



**HANS-BREDOW-INSTITUT**  
for Media Research at the University of Hamburg

# **SOCIAL GAME STUDIES: A WORKSHOP REPORT**

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## **Abstract**

This report documents the results of an international interdisciplinary workshop convened at the Games Convention Online 2010 to take stock of the existing research on social games, extract characteristic features of this emerging video game genre, and identify promising areas and methodological approaches of research. The report firstly summarises the background, motivation and proceedings of the workshop to then elaborate emerging observations and themes, touching on the technology, economics, design and usage of social games, as well as the general discourse about social games and research opportunities. A detailed documentation is provided, including a mapping of relevant literature, research groups, and information sources.

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## Introduction

When Electronic Arts simultaneously announced the acquisition of social game developer PlayFish for 300 mio. US\$ and a global layoff of 1,500 workers on November 9, 2009, it became clear to industry insiders that social games – games played and distributed on social network sites (SNS) – were more than a fad (Graft 2009). In February 2010, the facebook game FarmVille peaked with over 83 mio. monthly active users only eight months after its launch in June 2009, making it one of the most widely distributed video games ever recorded (Mack 2010).<sup>1</sup> In July 2010, the EA-PlayFish deal was followed by Disney announcing the acquisition of the social game startup Playdom for at least 563 mio. US\$ (Madway 2010). According to ScreenDigest (2010), the current global audience of social games has surpassed 500 mio. monthly active users; another market study shows that about 20 percent of the U.S. population has played a game on a social network in the past three months (Takahashi 2010), while consumer spending on social games rose from only 76 mio. US\$ in 2008 to 639 mio. US\$ in 2009 and is expected to grow to 1,5 billion US\$ in 2014 (ScreenDigest 2010).

These and other news items have stirred intense debate in the professional and academic community. Against the backdrop of an economic downturn in commercial off-the-shelf (COTS) video games, observers wonder whether social games could point toward a deep transformation of development, distribution and business models in the game industry. In parallel, their apparent appeal to a vast, formerly ‘non-gamer’ audience raises the question which (new) demographics social games engage, and what (new) usage motivations and behaviours they tap into. Who plays these games – and why?

This question is all the more interesting as social games are often criticised for their ‘simplistic’, repetitive gameplay, and often sport surprisingly ‘mundane’ topics and themes like farming or cooking, with innumerable clones springing up once a game shows success. What is it about these game mechanics and themes that apparently speaks to the motivations of a vast user group? Social games as well as their public reception showcase many features already encountered in “casual games” (Kuittinen et al. 2007, Juul 2010). So are they ‘just’ another form of casual games? If so many clones of successful games exist, how relevant are themes and game mechanics to the success of a social game in the first place – in relation to e.g. the “viral” marketing of the games utilising the social network platform? And how might the design of the games support said viral distribution, or the high profitability of the underlying business model of micro-payments and virtual item sales?

This leads directly to the relation of social games and SNS as their ‘host’ platforms. Social games use the SNS communication channels of their players to spread themselves among the players’

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1 One known contender for a documented wider distribution is the mobile game “Snake” preinstalled on many Nokia mobile phones, with a claimed distribution of 350 million (<http://goo.gl/JnAo>).

social networks, and they tie the players' networks directly into the gameplay. How are we to make sense of this intertwining of online 'Real Life' identities, relations and interactions, and 'in-game' activity?

Finally, social games have become subject to denigration in the professional game designer and hardcore gamer communities as simplistic 'pseudo' games, as well as negative press ranging from accusations of 'addictiveness' and lawsuits regarding scammy advertising offers (Arrington 2009) to more nuanced cultural critiques on the commodification of social relations and the exploitation of social instincts like reciprocity (Liszkiewicz 2010). In light of these criticisms, is there a space for positive, pro-social uses of social games?

This wealth of questions is faced with a dearth of research on social games due to their very recent appearance on the video gaming landscape. This report therefore sets out for a first attempt to gather and organise the existing research and critical thinking on social games, so as to create a shared baseline on which systematic academic research could build.

## A. The Workshop

### Description

The academic workshop “Social Game Studies: What Do We Know, What Might We Learn?” took place on Friday, July 9th, 2010, 2–6.30 pm at the 2010 GCO Games Convention Online in Leipzig, Germany.<sup>2</sup> Organised by the Hans Bredow Institute for Media Research,<sup>3</sup> it convened selected speakers from the GCO Business Talks under the following call:

“In tune with the relative newness of the hybrid medium that is social games, this workshop pursues two goals: One, to take stock of the academic and industry research on social games that has been done or is currently being conducted. Two, to identify what (if anything) makes social games different to video games on the one hand and social networks on the other: Which theoretical approaches and methodologies promise to capture these characteristics, which new data sources, methodologies and research questions do social games afford?”

### Proceedings

As noted, the workshop was framed by academic presentations of the invited participants given as part of the GCO Business Talks. A brief documentation including pointers to the presentations can be found below in the documentation section below (C.1). Ahead of the workshop, a brief email questionnaire of five items was sent out to help to build a shared ground ahead of the actual event (documented below, C.2.1-5). The workshop itself proceeded in four large sections, framed by a quick welcoming and wrap-up round:

- **Introductory round:** Each participant presented him/herself, touching on his/her background, current research project and involvement in social games, concluding with three “bold claims” on social games that should spark debate (C.2.6).
- **Defining social games:** In a moderated discussion, participants brainstormed and discussed features characteristic for social games, pre-grouped into the four categories *user*, *design*, *economy*, and *technology*. From the discussion, two further clusters of observation emerged: One was the *discourse* about social games itself, the other *opportunities* for the design of future social games (C.3).
- **Expanding social game studies:** In a second moderated discussion, participants identified understudied and/or promising research topics in regard to social games, together with promising new research methodologies afforded by social games (C.4).

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<sup>2</sup> See <http://gamesconvention.com>, <http://goo.gl/21aO>

<sup>3</sup> <http://www.hans-bredow-institut.de>

- **Mapping social game studies:** Initially, a third round of discussion collating existing research on social games was scheduled, but eventually deferred post-workshop due to time demands and the rote nature of the activity (C.5).

The results of the workshop, including the presentations of the participants given at the GCO Business Talks, are documented at <http://socialgamestudies.org/report>.

## Participants

- Staffan Björk, Chalmers University of Technology and University of Gothenburg, <http://www.chalmers.se/cse/EN/people/bjork-staffan>
- Sebastian Deterding, Research and Transfer Center Games and Virtual Worlds, Hans Bredow Institute, Hamburg, <http://codingconduct.cc>
- Stephan Dreyer, Research and Transfer Center Games and Virtual Worlds, Hans Bredow Institute, Hamburg, <http://www.hans-bredow-institut.de/de/staff/stephan-dreyer>
- Aki Järvinen, Digital Chocolate, Helsinki, <http://games4networks.posterous.com>
- Ben Kirman, Lincoln Social Computing Research Centre, University of Lincoln, Lincoln, <http://ben.kirman.org>
- Julian Kücklich, independent researcher, Berlin, <http://playability.de>
- Janne Paavilainen, Game Research Lab, University of Tampere, Tampere, <http://soplayproject.wordpress.com>
- Valentina Rao, GATE Game Research for Training and Entertainment Project, Utrecht University, Utrecht, <http://www.factorygirl.org/gamesacrossmedia/>
- Jan-Hinrik Schmidt, Research and Transfer Center Games and Virtual Worlds, Hans Bredow Institute, Hamburg, <http://schmidtmitdete.de>

## B. Themes and Findings

During the workshop, several themes and insights emerged that are not immediately apparent in the documentation or hard to grasp without the conversational context. This section therefore crystallises the main themes that appeared dominant, new, and/or valuable in the debate, and places it within existing research.

### 1. General observations

Starting with the public, professional and academic **discourse about social games**, the workshop participants noted an almost universally dismissive account of social games among game designers and users as being “more business-driven”, “less complex” or “not real” games in comparison to traditional commercial off-the-shelf games (Paavilainen 2010, see Costikyan 2010 for an example). Especially Aki Järvinen emphasised that as an academic researcher, one should not be captured by this value-laden discourse and comparison with traditional games, but rather stay neutral, analytic, and curious. In addition, there was consensus that today’s social games are very much in their infancy, and that already, more mature and complex social games are emerging, albeit outside of mainstream academic and media attention.

