

Shared Play with the Push of a Button: a Mixed-Method Analysis of Sony PlayStation 4's Share-Platform

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“It’s dangerous to go alone! Take this.”

(The Legend of Zelda, 1986)

ABSTRACT

With the incorporation of the Share-button and its underlying platform on the PlayStation 4, Sony has decided to bring social connectivity and the sharing of gameplay to the masses. Video game play streaming and sharing have their roots in early user-generated content, performing, and spectating practices. Examples from the nineties are machinima, speedrunning, and online multiplayer gaming in that period. Users with a high level of technical proficiency created content that was creative, subversive, and initiated new forms of interactions between players and spectators. The creation of user-generated content came under stricter corporate control when it was integrated as a part of well-designed and well-marketed video game platforms. While the construction of this material became more accessible to general players, creativity and subversiveness became more limited.

Sony PlayStation 4’s Share-button can be seen as a culmination of this development. As a form of controlled participation, the button and its proprietary platform facilitate remarkably quick production of this content with a limited toolset of creative possibilities. It is the material representation of a streamlined process of integrated platforms that clearly delineates and regulates the user’s input. This raises the question what the implications are of simplification and technical embedding of sharing gameplay performance on the culture of play. Three aspects are central to this question: creativity, subversiveness, and corporate control. This thesis explores the role of the Share-button in historical and contemporary video game culture and defines the practice of shared play. Shared play is a new form of play where a social platform facilitates gameplay that redefines the relationship between players and spectators. With its accessible features and community-driven focus, shared play provides corporate (controlled) opportunities, but at the same time limits creativity and subversiveness.

Research from the cultural and game study fields form the theoretical framework for thesis. Inspired by the upcoming field of platform studies, I examined and critically reflected on my research object in narrowly defined technical, historical, cultural and social contexts. To study the Share-button and define the concept of shared play, it was necessary to employ a mixed-methodological approach that involved very specific analyses. This approach consists of historical overviews of the origins of the button and user-generated content, a combination of a clearly defined, specific discourse analysis (focusing on marketing material and press reception) and an analysis of the button as an object and platform, a hands-on approach (by play as a method), and a case study. This combination allowed me to analyze my research object from different perspectives and led to defining the practice of shared play. The concept of shared play as a result of my research can help us understand corporate motives and the roles of creativity and subversiveness in (the use of) the Share-button and its accompanying platform, as well as provide a starting point for further research into comparable platforms.

I regard shared play as one of the most fascinating new forms of play of recent years. Social connectivity seems to be one of the industry’s driving forces for new video game development. Therefore, this thesis is a first step into analyzing and critically reflecting on this movement and what the video game industry and community will share with us this decade.

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1. INTRODUCTION

Creating and spectating are central to digital video game culture, as well as the act of playing. A specific part of user-generated content in gaming culture consists of the development of performance, ‘showing off’. An example of this is ‘speedrunning’, recording a playthrough of a specific part of a game as fast as possible, demonstrating remarkable skills and dexterity while performing.¹ These audiovisual creations have become an integral part of gaming culture and can be interpreted as paratexts accompanying the games they are based on.² Initially, such videos that show gaming performance were mostly created and distributed through external software and platforms adjacent to video games (e.g. YouTube, Twitch, OnLive), but the recording of gameplay has recently been incorporated into Sony’s PlayStation 4 video game console, launched November 2013. At the center stage of the PlayStation 4’s launch were its social features, including a sharing functionality that involves a prominent ‘Share’-button on the DualShock 4-controller. This introduced the phenomenon to a very large part of the gaming society. The button allows for direct uploading of gameplay footage to video sharing platforms.

This research focuses on this button and its cultural, social, and technological implications and impact. It also presents a history of user-created content and recordings of gameplay that preceded the button. In the early days of gameplay recording (the nineties), sharing your video gameplay (experience) meant using complex software and/or hardware to capture, record, encode, and distribute your play session. Finding an audience was not easy, and when that audience was found, the process had only just started. Viewers had to interpret, parse, and decode to eventually play back this material. With the emergence of video platforms like YouTube, and later Twitch and OnLive, the distribution of recorded gameplay became easier because of the platforms’ user-friendliness and share-centered design. However, recording and editing the material to be shared still required above average computer skills. The PlayStation 4’s Share-button simplifies this intricate technological process.

The development of this button raises the question what the implications are of simplification and technical embedding of sharing gameplay performance on the culture of play. Three aspects are central to this question: creativity, subversiveness, and corporate control. In this thesis, I will be looking at these aspects using a combination of very specific methodological approaches. My question will be answered by looking into how the technology works and how it affords sharing. Additionally, the role and motivation of the industry will be investigated. New media practices such as the creation and sharing of user-generated content and changes in gaming practices that arise with this new platform will be covered as well. As a result of my research, I have found that all these aspects are condensed into a corporate strategy, an incorporation of creativity that I call *shared play*.

¹ A speedrun is a play-through, or recording thereof, of a whole video game or a selected part of it (such as a single level) performed with the intent of completing it as fast as possible, optionally under certain prerequisites, mainly for the purposes of entertainment and competition (Edge Online 2007).

² The concept of the paratext is defined by literary theorist Gérard Genette as “the means by which a text makes a book of itself and proposes itself as such to its readers, and more generally to the public” (1991, 261), referring to things in a published work that accompany the text, like the name of the author, title, preface or introduction, or illustrations.

