by players of conventional games: It is described as "mind-numbingly repetitive […] no thrill in playing" (Newton, 2012). The reactions of traditional gamers indicate a kind of cultural shock: the game is not in agreement with any of the development directions of "real" video games, striving to improved graphical effects – powered by continuously sophisticated hardware – as a prominent example. Their production becomes more and more

elaborate and costly. In contrast the development of the first version of *FV* has been accomplished by a team of 11 people in 5 weeks (Mahajan, 2010). Admittedly costs cannot be compared to game play, but these figures on their own exemplify why SNGs are an additional branch of video games. Therefore, it is no surprise that SNGs cannot meet the expectations of so-called hardcore gamers. Another point of criticism is the option to buy progress in the game. From a different point of view, this business model of in-game transactions could be considered as an official, publisher-organized and more user-convenient version of the phenomenon of "gold farming". This term describes the paid, work-sharing production of game progress. For example players in countries with a low level of income level up game characters and generate in-game items as a business model. Finally these rewards and high-level characters are sold using third-party web platforms to players who want to save time (Gilmore, 2010). In this way those players buy game-progress as well. However, as this phenomenon is not supported in the game itself, it is not as obvious as in SNGs.

One culmination of the SNG criticism is Ian Bogost's SNG parody "Cow Clicker" (Bogost, 2010a) – a game which shows those game mechanics commonly in SNGs used: simple click accomplishable, and optionally purchasable, game progress, easy post-and-click interactions with FB friends, and the use of timers. Bogost points out that SNGs' game mechanics create compulsion and destroy even the time when the player is not playing, "through obligation, worry, and dread over missed opportunities" (Bogost, 2010b, sec. 4. Destroyed Time). Sulzdorf-Liszkiewicz (2010) matches FV with Caillois' (2001) six criteria of games and cannot confirm any of them. So as a game *FV* and SNGs in general are disputed controversially. Beyond the discussion, if *FV* is a game or not, further characteristics of *FV* are on the research agenda: the combination of *FV* and FB is seen as

virtual Third Place with ritual playing habits (Burroughs, 2014). Gruning (2013) investigates the value of virtual goods in *FV*.

This article is structured in mainly three parts: In the first part *FV* as an SNG is described. The incorporation of genre-typical appearance as the steady stream of new content and the need for player-guidance are addressed. Thereafter I delineate traits and experiences of my game play, which was driven by the goal of optimization. Finally there is a discussion about typical phenomena of SNGs (or claims typically attributed to an SNG), followed by a summarizing section.

The agile game: *FV* as a continuing and player-including experiment

FV started as a small prototype (Mahajan, 2010) and is still continuing development. A constant stream of new content is added. Game development is driven by commercial requirements: players need to be attracted and bound to the game (Kelly, 2010). From the developers' view SNGs have a unique advantage: new content can be tested in the (restricted) field. So-called A/B-testing allows game developers to choose the more accepted alternative for the final roll out (Nutt, 2011). In general, a SNG functions as an online laboratory for testing game mechanics with short feedback cycles – an ideal environment for game developers. Game developers are aware of a certain game element's effects on players and its acceptance within the playership. Thus they are in the position to add only those game elements which have proven their usefulness. Conversely, this means that whenever a game element is *repeatedly* added to the game it can be considered as serving the needs of the game developer.

Extension by configuration

An important mechanism in *FV* to provide easily new content

is configuration (Mahajan, 2010). As an example, adding a new crop to the game needs only the configuration of attributes as name, harvest time, seed cost and harvest gain. Additionally images of the crops at well-defined stages of the ripening process need to be provided (see *Table 1*). This configuration approach is effort saving: it avoids programming work and keeps the game software stable.

Attribute	**Crop**
Name	White Grape
Growing Time	12 hours
Cost	245 Farm Coins
Sell for	360 Farm Coins
XPs	2
Mastery	1200; 2400; 3600 (in plots)
Images	[IMAGE]

Configurable extensions also can be more complex. In March 2011 – almost two years after the start of *FV* – an even greater extension was introduced: a new farm, called *English Countryside*. This farm worked in the same way as the original farm, now called *Home Farm*. Directly after the release, switching to the new farm set all ripening processes on the *Home Farm* on hold. A few weeks later an option was introduced: the player could choose if the farm should be paused or not during the work on the other farm. It was communicated that this change has been made on request of players. This is an example how they influence the development. After the introduction of *English Countryside* new farms were added to FV regularly – now they act as a way to add new content to the game. A newly added farm may slightly differ from the preceding farms in supported game mechanics. An analysis of those – added or removed – game mechanics, reveals a development over time (see Table 2). In farm no. 4, *Winter Wonderland, Snow Treasures* appeared: These heaps were spread over the farm and blocked placing items on their spot.

They could be removed by adding a certain number of materials. The removal released an arbitrary item as reward. Now such a heap-material-reward game mechanic is element of each newly released farm. In contrast, a not continued example is the limitation of plots: Starting with farm no.3, *Lighthouse Cove*, the player was not able to cover the whole farm with plots. Since farm no.7, *Haunted Hollow*, there is no longer such a restriction. This trajectory results in a set of features, which are assigned to a currently released farm.

Farm No.	Novelties
2	Extension by new farms
3	Limitation of plots
4	Resolvable treasuresStationary building[1]
5	Water plots
6	Farm specific level
7	Limitation of plots removed (cf. farm no. 3)Kinds of plots reduced

Table 3 shows this (dynamic) feature set as it is valid for farm no. 19, *Oasis Garden*.