In terms of **defining social games**, no explicit shared definition was agreed on, but three definitions were suggested that appeared uncontroversial. Järvinen (2010) suggested to define social games as “Online games that adapt your online friendship ties for play purposes, while accommodating your daily routines.” Julian Kücklich offered the following definition: “Games that play on social networks.” Similarly, Björk (2010) suggested to describe social games as games “making use of social networks to provide gameplay”, combining casualness and playfulness. One caveat stressed during the workshop was that social games are still very much ‘in the making’. Hence, definitions are bound to change with its object. On another note, the rise of social games might very well change the public perceptions as well as academic definitions of what video games in general are, just as PCs and home consoles, online and mobile games did before.

Maybe the most resonant and often-repeated observation during the workshop was that “**social games are not social**”. On closer observation, this statement encompassed several aspects:

- **Object-mediated or lateral interaction:** In most current social games, there is no synchronous interaction between players and/or their co-present avatars (such as in e.g. traditional multiplayer games). Rather, players have “private game spaces” (farms, cafés, real estate) (Björk 2010) that they affect, and players note the presence of other players via static representations (avatars and/or game objects) of the other players in these environments. There is only (a) asynchronous interaction via objects both players interact with (e.g. I harvest your crop field, I gift you an item), or (b) lateral interaction in that other players are automatically utilised as tokens (e.g. the size of my friend network gives a point boost on

some game activity). This effectively makes current social games “Massively Single-Player Games” (Björk 2010).

- **Few social game mechanics:** It is seldom that social games make use of the many game mechanics known to necessitate or facilitate social interactions among players, e.g. cooperative play (Björk & Holopainen 2005: 237-276; Seif El-Nasr et al. 2010). This was seen as a design opportunity.
- **Commodification of social relations:** Social games standardise and codify social interactions into game actions which appear ‘flat’ or ‘inauthentic’ in comparison to online interpersonal discourse or even face-to-face interaction. Interaction partners are commodified into mere game tokens. (Note that this is a general trait and critique of mediated communication (Baym 2010: 1), but it appeared to be more readily apparent in social games).

The **sociality of social games** is obviously one of the most relevant, interesting and likely, complex issues in the matter. One necessary qualification is to distinguish between (a) *social play* in a game (e.g. team cooperation in a multiplayer capture-the-flag game), and (b) the *sociability* or social interactions happening around the game and afforded by it (e.g. chatting about the game or personal everyday life matters) (Stenros, Paavilainen & Mäyrä 2009). As Wohn et al. (2010: 4423) note, “People play SNGs (social network games, S.D) to create common ground for future social interaction rather than seeking direct social interaction in the game.”

A second general observation spanning economy, technology, design and usage was the **hybrid nature** of social games **between video games and social networks**. Already in their user interface, they combine the social networking site as a frame surrounding the game as the core interaction hub. Likewise, gameplay and game artefacts stretch across both, with updates and messages in the users’ SNS inbox or notification stream belonging to the game, and the social graph of the SNS being utilised in the game. Furthermore, unlike traditional roleplaying games that allow the full disappearance of the player’s identity behind a nickname and/or avatar, most social games blend the real-life identities of members of the player’s social graph directly into the game, leading to overlapping, if not collapsing contexts (Rossi 2009).<sup>4</sup> As Rao (2008) points out, even many Facebook applications have a “playful” nature, by affording (virtual) physicality (e.g. “poking” or “kissing” rather than mere textual interaction), spontaneity, and inherent sociability. Thus, she argues, social games and playful applications effectively the Facebook platform into a “Third Place” in the sense of urban sociologist Oldenburg – an in-between space of freedom and socialising apart from work and home.

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4 This is at least partially due to the real name policy of Facebook as the predominant social gaming platform.

## 2. Technology

Regarding the role of **technology**, it became quickly apparent that **although** the technological platform (social network sites) is the **most straightforward material definition of social games** in their current shape – video games utilising the social graph of a social networking site – it is the **least interesting or relevant aspect** when it comes to capturing the *characteristics* of social games. Furthermore, there was agreement that social games understood as the combination of these characteristics do not *necessarily* require social network sites as technological platform. What they need and utilise is a social graph that can be brought into play and/or used as a “viral substrate” (Järvinen) for distribution. So although “video games utilising the social graph of a social network site” is the current technological incarnation of social games, a broader, ‘platform-agnostic’ conceptualisation appears possible. This was again seen as a design opportunity – games that leverage (implicit) social graphs existing beyond social network sites (e.g. in address books, circles of friends, ...).

## 3. Economics

In contrast, the **economics of social games** proved surprisingly rich and relevant for the understanding of social games. The true **innovations** of social games appear to be more in **business models and product development process** than technology, game design, or audiences. Social games mark the shift from games as a product to **games as an online service** (Sotamaa & Karppi 2010), and with this,

- a shift from high-risk, high-investment, hit-driven ‘Hollywood’ mass media and desktop software monetisation models to **freemium, micro-payment models**;
- and a shift from long-term, ‘genius’, ‘intuitive’ development models to the **agile, iterative, pivoting, usage- and metrics-driven development** model of web startups.

In this, it was felt that social games ‘led the way’ for the entrenched commercial off-the-shelf industry. With services like Steam, OnLive, or the Xbox Marketplace, traditional players in the market can be expected to make significant moves toward the distribution and monetisation of games as online services in the foreseeable future. Similarly, a comparatively large amount of economic research has looked into micro-payment models and virtual item sales, and how their design might affect the economic outcome of social games and online games in general (Guo & Barnes 2007, 2009; Lehdonvirta 2009, Hamari & Lehdonvirta 2010).

The **economic tensions** of social games were thus seen less between the social game developers as market entries and the entrenched commercial off-the-shelf game industry as incumbents, and more between the social game developers and the SNS. Social games show characteristics of a **two-sided market**, with the SNS being the middle platform providing users with access to games and developers with access to users. However, at the current

moment, the game developers are the only party generating significant revenue out of this relationship, wherefore attempts by the SNS to claim part of the revenues appear likely. The much-publicised conflict of Facebook and social game developer Zynga over a potential split and Facebook pushing their own “credits” as the preferred micro-payment system on their platform delivers a case in point for this (Eldon 2010, Rao 2010).

Another pertinent observation was the very **tight coupling of game design and business development** in social games, to the point of “game design as marketing” (Hamari & Lehdonvirta 2010). Afforded by the measurement opportunities of online service models and the business culture of web startups, decisions and iterations in game design are linked to and judged by their effect on business metrics like virality, retention or average revenue per user (ARPU).

This observation was generalised to the insight that **the economy, technology, usage and design of video games are deeply intertwined** – not only in social games, but in all video games. For instance, the usage pattern of small gameplay sessions interspersed throughout the workday is catered to by specific time-based game mechanics that at the same time cater to the core business model – offering players to circumvent waiting/grinding time through micropayments. In a similar vein, the prevalence of sequels in commercial off-the-shelf games is partially owed to their high-risk, high-investment economics; sequels are essentially a risk-reduction strategy. Thus, usage motivations and patterns afford and constrain business models as much as business models afford and constrain the design space of games – and vice versa.

#### 4. Design and content

The **design** of social games was broadly characterised as

- appealing to the “**widest possible audience**” (Paavilainen 2010) through **easiness**, that is, easy, casual play with low barriers of entry, positive, everyday themes and “easy fun” (Lazzaro 2008) through high “juiciness” (Juul 2010: 45-9) or “clickability” (Järvinen 2010);
- optimised for **monetisation, virality, and retention**.<sup>5</sup>

“**Interruptibility**” (Juul 2010: 36-9, Paavilainen 2010a) was seen as a core feature for both easiness and retention: Players can interrupt and resume gameplay at any time, but this convenience combined with time-based mechanics of replenishing resources also facilitates regular returning to the game throughout the day and thus, retention. Björk (2010) characterised the time mechanics of social games as “tick-based games”, that is, game time progresses in ‘real time’, but in discrete steps, which in turn affords asynchronous gameplay – players don’t have to be synchronously co-present.

Similar to massively multiplayer online role-playing games (MMORPGs), social games usually offer **persistent worlds** and game mechanics that are heavy on “**grinding**”: repetitive tasks necessary to level up and collect virtual items and virtual currency (Björk 2010). This indeed constitutes a core part of the business model of virtual games: They are “broken by design” (Deterding), i.e. deliberately introduce frustrating grinding tasks and time lags between activities that can be circumvented through monetary micro-transactions or other out-of-game player activities that earn the game provider revenue (e.g. referrals). As Järvinen (2010) states: “In a freemium business model, all ‘game mechanics’ are retention mechanics that gear towards monetization, by imposing in-game goals that become The Wall” – meaning an obstacle to be overcome by paying money or something similar.