The PlayStation 4 and its Share-functionality combines facilitated video game live streaming and gameplay sharing by a user-content production-like platform. My study highlights the practice of shared play, a new form of play where a social platform facilitates gameplay that redefines the relationship between players and spectators. The development of user-generated content, eSports and video game streaming, and social sharing features in modern game platforms are incorporated into this new play practice of shared play. With its accessible features and community-driven focus, shared play provides corporate opportunities, but at the same time limits creativity and subversiveness. I believe we are at the dawn of a new era of play practices, and this provides one of the most interesting and important new objects of study for the new media research community. This research is aimed at analyzing one of the newest, largest, and fastest moving developments that already is becoming one of the central practices in our current generation of gaming. Shared play has well and truly become a part of modern video game society, its significance ever increasing. I therefore believe that my research fills a gap in the ongoing academic discussion, and that the concept of shared play is a valuable addition to the field of game studies. My concept can help us to understand this ever-quickening incorporation and control of non-direct player activities, and to situate the role of creativity, subversiveness and corporate motives in this movement.

1.1. Theory, Method, and Layout

In order to define the concept of shared play a very specific tactic was required. Looking at recent literature on the methodology of game studies, it becomes clear that a combination of different approaches is necessary for a well-substantiated analysis. These recent discussions argument for context, content, and reception as basic building blocks of game analysis (Fernández-Vara 2014). This means that text, object, and performance have to be taken into account, which is how I have tackled this study. It leads to a clear-cut and focused use of methods, with the concept of shared play as a result. In this thesis I have been able to highlight and deploy a very specific part of each approach. The interaction between these methodological approaches was a condition for my research to succeed. This synergy was fundamental to analyzing and defining Sony's Share-button and the practice of shared play.

1.1.1. Theory

I have used a theoretical framework that consists of a combination of different theoretical approaches within game studies. Historical game culture studies into user-generated content practices such as 'machinima' (Berkeley 2006; Ito 2011; Lowood 2006; 2008), 'modding' (van den Bosch, Ribbens and van Looy 2011; Jansz and Theodorsen 2009; Postigo 2007; Salen and Zimmerman 2004; Sotamaa 2003), and the rise of 'eSports' (Morris 2004; Taylor 2012) provide the theoretical foundation to understanding Sony's decision to incorporate a specific Share-button on the PlayStation 4-controller.³ Complementing these historical analyses are studies into user-generated content as

³ "Modding" is a slang expression, derived from the term "modify", which is often used in the computer game community. It refers to the act of modifying hardware, software, or anything else to perform a function not originally intended or conceived by the original designer. Especially popular in first-person shooters, role-playing games, and real-time strategy games, "mods" are "player-made alterations and additions to preexisting games" (Sotamaa 2010b, 240). Popular mods are able to significantly extend the life span of a game title, while others that are very successful can even be adopted as retail titles. Well known examples are *Counter-Strike* (mod for *Half-Life*) (Valve Corporation 1999) and *DOTA* (mod for *WarCraft III*) (Blizzard Entertainment 2005). See also Kücklich (2005), Postigo (2007), Sotamaa (2003; 2007; 2010), and Scacchi (2010). The terms 'machinima' and 'eSports' will be explained in detail in chapter two.

productive and transformative play (Pearce 2001; 2006; Sotamaa 2007a; 2007b; 2010a; 2010b; Wirman 2007; 2009). The academic results of video game culture researchers Pearce, Sotamaa, and Wirman were an inspiration to me. Their theoretical perspectives allowed me to look into the co-creative efforts of game players and designers. These efforts (user-generated content in the form of streaming live sessions, or recorded gameplay videos) are hosted on a specific platform, which has its limitations but at the same time facilitates different and new forms of gameplay and media use.

One field that advocates the use of a combination of multiple methods is platform studies.⁴ This is an upcoming field within game studies that connects a technological-level analysis of a platform to the influence it has (had) on its surrounding culture. This creates a new method of viewing new media platforms: highlighting specific technological elements of a platform and connecting these to relevant cultural changes and phenomena (Bogost and Montfort 2009). Bogost and Montfort do not (intend to) delineate a clear-cut ‘platform studies-approach’, which is why I take their work and Steven E. Jones’ and George K. Thiruvathukal’s platform study work on the Nintendo Wii (2012) as a starting point for my research, and shift from zooming in on intricate technological specifics to a broader look on the social and cultural context and experience.

Other studies have been done into video game spectatorship and live streaming as a socio-economic phenomenon (Cheung and Huang 2011; Kaytoue, Silva and Raïssi 2012; Smith, Obrist and Wright 2013; Taylor and Witkowski 2010). These studies provided insight into the effects of the broadcasting of gameplay on its performers and spectators. The result of this research was helpful in analyzing the socio-economic context of the Share-button and the phenomenon of shared play.

Political economical studies into the game industry such as those by Arvidsson and Sandvik (2007), Banks and Deuze (2009), Kücklich (2005), Stenros and Sotamaa (2009), and Westcott (2011) aided in forming a critical perspective on the recent developments in game industry content and revenue models. It allowed my research to critically reflect on the corporate agency in Sony’s Share-platform.