FEATURE
No limitation of plots
Unique kind of plots
Stationary building
Resolvable treasures
Farm specific currency and level

Game changers

Although *FV* introduces a high amount of new content through configuration, from time to time the development of FV brings

1. In FV a Stationary Building is a building with a fixed position outside of the common landspace. It holds no animals or trees; however it can be harvested periodically for certain random FV items. The value of gained items depends on the level of the building. A stationary building can be leveled up by collecting a certain number of building-specific types of material.

game changers. These are adjustments or introduction of game mechanics, which change the game play basically: the player will probably adjust her goals. Efforts change considerably for certain actions. Table 4 shows examples of game changers. The existence of such events often outdates results of planning and estimation processes.

Game mechanic	Impact
Introduction of farm no. 2	Enables the specialization of farms; farm land is no longer the limiting resource
Combine (Agricultural machinery)	Less "work" – more impact per click; introduction of fuel game mechanic
Search Functionality	Better overview: items can be located and counted on a farm. Specific actions (e.g. breeding) are eased.
One Item Per Purchase Operation	No bulk purchase (one click per item) possible any longer. A purchase requires at least three clicks. A consequence is a better overbuy protection: players are prevented from accidental purchases.
Dairy	New leading game mechanic for game progress.

Diversification

From time to time new mini games, which address other motivations of players, have been introduced. So the game tries to embrace more player motivations and therefore player types. It becomes a kind of vendor's tray, where players can pick those actions they like most. The types of those mini games comprise elements besides collecting: dexterity and gambling are examples for game mechanics in new mini games. *Anglers Pond* is a mini game which employs dexterity game mechanics. Until now no additional, similar game has been released, so such a game seems not to meet great acceptance of typical *FV* players.

Regular stream of contents

The *Mystery Game* is a raffle and an example for a gambling mini game (see Figure 2). The tickets, *Mystery Game Darts,* are earned among others as rewards for missions. Every fired dart results in a reward. There is a set of 6 different rewards. This set changes from time to time and is numbered. On Dec, 27th 2013 *Mystery Game 238* has been released (Quantcast, 2014 "Mystery Game 238"). The number 238 exemplifies the huge amount of items which is introduced in regular intervals.

Figure 2. Mini Game: Pop the Balloons (Mystery Game, Gambling)

The insisting game – guiding players

Although elementary actions in FV are very simple and easy to execute, the game contains a lot of functionality which guides the player. This functionality works as a kind of game embedded

side rail. One result of these assistances is a never dry-running-source of tasks for the players. From the developer's point of view, tackling these tasks generates a lot of opportunities to sell game-progress-easing items (Kelly, 2010). A good example are the decorating control elements on the main screen of *FV* (see Figure 3): in the screen's left side there are mission icons, each of these missions consists of elementary tasks. Examples for such tasks are harvesting a certain number of plots of a specified crop, harvesting or placing an animal or asking fellow players for certain items (using post-and-click interactions). A mission manager was introduced to improve the player's overview

Figure 3. Player guidance through control-decorated game-screen

When the game screen appears, often dialogue windows will open to present special offers and opportunities of play. These windows (Figure 4 shows an example) have to be closed mostly one after the other in order to start game play.

Figure 4. Special offer at the start of FV

The Experiment

I started playing *FV* for the first time in February 2010 – when I wanted to know how that "new style of game" works and if such a game could be facilitated as an educational tool – an option as development costs were said to be relatively low. Because I just wanted to get an impression of the game mechanics of *FV*, I decided not to use real money. Luckily, this clear principle saved me at many points a decision to use *Farm Cash*.

FV is also known as a decoration game: players arrange items on their farms artistically resulting in a beautiful overall picture or in an idyllic rural landscape. Those farms reminded me of virtual model railways, a sort of digital display case (Figure 6) or ASCII art (Figure5). I did not choose this style of playing as I like the challenge of optimization. Another reason was that many decoration items needed *Farm Cash*.

Figure 5. Decoration-style oriented farm (Wei, 2010)

Figure 6. Decoration-style oriented farm (blogcdn, 2011)

After a few days my ambition spurred me to play *FV* systematically. The goal was to level up as fast as possible, as higher levels release more items to the player. *FV* itself does barely support optimization by in-game information. The

needed information could be found on the web. On the website *www.farmviller.com*[2] I found the information I had missed so far: the harvests of animals and trees, and also the space which certain items require. It was a systematic presentation of *FV* related information. This site helped me to start optimizing my game play: there were lists maintained which showed game-optimizing calculations already and which made it easy to discover the most yielding items. The goal at that time was to level up since the *Belted Cow*, an animal which delivers a harvest of *incredible* 3000 *Farm Coin* each day, could be bought starting at level 75. This level was a milestone I reached after almost 5 months of purposeful game play, having taken before the intermediate steps level 35 (*Saddelback Pig*) and level 55 (*Arapawa Goat*).*Saddleback Pig* and *Arapawa Goat* are further animals with a comparatively high harvest, which is beaten only by the gain of the *Belted Cow*. 3000 *Farm Coins* each day – 4 *Belted Cows* per plot – this resulted in 12,000 *Farm Coins* per plot and day. I measured the harvest in this way. All other options had to compete with this benchmark.

Principles of playing

My progress in *FV* has been grounded on only a few cornerstones: First I tried to use farm space as efficiently as possible, i.e., there was no free space, and all space has been filled up with animals, trees or plots. At this point I strived to save all *Farm Coins* for buying *Belted Cows*, as they are the most lucrative animal. To illustrate the progress: at the beginning it took 10 days to buy one *Belted Cow*, currently it takes 15 minutes of work a day to harvest the amount of *Farm Coins* necessary to buy 40 of them. Mainly these facts accompanied by perseverance and tenacity are the foundation for leveling up in *FV*.