In alignment with the focus on easiness, it was noted that social games usually neither afford much openness for emergent gameplay, nor a complex procedural modelling of their subject matter. However, this was at least partially attributed to early and popular games such as *FarmVille* that dominate the public impression; more recent (and less popular) social games

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5 Paavilainen (2010) outlined several core design features at his talk that provided the springboard for this discussion. They have now become elaborated into ten design heuristics for social games (SoPay 2010, cf. Paavilainen 2010a):

“SG1 – Accessibility – Making the game easy to approach, understand and play.  
SG2 – Interruptability – Taking advantage of social network use context.  
SG3 – Continuity – Providing asynchronous and permanent game world.  
SG4 – Discovery – Creating an interesting setting with new content to discover.  
SG5 – Virality – Promoting various means for viral growth.  
SG6 – Narrativity – Using vivid in-game and off-game narratives for eliciting curiosity.  
SG7 – Expression – Supporting player’s self-discovery and ability to customize.  
SG8 – Sharing – Allowing players to share in-game resources easily.  
SG9 – Sociability – Using social network as a game mechanic.  
SG10 – Competition – Promoting playful social competition in the game.”

show more complexity and darker themes. Also, there is emergent user behaviour such as players appropriating game elements of *FarmVille* to create pixel art.

On a more critical note, many workshop participants observed that social games **exploit (social) psychological principles**, most notably, attachment, social proof, and reciprocity. With mechanics of **mutual gifting** and help among players, social proof make the usually implicit maintenance of social ties through **reciprocity** explicit and utilise the resulting sense of mutual guilt and obligation among players for retention to the game (Björk 2010). Social games utilise the psychological principle of **social proof** with the ‘viral’ sending of invitations via the social network, and the continued feedback that other friends are playing (and hence, approving of playing) the game. The public display of player statistics via leaderboards etc. affords dynamics of **competition** among friends. Finally, with the long-term, often-repeated interaction with and **sunk time and money costs** in the players’ virtual items, players potentially develop an emotional **attachment** to their items that likewise increases retention, similar to games like *Animal Crossing*.

## 5. Users and usage

The first relevant observation on the users of social games was that the equation ‘social games are for casual gamers, commercial off-the-shelf games are for hardcore gamers’ does not hold up. Just like casual games (Juul 2010: 50-55), social games appeal to casual as well as hardcore audiences, and as Kirman (2010) outlined, within the usage group of any given social game, one finds a stable power distribution between a broad base of casual players and a small group of devoted hardcore players. Also, people change over time in the degree of play activity and their playing style preference. From network analyses, Kirman (2010) identified four ‘archetypes’ of social game play as regards social interaction with others:

- Usually hardcore “Evangelists” who start social relations, reach out to other (non-)players, nearly always reciprocate.
- More casual “Socialites” whose interactions are usually bound to a small, existing cluster of contacts.
- “Reluctants” who rarely initiate, but always reciprocate interactions.
- “Antisocials” who neither initiate nor reciprocate interactions.

More characteristic for social games is a peculiar pattern of **usage motivations**. In an exploratory survey among social gamers (n=253), Wohn, Lee, Sung et al. (2010) found four clusters of self-reported uses and gratifications of social games:

- “Common ground”, i.e. using social games to build common topics and experiences that would service as a basis for out-of-game interactions with acquaintances;
- “Reciprocity”, i.e. helping and being helped;

- “Coping”, i.e. using social games to cope with out-of-game situations and states (stress reduction, distraction from problems); and
- “Passing Time”.

Building on the results of the qualitative interview study of social gamers by Paavilainen (2010), the workshop debate very much focused the latter two. Social games serve as **distracting gap-fillers and relaxing micro-breaks** throughout the workday. In contrast to the often steep difficulty curve of COTS hardcore games, and contrary to the notion that video games attract users mainly via providing “optimal experiences” or “flow” states achieved by an optimal match of skill and task difficulty, it appears that a large part of the social game audience is satisfied with ‘easy success’.

One state of mind that social games provide was likened to games such as **Pachinko or Bingo**, a **“pleasant boredom”** or quasi-meditative cognitive relief through repetitive activity with low suspense, low cognitive load and low emotional intensity. This is supported by the positive themes of the games – usually, everyday activities of a similarly relaxing nature, like cooking or gardening. Players even appear to enjoy the management and reorganisation of game resources for its own sake, a usage pattern described as “pottering” (Björk 2010). Restorative relaxation rather than intense emotional suspense and relief appears as a typical usage motivation of social games. These observations match the three “casual mentality profiles” – “killing time”, “filling gaps” and “relaxing” – identified in the gaming mentality framework (Kallio, Mäyrä & Kaipainen, forthcoming).

## 6. Research opportunities

Turning to future **research opportunities**, Björk suggested a four-dimensional model of potential research dimensions: artifact, people, activity, and production. Overall, promising research topics were seen **across all aspects of social games**, from users and usages to effects, economics, design patterns and processes, as well as critical studies and prosocial uses as “serious social games”. One discernible strand of interests was clearly practice-oriented, looking into optimising the design and business processes as well as opportunities to transfer lessons learned into the development of COTS games. Another recognisable hub of interests was the intertwining of in-game and out-of-game activity and experience.

**Method-wise**, this was reflected in a **strong appreciation of mixed method designs**, both in terms of combining data-intensive, quantitative methods (logfile analysis, social network analysis) with qualitative methods, and in terms of combining online, in-game data and observations with offline, out-of-game data and observations. Such mixed-method approaches promise to generate a holistic picture of a game practice that is characterised by the intertwining of online and offline, in-game and out-of-game.

## C. Documentation

The following section documents the outcomes of the workshop which were – apart from the presentations – captured in e-mails, live transcriptions and post-it notes “as is”, with minimal editing for spelling and harmonised terms.

### 1. Presentations

#### 1.1 Aki Järvinen, “The Quest for Aesthetics in a Metrics-driven Business”

Social games are often said to be a metrics- and marketing-driven enterprise – to the detriment of design and aesthetics. Aki Järvinen, lead social designer at Digital Chocolate, argues that this is an artificial opposition: Metrics actually help to develop and evolve gameplay and thus, the user experience/aesthetics of social games, and an exclusive focus on quantitative metrics will prove eventually hurtful to the business-side as they do not provide insight into the (qualitative, experiential) reasons of user behaviour. Järvinen begins by reframing social games as belonging to social design and service design. This context lets us understand the metrics-driven culture of social games as a conventional part of the business process of lean web start-ups.

The marketing-‘drivenness’ of social games is usually equated with “viral” distribution via the news streams and notification systems of social network sites. But as the network sites have reacted with filtering out such ‘spammy’ game notifications and the market solidified, viral distribution, in-game cross-promotion and plain advertising spending each account for roughly a third of user acquisition.

Still, acquisition is nothing without retention and monetisation achieved through game mechanics – which at the same time constitute the emotional and aesthetic core of social games. Järvinen defines three essential gameplay aesthetics of social games together with connected metrics:

- “Clickability”: the experience of clicking game items, including the joy of immediate feedback, connected to metrics such as time spent per session.
- “Social proof” created through “playing the social graph”, i.e. invitations sent to and feedback received on friends in your social graph;
- “Unlocking”: the experience of acquiring a new level or virtual item by grinding or paying.

*Link: <http://bit.ly/doidOG>.*

## 1.2 Janne Paavilainen, “Users and Their Experiences in Social Games”

The SoPlay Project is a two-year research project on “Social Play Among Casual Cross-Media Contents” at the Games Research Lab of University of Tampere. In this presentation, the project manager Janne Paavilainen leads through first results of qualitative interviews with Facebook game players on their experiences, practices, motivations and frustrations playing Facebook games. Especially already experienced video gamers perceived social games as “not really games”. Social games are perceived as different from ‘traditional’ games in that there is no deep immersion in the game world, a very simple, fast, and effortless installation and gameplay. Also, notifications, invites and gift requests were perceived as annoying spam and a source of potential embarrassment if sent to other users.

In terms of motivations, social games are generally played for killing time, filling gaps in the workday, relaxation, and keeping oneself busy. Social motivations like competition, a low-volume way of connecting with friends, and mutual obligations were also reported. Finally, experienced gamers showed an interest in novel genres, game mechanics or themes. Reported sources of frustration were the spammy notifications, requirements in terms of connected friends, scarce in-game resources or obligation to spend money, the repetitive nature of gameplay, technical bugs, and the shifts between the in-game interface and out-of-game newsfeeds and notifications often required.

Sociability turns out to improve gameplay experience to some and irritate others. Although sociability is usually confined to mutual gifting and the use of others as game tokens, there is also some emergent sociability like bonds with previously little-known persons evolving.