1.1.2. Method

This research required multiple perspectives from within game studies to successfully analyze the Share-button. The chosen approach is based on a combination of four different methodologies: discourse analysis, object analysis, platform studies, and play as a method. This thesis is built upon the synergy of its different methodological chapters. In each of the following chapters I use a tailored approach, a very specific point of view, to scrutinize the workings of Sony’s Share-button. As a result, I use the term discourse analysis, for example, but do not do a full-fledged discourse analysis with corresponding large text corpus. Instead, I concentrate this analysis on a very specific part of the discourse surrounding the PlayStation 4’s launch, namely the marketing communication and press reception of the Share-button. This results in research that is structured into chapters that all form their own point of view on my object of study. These chapters are integrated to

⁴ Platform studies is a new form of research into computer and video game hardware. Video game scholars Ian Bogost and Nick Montfort are trying to situate this field in discussions of social and humanity studies about new media (2009; Leorke 2012).

help focus on and understand the Share-button, to get a hold on its workings inside their relevant context, and subsequently define the practice of shared play.

In order to put my research object and question into their proper context, I start with a review of recent literature. This outline begins in chapter two with a historical overview of the development of spectatorship (Westecott 2008; 2009), user-generated content (Lowood 2006; 2008), and eSports (Morris 2004; Smith, Obrist and Wright 2013; Taylor 2012; Taylor and Witkowski 2010). The third chapter continues this overview, this time focusing on productive and transformative play (Pearce 2001; 2006; van den Bosch, Ribbens and van Looy 2011; Salen and Zimmerman 2004; Sotamaa 2007a; 2010a; Wirman 2007; 2009).

Chapter four consists of the aforementioned discourse analysis, which is very specific and zooms in on the marketing and reception of ‘social play’ and the Share-platform. On critical discourse analysis, linguistic researcher James Paul Gee writes that this should be based on naturally occurring data, focused on situated meanings, and characterized by rigorous empirical methods instead of only extracted from context (2004). However, to properly execute my focused use of the method, it was necessary to focus on situated meanings in a specific context. For this, I was also inspired by Jones and Thiruvathukal’s platform studies approach to the Nintendo Wii platform. In this book the authors analyze conference speeches, marketing materials, and interviews (2012). This situates their discourse analysis in a narrowly defined social and cultural context. Similar, the marketing, launch, and reception by journalists and public provided valuable texts to investigate, with sources such as official Sony marketing communications (e.g. websites, keynote speeches, promotional videos), game and technology websites reviews, and game magazine articles. An analysis of how and why Sony has marketed the Share-button and platform and how this is received helps us understand corporate motives within shared play.

The Share-button and the functionality of the PlayStation 4’s Share-platform have an inherent hardware specificity. This technicality is essential to its use and therefore requires the proper tools for analysis. This is where chapter five, a combination of an analysis of the button as an object/artifact (Sotamaa 2014) and platform studies (Bogost and Montfort 2009; Jones and Thiruvathukal 2012), comes into play. My analysis of the Share-button as an object was done by an in-depth study of the design, materiality, and functionality of the button. Because the button is embedded in the underlying PlayStation 4 Share-platform, I combined this object-oriented analysis with a platform studies approach. Unlike Bogost and Montfort’s first platform studies book on the Atari VCS (2009), here the focus is not mostly on intricate technological specifics. As said in Jones and Thiruvathukal’s take on the Nintendo Wii (2012) the social aspects of the platform play an important role as well.⁵ Jones and Thiruvathukal note that they consider the Wii a social platform and that it is “impossible [...] to separate particular hardware and software configurations from the social and cultural contexts that influenced them” (2012, 5). In my research I focus briefly on the technicality of the Share-button and the underlying hard- and software processes of the PlayStation 4 Share-platform. Because of the length of this study I will not delve too deeply into technical specifics. More important are the social and cultural processes that precede and arise from this platform and its context. The methods of analysis of an object and platform studies relate to each other in their focus on materiality and technicality, but

⁵ Both Bogost and Montfort’s (2009) and Jones and Thiruvathukal’s (2012) studies are books of over 150 pages each, whereas this thesis is much shorter in length. Their books thus have more room for thorough technological examinations of the platforms.

the latter expands on this by also taking note of the surrounding social context. Combining the two provided the space necessary for my preferred method of analysis by allowing me to define the connection between the PlayStation 4's Share-button and its underlying platform's technicalities and representations.

It might seem to be common sense that a proper game scholar should play the games and platforms he/she studies. To complete the understanding of its meaning the play experience has to be accounted for (Sicart 2011). In addition to this, digital culture and game researcher Frans Mäyrä notes that the methodological approach of play as study "should be combined with a selective and thoughtful use of other sources of information" (2008, 167).⁶ Therefore, I describe my own use of the PlayStation 4 in chapter six, including an analysis of the Share-button and its platform through play as a method of study (Aarseth 2003; Zagal 2010). This enabled me not only to critically analyze the platform and point out its limitations (e.g. issues regarding creativity and subversiveness), but also to highlight new forms of media usage and play that arise from the technological specific properties of this medium. To illustrate one of the new play practices brought forth by the Share-platform, I have included chapter seven, which is a small case study of the debacle of Sony's *PlayRoom* (SCE Japan Studio 2013) application and the Eye-camera. This focus on an entirely new and unexpected use of this particular platform complements the preceding approaches methodologically. It is a study of a subversive social practice, regarding the "creative and expressive involvement of play and players" (Sotamaa 2014, 6). This also helps to clarify the discourse about the broadcasting functionality of the platform. The case study is illuminating in its controversy, revealing the tension between subversiveness and corporate control in the contemporary game industry.

Finally, this brings me to provide examples of and subsequently defining the practice of shared play. I summarize and reflect on my final research findings and my contribution to the academic field. In the conclusion I will give several recommendations for further research into this fascinating and exciting new form of video game entertainment.