At a later stage of the game the *Blue Whale* became the most

2. This website is no longer available. It has been shut down in 2011.

profitable animal – but buying a *Blue Whale* does not result in as much XPs, i.e., it does not help on leveling up directly. This is a difference to purchasing a *Belted Cow*: whereas a *Blue Whale* costs 500.000 *Coconuts* (which is a farm specific in-game currency of the 5th *FV* farm *Hawaiian Paradise*) and results in 630 *XPs*, for the Belted Cow applies the 1:100 default ratio of purchases: it costs 1,000,000 *Farm Coins* and is rewarded with 10,000 *XPs*. However, in terms of earning power a *Blue Whale* is the better choice: It results in 5000 *Farm Coins* (plus 4250 *Coconuts*) – compared to 3000 *Farm Coins* of a *Belted Cow*. Therefore my strategy has been to buy as much *Blue Whales* as possible and convert their gain into XPs by buying *Belted Cows*.

In general my game play is about allocation of resources. Resources are limited and I have to use them in the most productive manner. The first limited resource is land space – so I saved my *Farm Cash* for farm expansions. Starting from a certain farm size expansions can be bought only by *Farm Cash*. Up to level 250 each level is rewarded with 1 *Farm Cash*. This is the only way to receive *Farm Cash* without paying real money. The next resource is building material: buildings can be useful in the optimization process, e.g., the *Cow Pasture* allows storing of up to 100 cows. This saves land space and makes them harvestable with only one click. Of course building material can be bought, but it needs the very limited resource *Farm Cash*. A completely constructed *Cow Pasture* requires more than 300 pieces of building material – each at a price of 1 *Farm Cash* per piece. Thus it is impossible to fully upgrade only one pasture with the freely, through level ups supplied *Farm Cash*. The alternative is sourcing it through post-and-click interactions from neighbors. My main sinks for "requested" building material are *Cow Pastures* (for *Belted Cow*s) and *Aquariums* (for *Blue Whales*).

Of course playing FV for such a long time requires a personal definition of cheating. Taking the frame given by Vázquez &

Consalvo (2013) I considered any use of external software as cheating. However, in the first time I used two alternative accounts in order to accomplish needed interactions. Later on these accounts became to time consuming. Furthermore, I (almost) urged a friend to login from time to time in order to fulfill helpful tasks.

Optimizing systematically: An Engineer's Approach

Besides using spreadsheets for identifying most profitable items, I used an online spreadsheet to track the efficiency of my measures by defining "Key Performance Indicators" (KPI). Corresponding to the development of the game and the player the KPIs changed over time, they have to fulfill the need to measure progress. "Progress" is redefined from time to time during the game's and the player's trajectories. I recorded the status at the specific events, like buying a *Belted Cow*, buying a farm expansion or starting a new farm. Each row in the spreadsheet denotes such an event. An important KPI has been "Guaranteed Daily Income" (GDI): the gain which can be reached by simple clicks on animals and trees without the effort to cultivate crops (At the time, when I introduced GDI, cultivating crops was the most time-consuming activity). GDI has been used to measure the earning power of the farm. In 2013 the most important KPI was "Dairy Level Up XPs" as most earned XPs originated from the *Dairy* game mechanic. The change of KPIs over time is visible in Figure 7: KPI appear and at a certain time they vanish again. So I tried to estimate the next *Belted Cow* purchase. Later this figure has developed to the number of *Belted Cow* purchases per day. This KPI developed itself to the number of level ups per day, as 10 Belted Cows are needed for another level

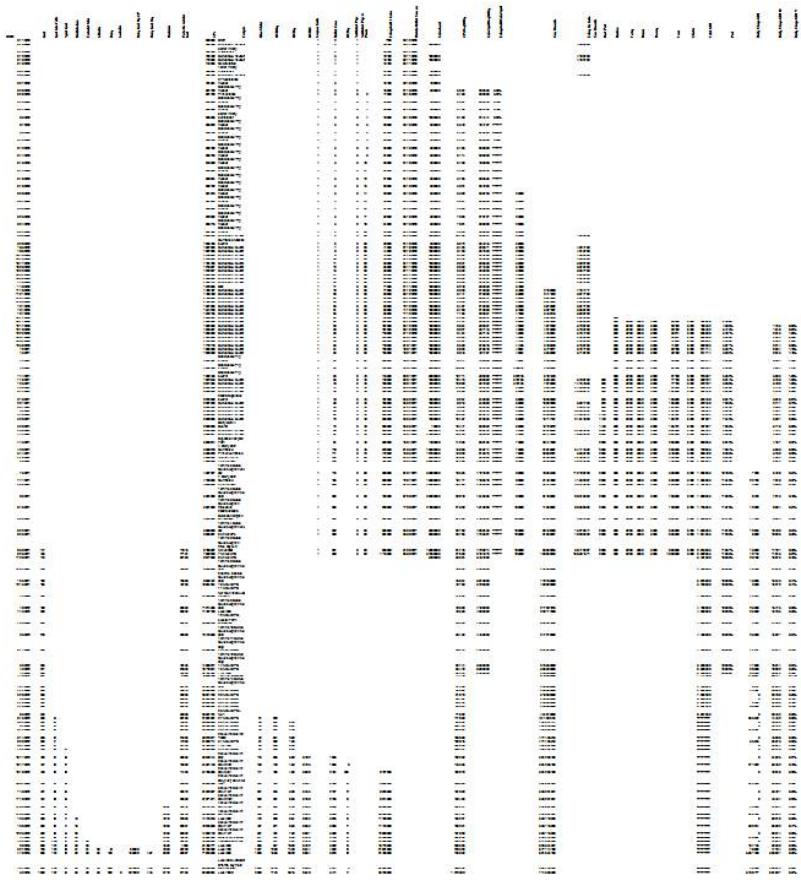

Figure 7. Spreadsheet to keep track of progress (overview)