Paavilainen closes by looking at fanatic players who feel a great responsibility toward the game and calculating, strategic gameplay, and at in-game-payments, which are generally felt to be “not worth it” and seriously hindered by usability issues; peer pressure appears to be one major motivator for buying virtual items. *Link: <http://bit.ly/cHQQoq>.*

## 1.3 Ben Kirman, “Playful Clusters: Motivations and social structures in social games”

In his presentation, Ben Kirman argues against the demographic modeling of an “average gamer”, as demographics do not account for the meaningful psychological differences in motivations and behaviors (what he calls “demographics of the mind”), as averages tend to smudge meaningful clusters of different groups. Plotting the number of social interactions or ties within a social game or spending habits, one finds a stable power distribution between a small core of hardcore players and the vast majority which plays, spends and interacts only little. Kirman culls out four archetypes of social interaction in social games:

- Usually hardcore “Evangelists” who start social relations, reach out to other (non-)players, nearly always reciprocate.

- More casual “Socialites” whose interactions are usually bound to a small, existing cluster of contacts.
- “Reluctants” who rarely initiate, but always reciprocate interactions.
- “Antisocials” who neither initiate nor reciprocate interactions. *Link: <http://bit.ly/df1l8g>.*

#### 1.4 Staffan Björk, “Principles and patterns of social games: Where’s the difference compared to other games?”

In his presentation, Staffan Björk first stresses the inherent sociality of all play and games, to then inquire the relation of social games to casual games and casual gamers as described by Juul (2010), and the relation of social games to playful behavior on SNS as described by Rao (2008) and Järvinen; symbolic physicality, social spontaneity, inherent sociability, narrativity and asynchronicity. He concludes that the *game qualities of casual games* help to explain players’ *preference* for social games, whereas the playfulness observed on SNS help to describe players’ *typical behavior* in and around social games. The second part of his presentation gives a detailed overview of 23 game design patterns characteristic for social games, loosely clustering around time mechanics and mechanics tapping into social psychological principles. *Link: <http://bit.ly/chZdiJ>.*

#### 1.5 Valentina Rao, “Casual Social Games for Serious Social Purposes”

In her presentation, Valentina Rao asks whether we can spell Social Games with a “big S” – that is, whether they can be interwoven with society at large, and used for prosocial purposes. She conceives of social games as a “Third Place” (Oldenbourg), a neutral, playful ground for socialising that blends reality and fiction – and due to its unassuming, relaxed nature, might make people more conducive to persuasive attempts. This, she argues, makes social games an underestimated tool for social change, but also puts greater ethical responsibility on the shoulders of social game designers. Rao then identifies four ways in which social games and reality might interact:

- Adding game dynamics to real-life interactions, exemplified by the mobile application Foursquare, doling out points and badges for “checking in” at a geographical location.
- Inserting elements of real life into a game. In-game-advertising or prosocial funding campaigns tied to micro-transactions in social games are examples for this.
- “Productive gameplay”: Tying a real-world outcome to in-game-activities. This can be crowdsourcing some useful activity (like image tagging) into a game, or the game provider promising players to act in the real world based on their in-game success.
- Repurposing existing games for serious causes, i.e. using FarmVille as a teachable moment for mathematics, or art gamers using the space of an online shooter set in Iraq to raise awareness about the victims of the war. *Link: <http://bit.ly/96bTAC>.*

## 1.6 Julian Kücklich, "Pwned. The Death of the Game Designer and the Future of Game Design"

In his presentation, independent game researcher Julian Kücklich takes a critical look at the past, current, and future role of the game designer. He argues that game designers have never achieved the same cultural prestige as "auteurs" of a "work" like novelists or movie directors – with few exceptions like American McGee or the practice of early Activision to put the names of the game designers on the game boxes. Today, we see the role of the designer diminish even more, with the audience as authors (UGC) and a sales decline of the COTS market which leads to even more risk adverse publishers, preferring sequels to original, new IP. Social games are siphoning off time and money, and in terms of business practice, their development practices, business models and game designs epitomise the hegemony of economics above game designers and game design that is already visible in the poor working conditions of the COTS gaming industry. *Link: <http://bit.ly/c1OCd7>.*

## 2. Statements and Claims

### 2.1 In relation to social network sites, social games

- ... leverage existing social ties for play purposes. (Aki Järvinen)
- ... are like fast international food chains aggressively pushing out the local competition. (Julian Kücklich)
- ... are just one of many types of application on the social graph, but they demonstrate the power and possibilities of your personal social network. (Ben Kirman)
- ... range from being a gimmick to being a fuel for social interaction - in some games, social interaction is a gimmick to make people play (Farmville, Frontierville, Restaurant City etc), but it could be the other way around, play could be used to make people do things, like the SocialVibe network, offering a play-like interface with points and goals and rules to raise money for fundraising. (Valentina Rao)
- ... are where the money is, at least in leisure contexts. Expect acquisitions and revenue share attempts by the network providers, cross/multi-platform moves by the game companies in return, and many other nasty things happening. (Sebastian Deterding)
- ... are one of the features that attract people to SNS. (Jan Schmidt)
- ... are those applications that prey upon users with their social habits,
- social statuses and peer impressions, while at the same time offer them
- new possibilities of reputation management on social network sites. (Stephan Dreyer)
- ... will become an even more dominant application form than they are now. (Janne Paavilainen)

## 2.2 In relation to COTS, casual and online games, social games ...

- ... have embraced the viral and spontaneous nature of online communication (Aki Järvinen)
- ... are primarily driven by marketing, rather than technology, or game design. (Julian Kücklich)
- ... are a return to the roots of gaming and play as social pastimes. (Ben Kirman)
- ... are inevitably more connected to real life, current events, personal stories, and need to be more flexible and capable of incorporating (or considering) in their design the impermanent flux of experience from both the private and public sphere. (Valentina Rao)
- ... are currently a more accidental assemblage of micropayment business models, viral/low threshold marketing, and monetization-optimized grinding as game mechanic. This assembly will (hopefully) decouple and gradually mature into a coherent genre that caters to specific (cooperative, sociable) motivations, kinds of fun, and hence, audiences. (Sebastian Deterding)
- ... are understudied. (Jan Schmidt)
- ... are less innovative, less creative, metric-driven and turnaround-optimized, while at the same time they show to be the next evolution step in global games development. (Stephan Dreyer)
- ... have the advantage of social networks which promote viral growth effectively. (Janne Paavilainen)

## 2.3 Interesting about social games is ...

- ... their fundamentally iterative, metrics-driven nature within a service design & development contexts. (Aki Järvinen)
- ... the way they leverage the reciprocity of gift-giving, thus establishing a gift economy seamlessly integrated with global capitalism. (Julian Kücklich)
- ... social games are for everyone - most are designed to be inclusive and not exclusive (i.e. no previous games experience needed). (Ben Kirman)
- ... how online life and "real" life interchange, and how social relationships and "branded" relationships (relationships created in the name of a brand) superimpose; also interesting how people relate differently within a game setting than they would do in everyday life. (Valentina Rao)
- ... how they interweave with and fill the interstitials of everyday life, and potentially build attachment through repeated, long-term interaction and investment like Tamagotchis or Animal Crossing; also, with metrics-driven design, their unintentional potential function as massive socio-psychological laboratories that research could tap into. (Sebastian Deterding)
- ... that they are understudied. (Jan Schmidt).