1.1.3. *Layout*

Every aspect of my research question required a specifically engineered approach. This is visible in the chapter-by-chapter layout of this thesis, which is as follows: I start in chapter two with a historical overview of user-generated content and the player-spectator relationship. Chapter three continues this outline, focusing on productive and transformative play. Chapter four then centers on the marketing and reception of 'social play' and the Share-platform. In chapter five, the Share-button is analyzed as an object and platform, with extra attention for its social aspects. In chapter six, I will introduce play as a method of researching and experiencing PlayStation 4's Share-platform. The accompanying case study follows in chapter seven. In conclusion, I provide examples and define the practice of shared play, reflect on my findings, and give thought to interesting new objects of research.

⁶ Furthermore, "[v]ideo games", according to Sotamaa, "with their military origins, emergent and programmable nature, and ubiquitous popularity, provoke multiple scholarly approaches" (2014, 1).

2. LOOKING AT GAMING THROUGH HISTORY

In the early days of video game studies (the end of the twentieth century), academic research into this field was greatly inspired by works of cultural philosophers Johan Huizinga and Roger Callois. Quintessential to the field, canonical texts on ‘play’ as *Homo Ludens* (Huizinga 1938) and *Man, Play, and Games* (Callois 1962) formed the basis for various forms of research into (video) games and play. Because of the novelty of the medium that was being researched, initial studies were mostly taxonomic and, inspired by afore mentioned classical texts, viewed games as, ‘unproductive’ by definition (Pearce 2006). Over the years, video game studies has grown into a mature field of academic research. The rise of video games as mainstream entertainment activity is reflected in increasing sales figures and changing demography of its players.⁷ This ever increasing ubiquity of video games in our society is a proof of their cultural relevance (Barwick, Dearnley and Muir 2009). Making use of various other academic disciplines, research has proven play as an act of production (Aarseth 2001; Pearce 2001; 2006) and video games are increasingly recognized as important forms of cultural heritage (Lowood, Armstrong, et al. 2009).

The medium of video games has been celebrated as a modern performance form as well (Westecott 2009). Take, the ‘Let’s Play’ phenomenon, for example. This is a very popular form of video game spectatorship where viewers watch recorded videos documenting a playthrough of a video game, which usually includes commentary by the person who is playing and recording.⁸ Viewing video games this way allows digital gameplay to be placed within a history of spectatorship, cultural productions that arise from the emergence of do-it-yourself technologies (hacking, modding), and their cultural significance. Therefore, I will start with an analysis of video game spectatorship before moving on to analyzing the advent of video game related consumer-producer culture.

“Spectatorship”, is a noun that is derived from the word “spectator”. A “spectator” is defined by the Oxford dictionary as “[a] person who watches at a show, game, or other event” (2014). Its origins lie in the late sixteenth century from French “spectateur” or Latin “spectator”, from “spectare”: ‘gaze at, observe’ (Oxford Dictionaries 2014). Classically, “spectatorship” can be described as the quality of a “spectator”: observing an event, without participating in it (Spradley 1980). In academic research, the issue of spectatorship has mostly been investigated in relation to sports, theatrical, and cinematic events and productions.⁹ Studies into video games as a modern form of performance have prioritized video gameplay experience over and above an isolated focus on either the players or games themselves (Burn 2006; Dixon 2007; Westecott 2008). This framing as performance allows for digital gameplay to be placed within a popular cultural heritage whilst at the same time noting the unique medium specific aspects of video games (Westecott 2009).

⁷ For example, “women aged 30 and older now represent a significantly larger portion of the total population of US gamers than boys 17 and younger” (Orland 2012).

⁸ Let’s Play videos differ from a walkthrough or strategy guide by focusing on an individual’s subjective experience with the game, often with humorous, irreverent, or even critical commentary from the gamer, rather than being an objective source of information on how to progress through the game (Nam 2013).

⁹ A part of human history for a long time, spectatorship has been prevalent in different forms, such as sports, theatre, and movies,. As a broad cultural phenomenon, it has been the focus of research in vast and diverse fields of study. Seminal works on spectatorship in, for example, cinema include film theorist Tom Gunning’s *The Cinema of Attraction* (1986) and apparatus theorist Jean-Louis Baudry’s *Ideological Effects of the Basic Cinematographic Apparatus* (1974).



Figure 1: Scene from *Diary of a Camper*, the first early machinima production that contained narrative (United Ranger Films 1996).

Although video games form a large part of our contemporary media culture, it is important to recognize that they have only recently become a part of our popular cultural heritage. Most games that are generally considered to be ‘classics’ are only a few decades old. The late 1970s and early 1980s represent the rise of the arcades and the first home played console and computer video games (Fenty 2008). As public places, arcade halls served as open and accessible ‘spectating grounds’ for those that were interested in seeing other players perform. In the mid-1990’s improvements in computer graphics and game technology were making 3D video games possible. Alongside this fast technological development of real-time animation techniques, players were also now able to capture and share the (moments of) games that they were playing. This resulted in the emergence of the ‘machinima’ phenomenon—movies created with video game engines, which “transform gameplay through performance, spectatorship, subversion, modification, and player communities” (Lowood 2006, 25).¹⁰

With machinima movies, players started making animated movies with a game engine, the software that is used to develop and play computer games. They discovered that they were able to transform themselves into in-game actors or directors. This enabled them to record animated movies with the same personal computers (PCs) they were using to play these video games, notably first-person shooters (see Figure 1). In his historical analysis of the machinima phenomenon, history of science and technology researcher Henry Lowood traces the evolution of early exceptional gameplay performance recording to pioneering works of narrative machinima. While concomitantly tracing the development of the tools

¹⁰ The term “machinima” is derived from ‘machine cinema’, or ‘machine animation’. Recommended are Lowood’s comprehensive historical analyses, which also cover the technological aspects of the development of this phenomenon (2006; 2008).

used for creation of these machinima movies, Lowood keeps reminding the reader that the origin of these works does not lie in content production, but in gameplay. The early machinima works were documenting exceptional gameplay in fast, action-packed video games (2006).