As the above spreadsheet demonstrates, an overarching activity during my game play has been estimation and planning. Estimation (mainly of the GDI) was connected to the most profitable game mechanic. At a certain point of time this has been *Belted Cow*, superseded by *Blue Whale* and finally excelled by the *Dairy* game mechanic. The estimation boiled down to a comparison of reward schedules: Level ups, caused by *Belted Cow* (and indirectly by *Blue Whale*) purchases increase day by day by a fraction of their price, as a kind of interest rate. The *Dairy* game mechanic at regular time intervals distributed amounts of XPs. These amounts increased from reward to reward by an additive

constant. So this estimation becomes an analysis of limits, as presented in Figure 8: In the "short" term the *Dairy* is the most valuable game-mechanic, but it will be outperformed by the *Blue Whale* in the long run. In short: *FV* made me exercise a limit analysis.

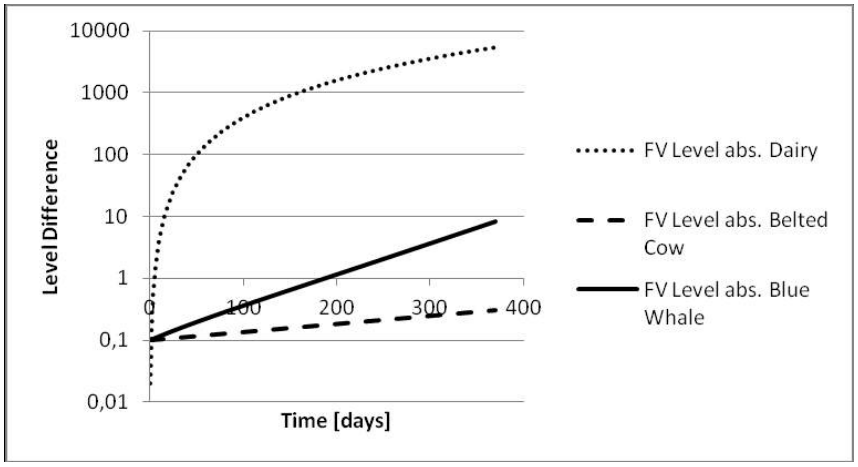

Figure 8. Estimation of Level progress for various leading income sources

Figure *9* shows an example result of optimized game play: A farm completely filled up with 5000 *Belted Cows*. This farm provides a harvest of 15,000,000 *Farm Coins* per day, which can be "reinvested" in 15 *Belted Cows*. Interestingly "completely filled" is not defined by available land space, but by the maximum number of items a farm can accommodate. In the beginning of my purposeful game play it was one rule to cover the available land space completely with harvestable items. However, at a certain size of the land space and a certain type of land usage, the available land space is no longer the limiting restriction. It is replaced by a – beforehand for the player invisible – maximum number of items. This maximum number has been reached because the space requirements of a cow are less than those of a plot: a farming plot needs four times the space of a cow. Of course the limitation would have not been reached in case of

stacking cows in *Cow Pastures*. Such a building occupies 12 times the space of a cow. There have been two reasons not to use *Cow Pastures* on this farm: First, the scarceness of building material for *Cow Pastures*. Secondly, harvesting buildings necessitates one manual click per building, whereas all animals on a farm can be harvested simultaneously by an item called *Farmhand*. Of course there is a bulk harvester for buildings, but it is available only for *Farm Cash*[3]. A *Farmhand* is also a limited resource, but harvesting this farm from time to time generates more gain than just buying unproductive decoration items to convert coins into *XPs*.

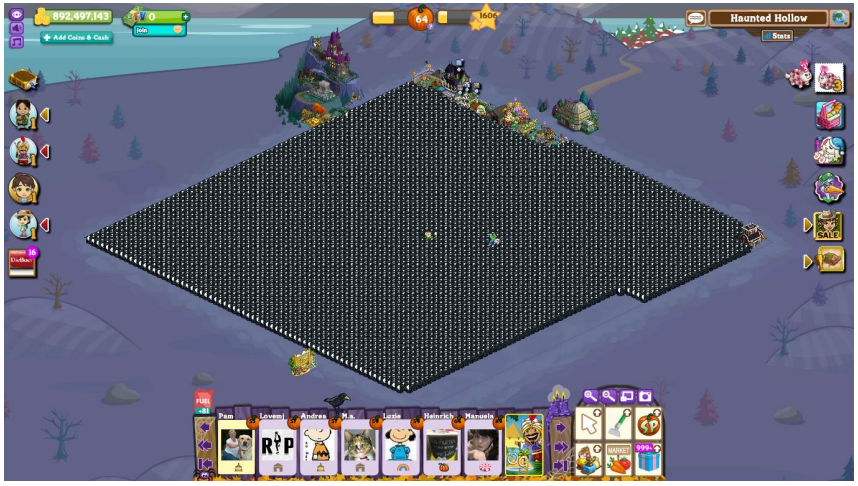

Figure 9. Result of optimized game play: farm holding 5000 Belted Cows

Resource "Time" and rhythm of play

Time is an important resource in *FV*. In the later stages of my game play it was the most limiting resource and guided the game play. Plowing, planting and harvesting required a lot of time, so I preferred crops with longer harvest times. Also I upgraded

3. *Harvesters for buildings, which allow harvesting multiple buildings (orchards and animal stables) in parallel, have been introduced in early 2013. For an optimizing gaming approach they would be very helpful as they save many clicks. However, they require Farm Cash. This is one of the first exceptions from the rule, that all game-mechanic relevant items can be acquired by pure game play (Farm Coins, interactions with neighbors, waiting time) also.*

my machines as soon as possible to multi-plot machines, which saved a lot of time. A kind of revolution was the release of the *Combine*, a machine doing all three processes (harvesting, plowing and planting) at one click. It is very helpful for the ambitious farmer and really worth its price of 500,000 Farm Coins! I also detected at that time the web browser shortcut *STRG + Left Mouse Click* to open a link in a new window. This made harvesting the FB news feed far more efficient: instead of clicking on a *FV* link, opening the FB page again and positioning it next to the new news feed entry, it allows you to click on one link after the other.