- ... that after an unbelievable peak in user numbers, the users are beginning to drop since 2010 - while social network user numbers still continue to grow. Must be that the first adopters are all gamers... (Stephan Dreyer)
- ... that they are still evolving rapidly, looking for their form. There is a lot of trial and error going at the moment. (Janne Paavilainen)

## 2.4 Worrisome about social games is ...

- ... questionable design ethics that try to blatantly exploit psychological patterns for monetization. (Aki Järvinen)
- ... their tendency to develop into hegemonic, monocultural social systems. (Julian Kücklich)
- ... the homogenization of design aesthetics and mechanics. (Ben Kirman)
- ... how they are used for commercial purposes, and how often they commodify human relationships, preying on the basic need for social interchange to create artificial communication that leaves no space for the individuals to express themselves beyond "brand creation" or "brand support". Also worrisome is how consent and sympathy created in a game environment can easily be deviated to some other area (for instance, voting for a political candidate), and how social games' huge potential for opinion-making can be used to any purpose, under the dubious regulations of social networks that mirror the mainstream ideology rather than offering a neutral space (a social game on Nazi ideology won't be accepted by Facebook because it's not acceptable in the predominant public sphere, but another defending the wildest forms of capitalism will, while I doubt we are going to see a social game on non-violent protest). (Valentina Rao)
- ... that their micro-monetization-driven design might spill over into the whole game design practice, crowding out non-micro-monetizable/grind mechanics and cultures of play and games unpervaded by economics. (Sebastian Deterding)
- ... the amount of personal data their developers might have access to. (Jan Schmidt)
- ... that nobody knows how much you reveal of your personality to the platform provider and the game provider by just using social games. (Stephan Dreyer)
- ... that they might stagnate to the "lowest denominator" form, meaning that they would not evolve into more complex games. (Janne Paavilainen)

## 2.5 In five years, social games will ...

- ... have solidified their position as a significant part of the games industry by being able to change as the networks change. (Aki Järvinen)
- ... be either dead or ubiquitous. (Julian Kücklich)
- ... be what everyone thinks when they hear the words "computer game" and everyone will play. Console games will continue to become more of a niche for a minority of game players. (Ben Kirman)

- ... be an accepted form for various kinds of interactions right now unrelated to games, like work, political communication, fundraising, education, preaching, commerce, dating, activism and advocacy (OK, maybe in 10 years). (Valentina Rao)
- ... have gone through a cycle of hype and fatigue, differentiated in depth and complexity (beginner vs. connoisseur social games), be cross-platform/network, and with mobile devices, pervade the physical world. (Sebastian Deterding)
- ... be a normal way of playing digital games. (Jan Schmidt)
- ... be a specific form of games that will coexist beside all current and future game forms. (Stephan Dreyer)
- ... are not browser based anymore, as social networks will be integrated into the system OS. (Janne Paavilainen)

## 2.6 Twenty Very Bold Claims on Social Games

- Life is a social game. (Valentina Rao)
- Pattern-wise, social games are not different from other games. Their uniqueness comes from the platform they are played on. (Staffan Björk)
- Social games are anti-social because they do not allow direct social interaction. (Stephan Dreyer).
- Social games are not social; future developers should focus on really social aspects such as self-expression. (Valentina Rao)
- Social games are not social – judged by board game standards. (Ben Kirman)
- Social games are not social. (Sebastian Deterding)
- Social games are preying on user psychology more than any other genre (Stephan Dreyer). – Except gambling. (Aki Järvinen) – Social games are "casual gambling". (Staffan Björk)
- Social games are redefining what gameplay is. (Aki Järvinen)
- Social games are reverse-engineered Chinese Goldfarming. (Sebastian Deterding)
- Social games are potentially the biggest research project of user data collection ever – if only academics could get their hands on industry data. (Sebastian Deterding)
- Social games are the salty sweet fats of the games industry, custom-engineered for our social needs. (Sebastian Deterding)
- Social game developers are better at interaction design than interaction designers (Staffan Björk)
- Social games will become more complicated and more social. (Janne Paavilainen)
- Social games will be banned the day a developer manages to exploit the “artificial scarcity” pattern.<sup>6</sup> (Ben Kirman)

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6 [http://en.wikipedia.org/wiki/Artificial\\_scarcity](http://en.wikipedia.org/wiki/Artificial_scarcity), <http://www.danlockton.com/dwi/Scarcity>

- Social Games will be banned in Germany in the next three years because of data and consumer protection issues (now that's a bold claim!). (Jan Schmidt)
- Social games will not manage to implement social norms of their own, because the social norms of the SNS are dominating. (Stephan Dreyer)
- The social games industry is very different from the traditional games industry - very business centered, very streamlined. (Ben Kirman)
- There are and there will be no independent ("indie", "alternative") social games. (Aki Järvinen)
- Western developers are whimps, because they make only boring, non-controversial social games. (Janne Paavilainen)
- You don't need to be sociable to be social. (Valentina Rao)

### 3. Defining Social Games

#### 3.1 General Remarks and definitional attempts

- Definition: "Games that play on social networks." (Julian Kücklich)
- Definition: "Online games that adapt your online friendship ties for play purposes, while accommodating your daily routines." (Aki Järvinen)
- The emergence and proliferation of social games could socially redefine what the term "game" means or encompasses.
- The term "social games" is well-established within the public, user and business sphere. Even though "social network games" or even "social network site games" might be more correct and precise terms, arguing for another term is a moot endeavour at this point in time. A clear academic definition what the term relates to is more helpful.
- Game researchers in particular shouldn't fall for the general value-laden, negative, dismissive discourse about social games vs. "real" games; rather, they should stay analytic, descriptive, curious – in a word, scientific.
- Specifically, researchers shouldn't evaluate social games by the standards of traditional video games.

#### 3.2 User (psychology, motivations, behaviours, communities, demographics)

- Both hardcore gamers and newcomers (who usually don't consider themselves as "gamers") usually see social games as "not real games".
- Generally a casual, game newcomer audience, but also played by hardcore gamers (though usually for different motivations than casual gamers).
- Can be and are played casually and hardcore, both by casual and hardcore gamers.
- Game activity follows power function: Small hardcore group accounts for majority of activity and monetisation, overarching majority plays and monetises only little.

- Game choice partially depends on the games my social graph plays – social games tap into network effects (critical mass, lock-in etc.) like SNS.
- Social Games use existing social ties for play.
- Friends are potentially turned into game assets or tokens (ludic commodification).
- ‘Ambient’, ‘peripheral’ sociability: Social games are played ‘together’ in a peripheral sense. No (mediated) co-present interaction, asynchronous interaction via objects both participants interact with. Players have “private game spaces”. We note the presence of others and others note our presence via environments/objects.
- Usually played in ‘gaps’, nooks and crannies of everyday life, especially at work (ties into filling gaps, relaxation as motivation, interruptability as design feature).
- Core motivations are filling gaps, relaxation, keeping the hands busy, socialising, competition, mutual obligation, interest in the game’s theme.
- Social games aim for the widest possible audience both technology- and content-wise (though compare with “Snake” on Nokia phones, or Windows Solitaire, Minesweeper).
- “Pleasant boredom”, a quasi-meditative cognitive relief through repetitive, low-cognitive load activity is one play experience and motivation for play.
- Flow theory suggests that games should continually raise difficulty with increasing player skill; However there is no empirical evidence to support this in games - in fact, what research exists (e.g. Klimmt et al, 2009) shows that player preference is for lower difficulty regardless of skills. Social games, either intentionally or not, take advantage of this apparent preference for simplicity.
- In the interface of social games, real life identity and game character identity coexist, real identity never fully disappears behind a character mask as in e.g. MMORPGs. Thus, social games afford less complete immersion into the alternate fictional world. The real life identity always remains involved.
- Social games exploit the innate social psychological principle of gifting and reciprocity; they make the usually implicit social maintenance and reciprocity explicit in game tokens, capitalise upon the sense of mutual obligation and guilt for retention and repeat play.
- Social games standardise and codify social interactions in their algorithms and game rules. (This is a general trait of social networks and games, but seems more visible/pertinent with social games).
- Social games deindividualise the user into a part in a machinic assemblage, a simulacrum of identity.
- Social games potentially create a tamagotchi-like attachment to core game items (your character, farm, creatures on farm, ...).
- Social presence = social identity.

- Evolving in terms of features and content - Social games are not static designs, they can evolve and change to match the desires and preferences of the player-base. This is very different to the “design once” mentality in traditional computer games
- Exchange & act within the community.