The first-person shooter titles that jumpstarted the machinima craze were id Software's *Doom* (1993) and *Quake* (1996a). These were video games that, like most of the video games in the nineties, were developed primarily for PCs instead of exclusive game consoles. They were at the forefront of innovation in the development of graphical video game engines, real-time generation of images, and game physics. Exceptionally skilled players began to record their actions, generally in real time. They did so by saving game demo files that contained logs of keystrokes or other information that was capable of being saved and replayed (Lowood 2006). In their original form as game replay files, or in an encoded movie format, these files were then distributed on the internet at almost no cost. Interested viewers could download these files and watch the 'performed' gameplay on their own PC at home. At the time, internet connections were not fast enough to share the usually large video files or stream live gameplay. The demo files, which were small in size, made it possible to share recorded sessions quickly, and therefore made spectatorship of these types of gameplay wider accessible.

Lowood notes that the complexity of recording and sharing these gameplay files was comparable to that of hacking, a "mixture of qualities [that] set the stage for a new wave of high-performance game practice" (2006, 32). Exploiting hidden aspects of software and sharing this knowledge led to impressive technical achievements, such as building tools for analyzing and editing game demo files, level builders, camera recordings, et cetera (Lowood 2008). He states that these "exploits of high-performance gameplay, programming, and storytelling were not isolated achievements or acts of creativity" and underlines the importance of a surrounding community and culture of gamers "engaged at every level of their work" (Lowood 2006, 38) as factor not to be underestimated in this form of high-performance play.

In recent years, the machinima scene seems to have dwindled. The latest machinima uploads to The Machinima Archive (a subsidiary of The Internet Archive) stem from over a year ago, download numbers are low, and the last forum post is from 2011 (The Internet Archive 2011). Machinima.com, formerly the largest 'machinima hub', has been transformed into a large multimedia gaming and media streaming website, ironically serving mostly animated or live-action features based on recent, popular games (Machinima 2014).¹¹ So, the machinima craze seems to have been usurped by a more 'traditional' streaming scene. It is therefore important to take a look at the origins of the streaming phenomenon.

With the release of *Doom* and *Quake* in the nineties, the game industry introduced two of the first video games belonging to the first-person shooter genre. Along with other 'spectacular' genres (including: action, fighting, platform and sports) it offers a wider

¹¹ The website's 'About-page' notes: "The word "machinima" is a portmanteau of "machine" and "cinema" and refers to the process of creating real-time animation by manipulating a video game's engine and assets. This classic form allows users to explore, create, and connect with their favorite games in new ways. In the same vein, Machinima is devoted to taking entertainment to all-new levels and capturing our fans' imaginations" (Machinima 2014).

potential for performance than others. Playing these games is all about immersion, flow, and movement and together they form a dynamic and visceral experience (Westecott 2008).¹² These games offer the prospective for ‘showing off’ and competition, and people started to demonstrate their skills in the games. This is visible in the emergence of phenomena such as eSports and speedrunning.¹³

The next big step in the industry was the development and rise of networked gaming, starting with the PC. *Doom* and other first-person shooter games of that era already supported LAN (Local Area Network) multiplayer gaming, but also supported DWANGO (Dial-Up Wide-Area Network Game Operation), an early online gaming service based in the United States. With this service, players were able to play matches against other players from all over the world; all they needed was an internet connection (dial-up at the time) and payment of a small fee to use the DWANGO client software. This form of electronic competition, eSports, quickly rose in popularity, with players and spectators gathering to play and watch matches. Building on *Quake* was the multiplayer add-on *QuakeWorld* (id Software 1996b), an experimental free networking application that enabled players to locate and connect to internet game servers, which heralded the start of easy accessible online multiplayer gaming (Morris 2004). Another milestone was the *QuakeCon* event, launched in 1996 by the *Quake* community. *QuakeCon* set the stage for the advent of eSports events where players got together and competed face-to-face, while also allowing interested spectators to watch their competitions. These events took place at corresponding popular culture fairs, exhibitions, LAN-parties, and on-site tournaments (Taylor 2012).

Broadband internet connections were becoming more widely available, simultaneously with the rise of eSports and networked gaming. This increased access and capacity meant that experienced players were finding ways to *directly* share their gameplay experience by live streaming of their play sessions.

As well as the on-site playing and spectating of live eSports matches, these matches were now also being streamed online, able of being watched by an enormous online public consisting of millions of active viewers. eSports has since then grown into a serious professional sport: yearly competitions are being held in over more than 40 countries all over the world, with prizes to be won that often amount to hundreds of thousands of dollars. Teams of professional gamers are backed by million dollar sponsorship deals and reach superstar-like status. These events are broadcast (streamed) live through various online channels and are watched by enthusiastic spectators (Morris 2004).

¹² Taking note of the earlier description of “spectatorship” as a position of observing without participating in an event, it is interesting to see that games and game design researcher Emma Westecott posits video games as a “dramatic form, more akin to modern experimental forms of theatre that include the audience explicitly in the experience than to the more linear media forms of film and television. [...] [T]he act of video gameplay erodes the boundaries between spectator and participant” (2008). Westecott takes the player that ‘plays’ (and therefore performs and spectates) itself as the subject of her research, instead of making the division between a separate player and spectator.