There is also another aspect of "Time" in *FV*: the game play needs to be scheduled as crops, trees and animals are characterized by harvest times. To be efficient it is useful to establish a rhythm of play and to plant crops accordingly. On one side the rhythm of play is determined by the harvest time of animals. Fortunately the harvest time of animals always is a multiple of a day. So playing each day at the same time is a good choice. The game design supports this approach: real harvest times calculate with duration of one day of 23 hours. Therefore I could start each day at the same time and integrate game play into my daily routine.

The goal of optimization turns success into failure

FV provides excessive positive feedback to the player. By harvesting animals, trees and crops the player accumulates rewards. There is only one noteworthy opportunity to get sanctioned negatively: crops wither when they are not harvested in time. But even in this single case there is an antidote: the *Unwither Ring*. Once it is placed on the farm, it interrupts the withering mechanism forever (of course such an item can only be purchased for *Farm Cash*). Therefore, nominally a player is always successful in *FV*.

Establishing a rhythm of playing was important for me as it

ensured a maximum of gain and game progress. In this sense missing the best opportunity to play (and thus reaching not the maximum gain possible) felt like a failure – although in fact there has been progress. This feeling comes close to the phenomenon Bogost (2010b) calls "compulsion". Being aware of it I tried to tune the game play according to the next planned visit on my farm.

Set of goals

Often a game offers different goals within different time frames (Squire, 2011). This statement was illustrated by my game play, as at any time there has been a set of current goals. Table 5 shows such a goal set. The goals are categorized: they may be relevant for the overall goal, which was in my case optimization. A "No" in this category indicates a kind of "luxury" goal – a goal I tried to achieve for "just for fun". Game mechanics of *FV* may promote a goal directly. For example leveling up on a farm (goal no. 1) is guided by *FV*, as it provides the level-display as a direct measurement. The time frame, when the goal should be reached, is an attribute of each goal. Goal no. 5 and no. 6 have been dismissed since the last goal dump: No. 5 is no longer possible as it was reached: The farm has been filled up. Goal no. 6 is not valid anymore, because it is too time consuming. Goals also are affected by the current trajectory status of the game. In the early years of the game the number of game mechanics was limited, so it was possible to play each mechanic of the game. Now that the player faces a huge range of game mechanics, s/he has to make choices. In general, goals may be aligned with each other, but there has been always a self-determined set of current goals.

No.	Goal	Optimization relevance	Guided by FV	Time Frame
1	To level up in *Jade Falls*	No	Yes	Middle
2	To increase *Blue Whale* population	Yes	No	Long
3	To breed 20 exemplars of each tree species	No	No	Middle
4	To breed profitable trees	Yes	No	Long
5	Add *Belted Calves* to farm	Yes	No	Middle
6	Operate each available farm on a daily base	Yes	No	Short

Almost beaten the game – the lightheaded reward schedule of the Dairy

One motivation for my game play was testing the limits: what happens at formerly undiscovered points of the game? At one particular point of game play there was at least one answer to this question: The *Dairy* (compare Section "Optimizing systematically: An Engineer's Approach") is a self-contained mini game about harvesting and transforming resources, that was rolled out in January 2013 and maintains its own level status. The original reward schedule issued 1000 XPs more for each level reached than for the previous level. It is possible to level up 2 times per day. As a consequence there was once a reward of more than 230,000 XPs for one *Dairy* level up. Each level in FV requires 100,000 XPs, so after 5 months of play the *Dairy* reached the same game progress as the result of 3 years of optimized play before. Furthermore the *Dairy* rewards increased much at a faster rate. In this way the *Dairy* had become the leading, time-saving, game mechanic for game progress (see Figure 8). I earned 500 levels with this game mechanic. "Unfortunately" – from my point of view – a nerf of the reward schedule has been made. Thus the game is open again: it is worth again to focus on *Belted Cow* and *Blue Whale* cultures and to be on the hunt for game

mechanics providing a higher gain than these two animals. Such a game play is by far more time consuming than simply "operating" the *Dairy* and receiving more and more rewards for the same amount of game play. The original *Dairy* reward schedule would have marginalized all other possible *XP*-relevant rewards. It would have reduced the necessary playing time to a few minutes per day. This probably could have had a huge impact on the in-game purchases, which would not have served the developer's commercial interests.

Competition or: Go at your own pace!

Competition is a main game mechanic. For example the list of my neighbors in the main screen of the game is ordered by their level (see Figure 10). So I am aware of my performance compared to these other player's achievements. In the beginning of my *FV* "career" there have been neighbors with better progress in terms of levels. I used the possibility to tend their farm to check the reason for their progress. I wanted to make sure, that I had not overlooked an optimization mechanic. However, it became clear that they had used *Farm Cash*. So I ignored this list. Nowadays I am second in this ranking list at a level of 1940 with almost 1300 levels margin to the next follower. In the lead is a farm of a level higher than 2400.