### 3.3 Design (content, mechanics, interface)

- Bite-sized interaction.
- “Clickability”.
- Very predefined gameplay and morality, low openness for emergent gameplay, social norms and moral choices (opportunity: more openness creating stronger social meaning of player actions).
- Similar to Pachinko, Bingo.
- Gameplay embedded in larger metagame of the social network.
- Ludic/nonfunctional UGC emerges (e.g. FarmVille pixel art).
- Social games combine SNS and game interface; the gameplay forces you to swap between game and SNS interface (e.g. for status updates), which breaks immersion.
- Competition on many levels. Social “fun” competition in relaxed “not-give-a-damn” atmosphere vs. serious “TO THE DEATH” competition (i.e taking the game too seriously)... Casual tuesday evening scrabble against un-familiar users VS. long going RISK! campaign among friends (I believe there was a RISK! clone called Attack! in FB)
- Competition: social, fun competition vs. serious competition.
- “Broken by design”, built-in grinding that drives player to buy out of it. (Relates to Bernard Suits’ (2005) definition of games, i.e. “playing a game is the voluntary attempt to overcome unnecessary obstacles.” In traditional games, unnecessary obstacles create the satisfying overcoming of obstacles; in social games, they are incentives to monetisation.)
- Social games have privacy issues: How to manage personal content?
- Loose coupling between game theme and game mechanic; many standard game mechanic ‘templates’ applied to different themes
- No elaborate, complex procedural modelling of theme by game mechanics.
- Game fiction/theme is ‘positive’ and taps into everyday mental models grasped by everyone (cooking, farming, ...).
- Game fiction/theme is relevant for cross-promotion (i.e. cross-promoting one game from another works best if both have similar themes)
- Low barriers to entry
- Persistent game world
- Interruptable, but time-scheduled game-play designed for regular return to game
- Funneling
- Tutorials still evolving

- Accessibility, interruptability, continuity, discovery, virality, (micro-) narrativity, sharing, expression, sociability, competition

### 3.4 Economy (Business models, business process)

- Two-sided market with SNS as platform and game developers and players as user groups.<sup>7</sup>
- Symbiotic/parasitic/conflictual relation of game developers (monetisation, viral spread) and SNS (monetisation, growth, user retention, spam prevention). SNS are bottlenecks to user base, content, data, marketing.
- Distributed (offshoring), networked production of intangible goods.
- Business/marketing-driven, not designer-driven.
- Affective labor.<sup>8</sup>
- Freemium business model.
- Micro-monetization through virtual items via lead generation or direct micro-payments; users pay for the convenience of not grinding. “Reverse Chinese Goldfarming.”
- “Mature” product development process compared to other games: Agile, iterative, customer-feedback based: software development model, not media development model; specifically, web 2.0/online startup development model, not traditional desktop software development model.
- Immaterial online service, hence service design, not product design.
- Evolutionary, usage-driven, metrics-driven design.
- Agile development, continuous deployment of features.
- Lean startups pivoting towards success, not big, long-term, high investment, risky “visionary” products à la Hollywood (or traditional AAA COTS games).

### 3.5 Technology

- Rely on a viral substrate (usually a SNS).
- Currently rely on SNS as technological platform.
- Easy/low threshold compared to other games: no installation or high-end PCs necessary.
- However, still not universally accessible, third world locked out.
- Not so or even irrelevant.
- Client/Server architecture.
- Browser-based.

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7 [http://en.wikipedia.org/wiki/Two-sided\\_market](http://en.wikipedia.org/wiki/Two-sided_market).

8 [http://en.wikipedia.org/wiki/Affective\\_labor](http://en.wikipedia.org/wiki/Affective_labor).

### 3.6 Design Opportunities

- How might social games use other kinds of feedback as rewards, not points, badges, levels?
- Could we think of social games that don't rely on Social Network Sites or even electronic/digital/online technology?
- Do other games or digital environments come with implicit social graphs that could be gamed?
- Mechanics for meaningful negotiation and bartering between players could increase sociability.
- Can we think of grief play or evil deeds incorporated in Social Games (cf. Castle Age)? How might that look like?
- Where are the Serious Social Games?
- How might we design social games with a meaningful ending or closure?
- How might we incorporate real-life elements into social games?
- How might we move from collaborative/constructive player interaction mechanics to more competitive, conflictual ones? And would it work (e.g. sell, be enjoyed)?
- How might we design mechanics of sharing that feel more socially relevant, less spammy?

## 4. Research potentials

### 4.1 Promising research topics

- Pleasures and displeasures of social gaming.
- Quantitative and qualitative study of user experience of social games; triangulation of both data sources.
- Game mechanics: characteristic mechanics compared to other game genres.
- Game mechanics: Opportunity to study interaction effects of different mechanics quantitatively.
- Problematic behaviours and effects, excessive social gaming: Do they exist? Reasons and consequences.
- Can/do people learn from social games?
- Psychological reactions in social games: What are they, how do they transfer into/affect real life?
- How does playing social games fit into and interact with other everyday life activities?
- Which evaluation methods could be used in the design process of social games?
- Metrics.
- Social gamers and their audiences.
- “Item biographies”: What emotional/economic value does a player place upon virtual items based on his or others game play histories/past interactions with that item?
- Storification and meaning: (How) do players construct meaning and stories and biographies out of their social game play? E.g., how do we “retell” social game playing?
- Public and player attitudes toward social games and other genres: Do they regard social games differently, and why?
- Real-world rapid prototyping.
- Characteristics of the game design process.
- Productive play: (How) can social games be used for prosocial purposes?
- How do SNS features afford/constrain design space of social game features?
- Relevance, forms and effects of customisation.
- Power relations between users and producers: Capturing/enclosing and liberation/empowerment of users.
- Individual perceived vs. actual amount of user activity.
- Real network effects of game relationships (e.g. do social games help build weak ties).
- Characteristics of the software engineering process (XP etc.).
- Out-of-game communication and community in social games compared to COTS games.
- Metagaming and grief play.
- Social games metamedia: Factors, tools, actors used to decide which social game to play.

- Business process.
- Architecture of participation and affect in social games.
- Psychological dynamics of trust and credibility in social games (e.g. recommendations of friends).
- Critique and critical understanding of social games.
- Continuities and differences between online and offline social games (e.g. Bingo, Pachinko).
- Effects of social game play on peoples' general social network.
- Viral patterns between players.
- Development of play behaviour and play motivations over time (long-term attachment, switching from game to game, activity/item buying over time).
- Transfer potentials of design and business process models to regular video game and software development.
- Transfer potentials of design patterns to regular video games and applications.
- Virtual goods consumption in social games: Patterns, motivations, drivers.
- Lock-in mechanics of virtual item buying (e.g. items not transferable to other games).

## 4.2 Promising methods, data sources and theoretical approaches

- Generally four approaches:
  - Artifact
  - People
  - Activity
  - Production
- Ritual studies.
- Deludology.
- Combining real and virtual ethnography: virtual ethnography alone doesn't capture the real life context.
- Combining logfiles with qualitative data: diary studies, interviews, logfile-aided recall.
- Combining logfiles and webcam video (e.g. for the interaction of online and real life).
- Secondary analyses of industry data.
- Social network analysis.
- Out-of-game communication.
- Controlled quantitative studies with large groups.
- Psychological experimental studies (e.g. for collaborative play).
- AB & multivariate testing (e.g. of game mechanics).
- Approach the community.
- Economic data.

## 5. Mapping Social Game Studies

This overview of existing research on social games codes each item with two or more letters. The first letters stand for the type of research:

- I = Industry
- A = Academic

The following letters stand for the topics covered:

- U = User
- D = Design
- T = Technology
- E = Economy

### 5.1 Research Groups, Projects & Individuals

#### 5.1a Research Groups & Projects

Lincoln Social Computing Research Centre (AUDT)

[http://lincoln.ac.uk/mht/research-technology/lsrc/scr\\_default.htm](http://lincoln.ac.uk/mht/research-technology/lsrc/scr_default.htm)

The only large standing research centre that has social games as one of their explicit research areas.

Game Research Lab at the University of Tampere (AUDE)

<http://gamelab.uta.fi/>, <http://soplayproject.wordpress.com/>

The Game Research Lab is home of two large relevant research projects: SoPlay (Social Play among Casual, Cross-Media Contents), and the (recently concluded) GaS Games as Services Project.

IDGA Casual Games SIG (IDTE)

[http://wiki.igda.org/Casual\\_Games\\_SIG](http://wiki.igda.org/Casual_Games_SIG)

The IGDA Special Interest Group on casual games offers a wiki and regularly updated white paper.

Casual Games Association (IDTE)

<http://www.casualgamesassociation.org>

Virtual Economy Research Network (AUDE)

<http://virtual-economy.org>

A research hub on virtual economies, also covering MMOGs and virtual worlds.