¹³ eSports is electronic sports in the form of organized video game competitions, usually between professionals. It is most commonly associated with real-time strategy, fighting, first-person shooter, and multiplayer online battle arena (MOBA) video game genres (Tassi 2012).



Figure 2: A Twitch live stream of the SK Telecom StarCraft 2 ProLeague 2014 by channel “sc2proleague”. The channel has almost 36 million total views (Twitch 2014).

To those with access to recent new web services and advances in internet bandwidth, live streaming has become ‘democratized’, allowing people to stream (almost) anything they want (Smith, Obrist and Wright 2013). Much like machinima, which were significantly difficult at first and almost ‘hacker-like’ in production, recent years have seen developments that have caused for easier production and sharing tools. As the technology (and users’ grasp of it) has matured, the live streaming community has become more organized. Subject-specific shows are publishing daily or weekly live streams from various genres, including video games.

The increasing popularity in video game live streaming communities has turned the video game medium into a viewer experience as well as a player experience. From players recording themselves playing horror games for laughs to highly competitive international eSports championships, the community has grown so much in size that there are live stream web services solely for video games, notably Twitch and OnLive (Smith, Obrist and Wright 2013). Twitch is the larger of these two (see Figure 2). Established in 2011, the website now has 35 million monthly viewers who watch an average of one and a half hours of eSports and video gaming *a day* (Lawler 2013). Twitch has recently been acquired by e-commerce giant Amazon and is one of the fastest growing online gaming platforms (Kumparak 2014; Shear 2014).

Interactive television researchers Thomas P.B. Smith, Marianna Obrist, and Peter Wright note that the video game live streaming community is not unified in content or practice, but in technology. They performed an exploratory analysis of eSports, speedrunning, and Let’s Play phenomena and use eSports spectator community research to demonstrate that there is a malleability between roles of the active and the passive in users’ (players/spectators) experiences.¹⁴ Smith, Obrist, and Wright conclude that these cannot be

¹⁴ Smith, Obrist, and Wright use a study done by identity & virtual social interactions researchers Gifford Cheung and Jeff Huang. Cheung and Huang provide a series of nine spectator personas that

treated as conflicting and separate ideas as live stream viewers can co-labor in play as well by interacting with the live stream players through various communication methods and user-generated content (2013).

It seems that the classical characterization of the spectator as a passive observer is outdated in our contemporary technological and increasingly mediated society. Much like hacker culture, communities of pure enthusiasm and devotion to the required technological skills surrounded the machinima movie craze. More recently, the popularity of eSports and live streaming of gameplay seems to erode the boundaries between the player and the spectator. Large online platforms that support broadcasting and feedback dialogues intermingle the player-spectator and allow the creation of content that forms additions to the original published game content. This industry stimulated blurring of boundaries between user and producer also has its roots in the early nineties and provides an interesting starting point for a short historical analysis of the user-generated content gameplay design models that we see today.

3. PLAYING, CREATING, SHARING

The historic examination of video game spectatorship and user-generated content in the previous chapter provides us with a starting point for this chapter's review of the development of co-creative efforts of game designers and players. What follows is also a brief historical outline, this time theoretically grounded in studies of productive and transformative play. The aim is to add historical background to the integration of creative social sharing functionalities to contemporary video game products, with a special focus on Sony's platforms. This creates a technical historical perspective that helps to frame my research object.

As long as there have been video games, the medium has been a space for user creativity: be it by altering, interacting with, creating in, or even constructing complete new virtual worlds (Sotamaa 2003; Postigo 2007; Juul 2011). The digital foundations of the medium provide a basis for these creative expressions and many early game titles are seen as modifications of one another. With the rise of the internet and the accompanying release of *Doom* in the nineties, user-generated content came into play as a commodity. By supporting the production and distribution of user-generated content, developer id Software seized the opportunity to enlarge the demand for future titles (van den Bosch, Ribbens and van Looy 2011). While adding value to the game for gamers, this creative output also formed the basis for those training in primary game design, as well as stimulating the forming of a community around playing and modifying *Doom*.

Quake was released in 1996 and was the first FPS title with a truly three-dimensional world and one of the first with support for 3D graphic acceleration hardware. The development of this technology was greatly stimulated by *Quake* and has since become an industry standard. With this game, modifications were even easier—players could simply download *QuakeC*, the programming language, and mapping tools, and create their own mods and/or game levels (Morris 2004).¹⁵ This design philosophy is described by video game researchers Katie Salen & Eric Zimmerman as open system games, “designed to be

occur in the community and a theoretical framework that helps analyze facets of the spectator experience. They point out that a spectator can consist of a mix of multiple personas (2011).

¹⁵ Most of *Quake*'s mods were team games, adding greater complexity, strategy, and cooperation to the game (Morris 2004).

manipulated and modified by the people who purchase and play them. [These game designs] include conditions that let players affect the games as *producers*—of new game worlds, stories, and characters” [emphasis in original] (2004, 527). Even though Salen & Zimmerman define open system games as openly accessible, nonhierarchical, non-guided, and evolving, many game editors are restricted in their functionality. They still keep a hierarchical relationship between producer and consumer by usually requiring a purchase of the game, and developers are typically reluctant to open up the complete game code for modification (van den Bosch, Ribbens and van Looy 2011).¹⁶

Even though I speak of “easier” and “simply” modification, this was by no means a very accessible way of modifying video games. As was the case in the early days of video gameplay streaming, a very high level of technical proficiency was required to edit, program, and create these mods. Still, PC game modification often involves elaborate knowledge on coding or graphical computing (Jansz and Theodorsen 2009). Concomitantly, the level editors of video game consoles are comparatively easy to grasp. Inspired by the rise of web 2.0 principles of web design (such as user participation and dynamic interaction), game developers have successfully combined the accessibility of a video game console interface with the intricacy of professional tools in recent years. Coupled with the implementation of centralized online distribution networks, they have at the same time attempted (and succeeded) to bring user-created content out of obscurity (van den Bosch, Ribbens and van Looy 2011).