Figure 10. Leaderboard in FV – omnipresent as element of the default screen

There is no world-wide highscore list, only a player-centric ranking list with all her/his affiliated neighbors. Therefore from time to time the question arose, how the performance of my

game play can be linked to global leaders, In forums on the web there are farms of level 200,000 mentioned (Mondal, 2011b, n. comment dave smitty). However, this player is said to have used bots. Another player, who presents a farm of level 43035, demonstrates in a video the handling of the third party software tool *FarmVille Bot*. Therefore his level seems to be achieved with the help of software, too (Mondal, 2011a). As a conclusion I draw that competition probably has led to either using real money or software bots. Both possibilities are no elements of my game play. With the target of optimizing game play, competition may have an indirect impact, but is not sufficient as a main motivation: By definition of the approach the performance has reached a maximum value, considering the given conditions. Therefore the meaning of competition vanishes: Ok, go at your own pace – it is the fastest possible!

Is it still a joy or already a chore? When Level Up starts bothering

At the moment the most important resource is time: three standard actions sum up to a 40 million *Farm Coins* gain and take 15 minutes a day (one of these actions is harvesting the farm shown in Figure 9). The problem arises thereafter: *Farm Coins* have to be converted into *XPs* in a way which cumulates the earning power of the farms. (until now the most productive way to reach this goal is buying *Belted Cows*). However to place them it needs either land space or building material and time. All of them are limited resources. At the moment of writing I have piled up the money for 820 cows. Buying a cow from the market takes around 10 seconds, so there is the need to invest at least two hours of work. Also the message of leveling up, which appears every 10 cows, has to be acknowledged by an additional click. Yes, it is a chore at this point. At the moment there is no vision: game play becomes linear. There seems to be no further development to continue my approach of leveling up: increasing the GDI further would mean investing more time. And time is a resource I do not want to increase.

Is this game play representative?

The described game play is for sure not representative. It is highly connected to my context: traits of my personality guided the game play as well as my personal situation. According to Bartle's taxonomy (1996), I play predominantly as an achiever. Also I tend to fulfill my duties assiduously. This seems to be a good foundation for dealing with a game that is attributed as "compulsive" (Bogost, 2010b). Another circumstance which stimulated this once-in-a-lifetime experiment (other SNGs I play only for capturing their game mechanics) has been my personal curiosity in the game mechanics and lifecycle development of such an SNG. The sake of procrastination has "fostered" a lot of game progress, too: I estimate an average of 2 hours a day for four years. From my view point now the puzzle is solved (Koster, 2004): the resource "Time" is the limit.

Discussion

How social is an SNG?

The question of sociability arises when the word "social" is part of the game genre name. However, from a developers view these games can be seen as "games on the technical and organizational platform of a social network service". The successful usage of social interactions and social bindings as elements in a viral distribution model and competition as an element of motivation does not require deep social interactions. So the claim of SNGs as "being social" may overburden the intentions of commercial game developers. Nevertheless, the discussion is justified as there are games which show traits of fostering sociability.

Originally there was the game mechanic in *FV* that neighbors have to be acquired from the FB friend list. This consideration did not work out, as there have been special threads in forum to find new FV neighbors. So FV became the only common ground of FB "friends". Later the design of FV accommodated this failed

assumption: now an in-game functionality allows establishing new neighbor relationships without friending them on FB. Even more convenient, but (almost) no longer social is a recent feature, which allows the player to add FV-suggested neighbors. If that action reaches the maximum number of neighbors, FV can be instructed to replace inactive neighbors automatically.

The main interaction scheme between players happens when a player creates a FB news feed entry and other players click on this entry. This results in a piece of material for both, the posting and the clicking player. There is no personal interaction between players needed. This turns fellow players into resources, as success is correlated to the number of neighbors. This aspect is often criticized in the context of SNG, but also attributed to other game types, as Yee (2014, p. 193) states, that MMOGs such as *World of Warcraft* "turn friends into fungible, disposable resources."

Gruning (2013) played *FarmVille 2*, the successor of *FV*, on an alternate account without developing a social context. Therefore she could not proof hypotheses about the values of virtual goods. According to my experiences, even with the social context of my primary FB account, no *FV*-related social context has developed. There is only a small or empty set of original FB friends, who play *FV* contemporarily. However, this observation may induced by my playing goals. On the other hand Bachvarova & Bocconi (2013) support this finding when the state that in SNGs exists only little conversation between players. In contrast Wohn & Lee (2013) showed that there is a group of FB users, who play SNGs in order to build a common ground with existing acquaintances. This hypothesis is approved by Burroughs (2014), when he identifies the combination of Facebook and *FV* as a virtual Third Place – which requires a lot of social interactions.

In this context voting buildings are a noteworthy appearance. These voting buildings are used to ask fellow players about their

perception of the player's personality traits. An example for such a question is shown in Figure 11. At least 4 fellow players have to decide for one of the two alternatives to create a valid answer (see Figure 12). Once such an answer is available, the next question concerning player's preferences gets released. So in theory players have to reflect about their neighbors and there will be a personality profile at the end. However, in fact players hunted the different rewards which are assigned to each answer option (see Figure 11): when posting the question, mostly there were commands to the neighbors, which option they should choose.

Figure 11. Voting building – player's view

Figure 12. Voting building: fellow player's view

Free-To-Play payment model

Almost any game process can be bought in *FV*, and an example is shown in Figure 11. In general there are so many "Buy" options that it is easy to spend one's *Farm Cash*. As a consequence there are reports of misuse: an example is a person who complained in a forum that his mother has spent over $1000 in the last month on *FV*; money that originally was intended for paying the rent. Furthermore it is easy to lose one's *Farm Cash* accidentally – just by incautious clicking, for example on caption-changing buttons. Figure 13 and Figure 14 demonstrate such a change. In this case caption- (and function) changing is problematic as adding the required 40 treats at once seduces the player to increase the click speed.