USC Interactive Media Division, Game Innovation Lab

<http://interactive2.usc.edu/blog/?project=wellness-partners>

Home to “Wellness Partners”, a research project looking into a serious social game for health

TOIL The Online Interaction Lab, Michigan State University (AU)

<https://www.msu.edu/~nellison/TOIL/index.html>

Research on user demographics and motivations of social games

### **5.1b Individual researchers**

Lada Adamic (AU), <http://www.ladamic.com/>

Structure and dynamics of social networks

Stuart Barnes, Yue Guo (AUP),

<http://www.uea.ac.uk/nbs/people/People/Academic/Stuart+Barnes>

Virtual Item Purchasing Behavior

Amy Jo Kim, ShuffleBrain (IUD), <http://www.shufflebrain.com/>

Community design, metagame mechanics

Julian Kücklich (AUDE), <http://playability.de>

Economic conditions of design, playbour

Nicole Lazzaro, XEODesign (IUD), <http://xeodesign.com>

Typology of fun in (social) games

Valentina Rao (AUD), <http://www.factorygirl.org/gamesacrossmedia>

Persuasive, prosocial use of social games; social games as Third Places

Luca Rossi (AU), <http://larica.uniurb.it/redline>

Social practices in online gaming networks

## **5.2 Conferences & Events**

GDC Social & Online Games Summit (IUDTE), <http://www.gdconf.com/conference/sogs.html>

Casual Connect (IUDE), <http://www.casualconnect.org>

Social Gaming Summit (IUDE), <http://www.mediabistro.com/socialgamingsummit/>

Social Developer Summit (IT), <http://www.mediabistro.com/socialdevelopersummit/>

Virtual Goods Forum (IE), <http://www.virtualgoodsforum.co.uk/>

Mindtrek (AUDE), <http://www.mindtrek.org/>

WOSN Workshop on Online Social Networks (AUD),

<http://www.usenix.org/events/byname/wosn.html>

FDG Fundamentals of Digital Games (AUD), <http://fdg2010.org/PanelsAndDemos.html>

In 2010 host to a panel “Gaming Friendship: Social Network Sites as Fields of Play”

### 5.3 News Sources

Inside Social Games (IUDE), <http://www.insidesocialgames.com/>

SocialTimes (ITE), <http://www.socialtimes.com/social-games-news/>

Worlds in Motion (IUDE), [http://worldsinmotion.biz/social\\_network\\_games/](http://worldsinmotion.biz/social_network_games/)

Social Games Observer (IUDE), <http://www.socialgamesobserver.com/>

Games for Social Networks (AIUDE), <http://games4networks.posterous.com/>

### 5.4 Journals

Journal of Virtual Worlds Research (AUD), <http://jvwresearch.org>

### 5.5 Surveys and Statistics

Gamesindustry.com, & Newzoo. (2010). Social Gaming Monitor Graphs 2010. Retrieved from <http://www.gamesindustry.com/about-newzoo/socialgaminggraphs2010>.

Information Solutions Group. (2010). 2010 Social Gaming Research. Seattle, Dublin. Retrieved from <http://goo.gl/uyZ7>.

Roiworld. (2010). Teens & Social Networks Study. Retrieved from <http://www.scribd.com/doc/33751159/Teens-Social-Networks-Study-June-2010>.

Smith, J. (2010). The State of Social Gaming. Presentation, given at the GDC 2010, San Francisco. Palo Alto: Inside Network. Retrieved from <http://goo.gl/tJL3>.

TNS, & Gamesindustry.com. (2009). Social Gaming Monitor Graphs 2009. Retrieved from [http://www.gamesindustry.com/about-newzoo/todaysgamers\\_graphs\\_socialgaming](http://www.gamesindustry.com/about-newzoo/todaysgamers_graphs_socialgaming).

### 5.5 Books

Crumlish, C., & Malone, E. (2009). *Designing Social Interfaces: Principles, Patterns, and Practices for Improving the User Experience* (1 ed.). Sebastopol: O'Reilly.

Järvinen, A. (2011). *Games for Social Networks: The Design and Business of Networked Play*. Pittsburgh, PA: ETC Press. Retrieved from <http://www.etc.cmu.edu/etcpres/node/314>.

Farmer, R., & Glass, B. (2010). *Building Web Reputation Systems* (1 ed.). Sebastopol: O'Reilly.

Juul, J. (2010). *A Casual Revolution: Reinventing Video Games and Their Players*. Cambridge, MA: MIT Press.

Trefry, G. (2010). *Casual Game Design: Designing Play for the Gamer in ALL of Us*. Amsterdam et al.: Morgan Kaufmann.

## 5.6 Papers and Presentations

- Björk, S. (2010). Principles and patterns of social games: Where's the difference compared to other games? In GCO Games Convention Online 2010. Leipzig.
- Guo, Y., & Barnes, S. (2007). Why people buy virtual items in virtual worlds with real money. SIGMIS Database, 38(4), 69-76.
- Guo, Y., & Barnes, S. (2009). Virtual item purchase behavior in virtual worlds: an exploratory investigation. Electronic Commerce Research, 9(1-2), 77-96.
- Hamari, J., & Lehdonvirta, V. (2010). Game design as marketing: How game mechanics create demand for virtual goods. Journal of Business Science and Applied Management, 5(1). Retrieved from <http://www.business-and-management.org/paper.php?id=48>.
- Järvinen, A. (2009). Game design for social networks: interaction design for playful dispositions. In Proceedings of the 2009 ACM SIGGRAPH Symposium (pp. 95-102). New York: ACM Press.
- Kirman, B. (2010). Playful Clusters: Motivations and Social Structures in Social Games. In GCO Games Conference Online. Leipzig.
- Kirman, B., Lawson, S., Linehan, C., Martino, F., Gamberini, L., Gaggioli, A., et al. (2010). Improving social game engagement on facebook through enhanced socio-contextual information. In CHI'10 Proceedings of the 28th of the international conference extended abstracts on Human factors in computing systems (pp. 1753-1756). New York: ACM.
- Kücklich, J. (2010). Pwned. The Death of the Game Designer and the Future of Game Design. In GCO Games Convention Online. Leipzig.
- Kuittinen, J., Kultima, A., Niemelä, J., & Paavilainen, J. (2007). Casual games discussion. In Proceedings of the 2007 conference on Future Play - Future Play '07 (pp. 105-112). New York: ACM Press.
- Lehdonvirta, V. (2009). Virtual item sales as a revenue model: identifying attributes that drive purchase decisions. Electronic Commerce Research, 9(1-2), 97-113.
- Liszkiewicz, A. J. (2010). Cultivated Play: Farmville. MediaCommons. Retrieved from <http://mediacommons.futureofthebook.org/content/cultivated-play-farmville>.
- Losh, E. In polite company: rules of play in five Facebook games. Proceedings of the 2008 International Conference on Advances in Computer Entertainment Technology, ACM Press (2008), 345-351.
- Paavilainen, J. (2010). Critical Review on Video Game Evaluation Heuristics: Social Games Perspective. In Proceedings of the FuturePlay'10 Conference, Vancouver, Canada. New York: ACM Press.
- Paavilainen, J. (2010). Users and Their Experiences in Social Games. In GCO Games Conference Online. Leipzig.

- Rao, V. (2008). Facebook Applications and playful mood: the construction of Facebook as a third place. In Proceedings of the 12th International MindTrek Conference - MindTrek'08 (pp. 8-12). New York: ACM Press.
- Rao, V. (2010). Casual Social Games for Serious Social Purposes. In GCO Games Convention Online. Leipzig. Retrieved from <http://bit.ly/96bTAC>.
- Rohrl, D. (2009). 2008-2009 Casual Games White Paper. Mt. Royal, NJ. Retrieved from [http://wiki.igda.org/Casual\\_Games\\_SIG#White\\_Papers](http://wiki.igda.org/Casual_Games_SIG#White_Papers).
- Rossi, L. (2009). Playing your network: gaming in social network sites. Breaking New Ground: Innovation in Games, Play, Practice and Theory. Proceedings of DiGRA 2009. Retrieved from <http://digra.org:8080/Plone/dl/db/09287.20599.pdf>.
- Seif El-Nasr, M., Aghabeigi, B., Milam, D., Erfani, M., Lameman, B., Maygoli, H., et al. (2010). Understanding and evaluating cooperative games. In Proceedings of the 28th international conference on Human factors in computing systems - CHI '10 (pp. 253-262). New York: ACM Press.
- Sotamaa, O., & Karppi, T. (2010). Games as Services - Final Report. Trim Research Reports, 2. Department of Interactive Media TRIM Research Reports. Tampere. Retrieved from <http://tampub.uta.fi/tulos.php?tiedot=360>.
- Stenros, J., Paavilainen, J., & Mäyrä, F. (2009). The many faces of sociability and social play in games. In Proceedings of the 13th International MindTrek Conference - MindTrek '09 (pp. 82-89). New York: ACM Press.
- Sung, J., Bjornrud, T., Lee, Y., & Wohn, D. Y. (2010). Social network games: exploring audience traits. In CHI'10 Proceedings of the 28th of the international conference extended abstracts on Human factors in computing systems (pp. 3649-3654). New York: ACM.
- Wei, X., Yang, J., Adamic, L., Araújo, R. D., & Rekhi, M. (2010). Diffusion dynamics of games on online social networks. In Proceedings of the 3rd conference on Online social networks. Berkeley, CA: USENIC Association. Retrieved from [http://www.usenix.org/event/wosn10/tech/full\\_papers/Wei.pdf](http://www.usenix.org/event/wosn10/tech/full_papers/Wei.pdf).
- Wohn, D. Y., Lee, Y., Sung, J., & Bjornrud, T. (2010). Building common ground and reciprocity through social network games. In CHI'10 Proceedings of the 28th of the international conference extended abstracts on Human factors in computing systems (pp. 4423-4428). New York: ACM.