Recognizing the popularity of user-generated content, the video game industry responded by implementing this user creation of content into the development of their games. One example is Lionhead Studios’ movie studio simulation game *The Movies* (2005), in which players can create their own movie with the in-game engine, drawing comparisons to the creation of machinima films (Sotamaa 2007a). Regarding these new forms of gameplay, Sotamaa expands on Salen and Zimmerman’s concept of ‘transformative play’ in his analysis of aspects of play outside the immediate playing experience.¹⁷ For my research, the concept is useful when describing how the creation of this user-generated content outside of the direct play experience paradoxically always takes place within a corporately framed setting, with mechanisms of control and reward applied by corporate actors in the game. The notion of transformative play is clearly recognizable in the PlayStation 3 exclusive video game *LittleBigPlanet* (Media Molecule 2008). This game is most famous for its player productivity-centered gameplay and user-generated content, which are the most important parts of the game as well as the highlights of its marketing rhetoric: ‘Play. Create. Share.’ (see Figure 3).¹⁸ In his research, Sotamaa outlines the characteristics of the agency that is available for players and looks for the space available for subversive gameplay.

¹⁶ Even in games where the production of user-generated content is central to the core gameplay, this building process can be highly guided as well. Maxis’ *Spore*, a strategy game, forces players to create a new species before they can proceed in the game. The content creation is then funneled through a restricting user interface to accommodate this building process to players in different difficulty levels (van den Bosch, Ribbens and van Looy 2011).

¹⁷ Salen and Zimmerman describe transformative play as “a special case of play that occurs when free movement of play alters the more rigid structure in which it takes shape” (2004, 321).

¹⁸ “[T]he marketing materials highlighted how the players could now fulfill their creative ambitions and carry out projects traditionally reserved for professional game developers. The marketing rhetoric of [*LittleBigPlanet*] epitomizes the recent innovation paradigms that emphasize the new roles reserved for users” (Sotamaa 2010a, 1).



Figure 3: An entry for the “LittleBigChallenge 004 – Create your own Print Ad”-competition (meetmyphantoms 2008).

Inspired by Sotamaa’s work, I take a look at ‘negotiations’ between PlayStation 4’s Share-platform holders, developers, and players that “practically define the limits between supported and unwanted player activities” (Sotamaa 2010a, 2).

Different forms of ‘productivity’ in gaming have been the subject of recent game studies. Hanna Wirman, media and design researcher, illustrates the ways video games enable ‘productive play’, the blurring of professional and hobbyist productivity in games. This leads to an (over)abundance of user-generated content, but is also thought-provoking. Productive play raises interesting questions regarding cultural production, ownership and copyrights, and co-creation between players and developers (2007; 2009).

PlayStation 4’s sharing platform with its Share-button is a sort of culmination of a co-creative process, representing corporate-controlled user-generated content. It centralizes, facilitates, and simplifies the process of capturing and sharing a special video game moment with your friends or the rest of the world. As part of a well-designed and marketed video game platform, the player-spectator relationship, in the form of user-generated content, becomes commodified and a readily fabricated element of everyone’s social experience.

Above, I have connected these cultural developments to the surrounding user-generated content and player-spectator culture by way of review of recent literature on historical and contemporary media research. As a big part of contemporary gamer culture, the phenomena of user-generated content and gameplay streaming have inspired video game console builders to dedicate a specific console controller button to it, or otherwise widely implement sharing functionalities in their console software. What follows is a look at the (marketing) discourse surrounding Sony’s PlayStation 4 launch, focusing on its sharing and social functionalities.

4. MARKETING THE SHARE-PLATFORM

The connection between PlayStation 4's Share-button, its representation, and its underlying technical specificity can only be understood by combining two different research methods: a very focused discourse analysis of its social and cultural context to make marketing strategies more transparent and an object-oriented/platform study. The theoretical foundations of this approach lie in identifying the social and cultural context as inseparable from the hardware/software configurations they influence (Jones and Thiruvathukal 2012), while simultaneously recognizing the technicality and materiality of the object of study (Bogost and Montfort 2009; Sotamaa 2014). This combination forms the methodological basis for the following two chapters.

Olli Sotamaa and Jaakko Stenros have noted that the currently dominant standard in the games industry is the “service paradigm [...] built on the idea of games as commodities” (2009, 1). By viewing games as a platform for activities instead of simple services or products, we better understand the expanded play experience and this clears the way for a whole new (service) design. These business models rely on player-created content and thereby require a variety of services for player-creators (Stenros and Sotamaa 2009). This is indeed reflected in Sony's investment in *LittleBigPlanet* as a PlayStation 3 launch title, with the game emphasizing on a player-creator. This increased gaming trend from ‘games-as-product’ to ‘games-as-service’ shows an interest in opening up to a larger part of the gamer market (Westecott 2011). While subscription-based services like PlayStation Network (or Microsoft's Xbox Live or Nintendo's Network) offer ways of purchasing content and keeping the customer involved with the product line, social sharing seems to have become one of the main ‘activities’ that players are encouraged to engage in. Therefore it is useful to look at the discourse surrounding PlayStation 4's Share-button.