Figure 13. Treats available: "Use Treat" button

Figure 14. No treats available: "Buy Treat" button in the same position as former "Use Treat" button

A decisive step in the career of a *FV* player is entering his credit card number. From time to time there are charity events which encourage the player under the pretext of a donation to add this information. Once this information is added, further *FV* related transactions are eased. The same purpose fulfills the *Coins-Into-Cash* schedule: To convert superfluous *Farm Coins* into rare *Farm Cash*, payment information have to be submitted.

A questionable business model becomes visible in Figure 15. It shows a special offer of US-$100 for mainly all expansions of only one certain farm. One novelty is that the player pays directly in real currency: before *Farm Cash* had to be bought for real money. The amount of US-$100 is remarkable, as almost any traditional video game is cheaper. Subscription models commonly do not require that amount of money at once, either. Last but not least the additional text "A $600 value" proves how much money can be spent on FV. There have been released recently other alternative payment models in *FV*, like memberships. Nevertheless some of the presented payment models here are not recommendable.

Figure 15. $100 offer (Captured: 06/12/2014)

Every start is easy – every ending is hard

Compared to other, conventional video games, leaving *FV* seems to be a hard process. Seldom players have talked in a positive way about their *FV* career. Often stopping the game has a negative connotation as in the following FB post is indicated by the word "*Also*": for S2 being fed up with *FV* seems to be the only logical explanation for such a question.

N: **How do I delete my FV account?**

S1: You got a pm.

N: Thank you!

S2: **Also fed up with FV?**

Another reaction of a former FV player about the reason to quit

has been *"[...] I started to align my daily routine according to FV – which is bad. Thanks to god I have recognized it. [...] I cannot involve myself only a little bit – therefore I quit FV completely. [...]"*

A further player talks about "[…] It required too much time.[…] ". These reactions acknowledge the idea of SNGs as being compulsive. Players may have difficulties to adhere to self-chosen and not game-directed goals, as it is possible in *FV* (Söbke, Bröker, & Kornadt, 2012) .

Conclusion

Four years of game play have accompanied a considerable part of the development of *FV*. During this development *FV* has grown to a broad, versatile SNG with an excessive number of items and features. This article presents only a condensed selection of game play experiences and connected phenomena. Nevertheless, there are some cornerstones which remain after all the game play. The design of FV is highly driven by its commercial background as a Free-To-Play SNG. Similar to ad-funded TV, players as consumers are supplied with those game mechanics they prefer. For a game-designer, an SNG is a perfect online laboratory. Development of SNGs can be done in parallel to their productive use with short feedback cycles. This lowers development costs, which can spread over a longer time. Another characteristic, which distinguishes an SNG from traditional video games and impacts game play significantly, is the steady development of the game. At any arbitrary point of time a game-changing modification can occur and require the player to change her goals. Also remarkable is the subjectivity of failure and success. Each player can define her own measurement for success. In this experiment *FV* was played in a less social way. However, there is research showing that SNGs are played at least partially for the sake of sociability.

The pervasive offerings to buy game progress are justified from

a developer's point of view. However, they easily can become annoying. Consequently the Free-To-Play payment model has to be observed and developed. Outgrowths as a "$100-Special Offer" seem to be more than questionable. The used game mechanics as competition and interactions with fellow players and the open-ended game style tend to overburden some players. As delineated by Pixie (2010), who seems not be an isolated case, quitting the game is often related to frustration. These effects need game design rework. Harmful effects of excessive play are not limited to FV or SNGs in general, but in SNGs there is an easy possibility of technical regulation as there is always a connection to a central server. Furthermore in the context of game design, the usage of timers can be and has to be aligned with affordances of real life. Effects of long-term play on players have to be investigated.

However, the positive traits of SNGs could let them extend the set of tools for learning. It has been shown that SNGs also foster learning processes and the development of meta skills (Söbke, Corredor, & Kornadt, 2013). Due to the SNG format, they acquired a group of people for gaming which have not played before. So accessibility induces usage. It is worthwhile investigating the game mechanics which are used now successfully to lure the player into becoming a paying customer: probably they can be used in educational settings to guide player's learning progress. Noteworthy is the temporal structure of game play which is almost as steady-going as the time schedule of formal education is.

The discussion of whether SNGs are games or not points to player-type dependability. Each player decides for herself if a game is intriguing. For stakeholders, like game developers and educators, it is a matter of quantity. They need to attract a preferably great number of buyers or learners with a game to mitigate their costs. SNGs are just another game genre with different characteristics. They have an on own audience. "Why

are you trying to make them do more?" is the concluding question of Jason M. (2010) in a response to an SNG-critical article (Bogost, 2010b).

References

Bachvarova, Y., & Bocconi, S. (2013). Games and Social Networks. In T. M. Connolly, T. Hainey, E. Boyle, G. Baxter, & P. Moreno-Ger (Eds.), *Psychology, Pedagogy, and Assessment in Serious Games* (pp. 204–219). IGI Global. doi:10.4018/978-1-4666-4773-2

Bartle, R. A. (1996). Hearts, Clubs, Diamonds, Spades: Players Who Suit MUDs. *Journal of MUD Research*, *1*(1), 19.

blogcdn. (2011). FarmVille Farm. Retrieved April 24, 2012, from http://www.blogcdn.com/blog.games.com/media/2011/10/jlworkmore-farmville-bugs-bunny-carrots.jpg

Bogost, I. (2010a). Cow Clicker.