## References

- Arrington, M. (2009). Scamville: Zynga Says 1/3 Of Revenue Comes From Lead Gen And Other Offers. TechCrunch. Retrieved from <http://techcrunch.com/2009/11/02/scamville-zynga-says-13-of-revenue-comes-from-lead-gen-and-other-offers/>.
- Baym, N. K. (2010). *Personal Connections in the Digital Age*. Cambridge: Polity Press.
- Björk, S. (2010). Principles and patterns of social games: Where's the difference compared to other games? Invited talk at Games Convention Online (GCO) 2010, July 7-10, Leipzig, Germany.
- Björk, S., & Holopainen, J. (2005). *Patterns in Game Design*. Boston, MA: Charles River Media.
- Costikyan, G. (2010). Social Network Games: ARPU over Design. Gamasutra. Retrieved from [http://www.gamasutra.com/blogs/GregCostikyan/20100420/4977/Social\\_Network\\_Games\\_ARPU\\_over\\_Design.php](http://www.gamasutra.com/blogs/GregCostikyan/20100420/4977/Social_Network_Games_ARPU_over_Design.php).
- Eldon, E. (2010). Facebook and Zynga Battle Over Credits – and Bigger Platform Issues. Inside Social Games. Retrieved from <http://www.insidesocialgames.com/2010/05/11/facebook-and-zynga-battle-over-credits-and-bigger-platform-issues>.
- Graft, K. (2009). EA: 'No Coincidence' That Layoffs, PlayFish Buy Emerged Simultaneously. Gamasutra. Retrieved from [http://www.gamasutra.com/php-bin/news\\_index.php?story=26058](http://www.gamasutra.com/php-bin/news_index.php?story=26058).
- Guo, Y., & Barnes, S. (2007). Why people buy virtual items in virtual worlds with real money. SIGMIS Database, 38(4), 69-76.
- Guo, Y., & Barnes, S. (2009). Virtual item purchase behavior in virtual worlds: an exploratory investigation. *Electronic Commerce Research*, 9(1-2), 77-96.
- Hamari, J., & Lehdonvirta, V. (2010). Game design as marketing: How game mechanics create demand for virtual goods. *Journal of Business Science and Applied Management*, 5(1). Retrieved from <http://www.business-and-management.org/paper.php?id=48>.
- Järvinen, A. (2009). Game design for social networks: interaction design for playful dispositions. In *Proceedings of the 2009 ACM SIGGRAPH Symposium* (pp. 95-102). New York: ACM Press.
- Järvinen, A. (2010). The Quest for Aesthetics in a Metrics-driven Business. Invited talk at Games Convention Online (GCO) 2010, July 7-10, Leipzig, Germany.
- Järvinen, A. (2010a). Clickability: A Design Concept for Social Games. Gamasutra. Retrieved from <http://goo.gl/Dzdu>.
- Juul, J. (2010). *A Casual Revolution: Reinventing Video Games and Their Players*. Cambridge, MA: MIT Press.
- Kallio, K., Mäyrä, F., & Kaipainen, K. (to appear). At least nine ways to play: approaching gamer mentalities. *Game Studies*, to appear.

- Kirman, B. (2010). Playful Clusters: Motivations and Social Structures in Social Games. Invited talk at Games Convention Online (GCO) 2010, July 7-10, Leipzig, Germany.
- Klimmt, C., Blake, C., Hefner, D., Vorderer, P., & Roth, C. (2009). Player Performance, Satisfaction, and Video Game. In S. Natkin & J. Dupire, Entertainment Computing – ICEC 2009 8th International Conference, Paris, France, September 3-5, 2009. Proceedings (pp. 1-12). Berlin, Heidelberg: Springer.
- Kuittinen, J., Kultima, A., Niemelä, J., & Paavilainen, J. (2007). Casual games discussion. In Proceedings of the 2007 conference on Future Play - Future Play '07 (pp. 105-112). New York: ACM Press.
- Lazzaro, N. (2008). Why We Play: Affect and the Fun of Games. Designing Emotions for Games, Entertainment Interfaces and Interactive Products. In A. Sears & J. A. Jacko, The Human-Computer Interaction Handbook. Fundamentals, evolving technologies and emerging applications. (pp. 679-700). New York, London: Lawrence Erlbaum.
- Lehdonvirta, V. (2009). Virtual item sales as a revenue model: identifying attributes that drive purchase decisions. *Electronic Commerce Research*, 9(1-2), 97-113.
- Liszkiewicz, A. J. (2010). Cultivated Play: Farmville. MediaCommons. Retrieved from <http://mediacommons.futureofthebook.org/content/cultivated-play-farmville>.
- Mack, C. (2010). Top 25 Facebook Games for February, 2010. Inside Social Games. Retrieved from <http://www.insidesocialgames.com/2010/03/02/top-25-facebook-games-for-february-2010/>.
- Madway, G. (2010). Disney buying Playdom for at least \$563 million. Reuters. Retrieved from <http://www.reuters.com/article/idUSTRE66Q6DL20100727>.
- Paavilainen, J. (2010). Users and Their Experiences in Social Games. Invited talk at Games Convention Online (GCO) 2010, July 7-10, Leipzig, Germany.
- Paavilainen, J. (2010a). Critical Review on Video Game Evaluation Heuristics: Social Games Perspective. In Proceedings of the FuturePlay'10 Conference, Vancouver, Canada. New York: ACM Press.
- Rao, L. (2010). Facebook And Zynga Enter Into Five Year Partnership, Expand Use Of Facebook Credits. TechCrunch. Retrieved from <http://techcrunch.com/2010/05/18/facebook-and-zynga-enter-into-five-year-partnership-expand-use-of-facebook-credits/>.
- Rao, V. (2008). Facebook Applications and playful mood: the construction of Facebook as a third place. In Proceedings of the 12th International MindTrek Conference - MindTrek'08 (pp. 8-12). New York: ACM Press.
- Rossi, L. (2009). Playing your network: gaming in social network sites. *Breaking New Ground: Innovation in Games, Play, Practice and Theory*. Proceedings of DiGRA 2009. Retrieved from <http://digra.org:8080/Plone/dl/db/09287.20599.pdf>.
- ScreenDigest. (2010). Social Network Games: Casual Games' New Growth Engine. ScreenDigest.com. Retrieved from <http://goo.gl/TQ2e>.

- Seif El-Nasr, M., Aghabeigi, B., Milam, D., Erfani, M., Lameman, B., Maygoli, H., et al. (2010). Understanding and evaluating cooperative games. In Proceedings of the 28th international conference on Human factors in computing systems - CHI '10 (pp. 253-262). New York: ACM Press.
- SoPlay. (2010). Heuristics. SoPlay: A Research Project on Social Playability. Retrieved from <http://soplayproject.wordpress.com/heuristics/>.
- Sotamaa, O., & Karppi, T. (2010). Games as Services - Final Report. Trim Research Reports, 2. Department of Interactive Media TRIM Research Reports. Tampere. Retrieved from <http://tampub.uta.fi/tulos.php?tiedot=360>.
- Stenros, J., Paavilainen, J., & Mäyrä, F. (2009). The many faces of sociability and social play in games. In Proceedings of the 13th International MindTrek Conference - MindTrek '09 (pp. 82-89). New York: ACM Press.
- Suits, B. (2005). The Grasshopper. Games, Life and Utopia. Peterborough: Broadview.
- Sung, J., Bjornrud, T., Lee, Y., & Wohn, D. Y. (2010). Social network games: exploring audience traits. In CHI'10 Proceedings of the 28th of the international conference extended abstracts on Human factors in computing systems (pp. 3649-3654). New York: ACM Press.
- Takahashi, D. (2010). One in five Americans plays games on social networks. VentureBeat. Retrieved from <http://venturebeat.com/2010/08/23/one-in-five-americans-plays-games-on-social-networks/>.
- Wohn, D. Y., Lee, Y., Sung, J., & Bjornrud, T. (2010). Building common ground and reciprocity through social network games. In CHI'10 Proceedings of the 28th of the international conference extended abstracts on Human factors in computing systems (pp. 4423-4428). New York: ACM Press.