Bogost, I. (2010b). Cow Clicker – The Making of Obsession. *Video Game Theory, Criticism, Design*. Retrieved July 17, 2014, from http://www.bogost.com/blog/cow_clicker_1.shtml

Burroughs, B. (2014). Facebook and FarmVille: A Digital Ritual Analysis of Social Gaming. *Games and Culture*, *9*(3), 151–166. doi:10.1177/1555412014535663

Caillois, R. (2001). *Man, Play and Games*. University of Illinois Press.

DataGenetics. (2010). Facebook Casual Game Demographics. *DataGeneticsBlog*. Retrieved December 12, 2014, from http://www.datagenetics.com/blog/december12010/

Gilmore, A. (2010). China's new gold farm. *Journal of Virtual Worlds Research*, *2*(4).

Gruning, J. (2013). Good Fences Make Good Neighbors: Values of Digital Objects in Everyday Life. In *DiGRA 2013 – DeFragging Game Studies* (Vol. 2).

Kelly, T. (2010). CityVille explained, part 1. *Gamasutra.com*. Retrieved April 24, 2012, from http://gamasutra.com/view/feature/134615/cityville_explained_part_1.php?print=1

Koster, R. (2004). *A Theory of Fun for Game Design* (p. 256). Paraglyph Press.

M., J. (2010). Why are you trying to make them do more? *Ian Bogost – Cow Clicker (Answer to Bogost (2010), Cow Clicker – The Making of Obsession)*. Retrieved July 17, 2014, from http://www.bogost.com/blog/cow_clicker_1.shtml#comment-59182

Mahajan, A. (2010). Rapidly Developing FarmVille. *GDC 2010*. Retrieved September 10, 2011, from http://de.slideshare.net/amittmahajan/rapidly-building-farmville-how-we-built-and-scaled-a-1-facebook-game-in-5-weeks

Mondal, A. (2011a). How To use FarmVille Bot!!! *Youtube*. Retrieved December 8, 2014, from https://www.youtube.com/watch?v=EP-xQIlq2Nw&list=UU1jDop-4FFiOQLoBGtLwcjQ&index=6

Mondal, A. (2011b). The Highest Level In FarmVille!!!…43035(Zynga Shows Upto 21560). *Youtube*. Retrieved December 8, 2014, from https://www.youtube.com/watch?v=fS3_5khtPNs&list=UU1jDop-4FFiOQLoBGtLwcjQ&index=9

Newton, S. (2012). Why So Many Gamers Think Zynga Sucks. *Altered Gamer*. Retrieved March 12, 2014, from http://www.alteredgamer.com/worst-pc-gaming/120369-zynga-sucks/

Nutt, C. (2011). A Philosophy That Extends Eastward: Social Games Zynga-Style. *Gamasutra*. Retrieved February 12, 2014, from http://www.gamasutra.com/view/feature/6280/a_philosophy_that_extends_.php

Pixie, Y. (2010). 10 Reasons Why I Left Farmville. *blogcritics.org*. Retrieved December 3, 2013, from http://blogcritics.org/10-reasons-why-i-left-farmville/

Quantcast. (2014). FarmVille Wiki. *Wikia.com*. Retrieved February 2, 2014, from http://farmville.wikia.com/wiki/FarmVille_Wiki

Snow, S. (2010). "FarmVille" vs. Real Farms. *mashable.com*. Retrieved February 3, 2014 from http://mashable.com/2010/09/10/farmville-vs-real-farms-infographic/

Söbke, H. (2014). FarmVille. Testing limits. Four years. Level 1446. In A. Ochsner, J. Dietmeier, C. C. Williams, & C. Steinkuehler (Eds.), *PROCEEDINGS GLS 10 GAMES + LEARNING + SOCIETY CONFERENCE* (pp. 315–322). ETC Press. doi:ISSN 2164-666X

Söbke, H., Bröker, T., & Kornadt, O. (2012). Social Gaming – Just Click and Reward? In P. Felicia (Ed.), *Proceedings of the 6th European Conference on Games Based Learning* (pp. 478–486). Academic Publishing Limited.

Söbke, H., Corredor, J. A., & Kornadt, O. (2013). Learning, Reasoning and Modeling in Social Gaming. In Z. Pan, A. D. Cheok, W. Mueller, I. Iurgel, P. Petta, & B. Urban (Eds.), *Transactions on Edutainment X* (pp. 243–258). Berlin Heidelberg: Springer. doi:10.1007/978-3-642-37919-2_15

Squire, K. R. (2011). *Video Games and Learning: Teaching and Participatory Culture in the Digital Age* (p. 312). Teachers College Press.

Sulzdorf-Liszkiewicz, A. (2010). Cultivated Play: Farmville. *MediaCommons*. Retrieved August 8, 2014 from http://mediacommons.futureofthebook.org/content/cultivated-play-farmville/

Vázquez, I. S., & Consalvo, M. (2013). Cheating in social network games. *New Media & Society*. doi:10.1177/1461444813516835

Wei, S. (2010). Decorated Farm in FarmVille. *Facebook*. Retrieved April 24, 2012, from https://fbcdn-sphotos-a.akamaihd.net/hphotos-ak-snc6/224850_208017265886951_100000360370627_655563_2452168_n.jpg

Wohn, D., & Lee, Y. (2013). Players of facebook games and how they play. *Entertainment Computing*, *4*(3), 171–178.

Yee, N. (2014). *The Proteus Paradox: How Online Games and Virtual Worlds Change Us—And How They Don't* (p. 264). Yale University Press.

Zynga. (2009). FarmVille. Retrieved January 15, 2015 from http://apps.facebook.com/onthefarm/

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