During the PlayStation 4 worldwide reveal on February 20, 2013, it was confirmed that the platform would focus heavily on social sharing integration. David Perry, head of game-streaming service Gaikai of Sony, stated that the PlayStation 4 would provide “the first social gaming network with meaning” (cited in IGN 2014). Sony's official marketing rhetoric surrounding the PlayStation 4 includes the term “Gamer Focus”, its official slogan being “The Best Place to Play™”, while the platform “opens the door to an incredible journey through immersive new gaming worlds and a *deeply connected gaming community* [emphasis added]” (Sony 2014b). Regarding the Share-functionality it dares players to:

Engage in endless personal challenges with your community and share your epic triumphs with *the press of a button*. Simply hit the SHARE button on the controller, scan through the last few minutes of gameplay, tag it and return to the game—the video *uploads as you play*. The PS4™ system also enhances *social spectating* by enabling you to broadcast your gameplay in real-time [emphasis added] (Sony 2014b).

This focus on accessible, social sharing also includes easy spectatorship via broadcast and is highlighted by the accompanying promotional video in which Twitch is promoted as the platform where games can be streamed with “the push of a button. Just take your DualShock 4-controller, and press Share!” (Sony 2014b).

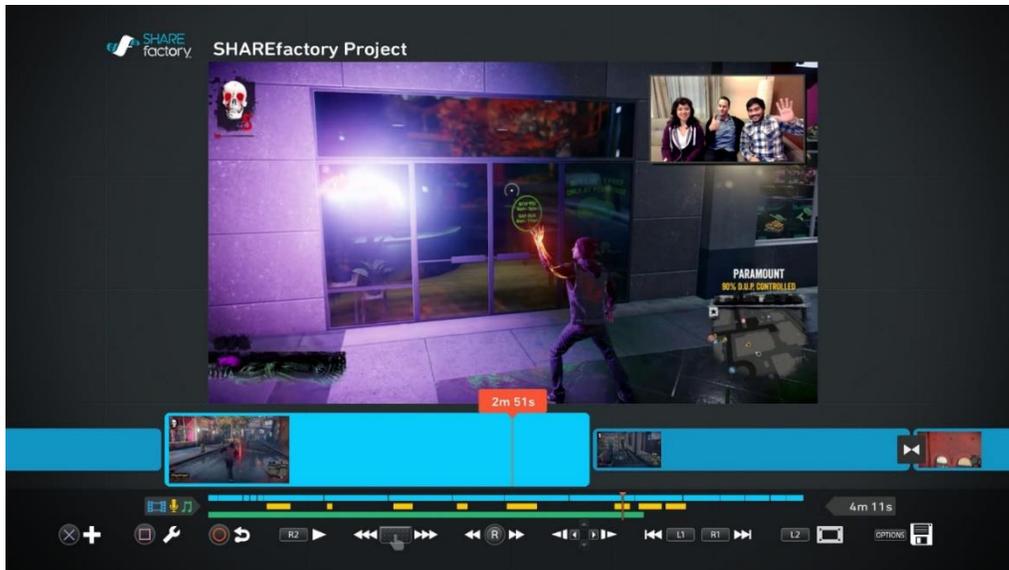


Figure 4: Sony’s official marketing communication image of the *SHAREfactory* app (Sony 2014d).

In the short video, the ease with which other gamers (Twitch and/or PS4 users) can view your streams through the accompanying platform is also noted, telling prospective buyers to “go ahead, share your game on Twitch!” (Sony 2014b).

Player creativity is further encouraged with the introduction of the *SHAREfactory*TM app on the PlayStation 4-platform, which is an easy-to-use video-editing tool for editing gameplay and adding effects (e.g. own music, text, picture-in-picture video with the PlayStation 4’s camera: ‘Eye’) (see Figure 4). These creations can be easily shared, giving users the “the tools to show everyone *your most amazing moments* – and make those moments even more *spectacular*” [emphasis added] (Sony 2014d).

Mark Cerny, lead architecture of PlayStation 4 and Vita, has stated that “heightened social integration” in games is one of the features that will define the coming generation of console hardware the most (Edge 2013, 65). The Share-button and its recording and broadcasting features are key aspects of Sony’s implementation of social integration. Note that in virtually all of Sony’s PlayStation marketing rhetoric the company speaks to the gamer, “you”. Your gameplay, your skills, your achievements, all to be shared, experienced and enjoyed with others. These others form a community that is widely connected, making use of existing social networking platforms which are connected upon setting up the PlayStation and its online network PSN.

Responses to PlayStation 4’s launch in the press focused mostly on its gamer-centric focus (as opposed to Microsoft’s broader general all-in-one media-oriented approach) and its new DualShock 4-controller, paying special attention to the Share-button. The opinions are that the Share-button is “self-evident” (Siegal 2013) and makes it “easier than ever to broadcast gaming adventures with others” (Graziano 2013) while live broadcasting integrates “seamlessly into the system” (Greenwald 2014). Technology website Engadget sees the button as “crucial to the PS4’s push into social” and is “Sony’s biggest promise delivered [...] this type of functionality will shape the next 10 years with the PlayStation 4” (2013). Digital Trends reviewer Ryan Fleming is not sold immediately and notes that, while

recognizing a “level of social integration that is new to the PlayStation ecosystem”, “[i]t’s difficult to tell what people will accept when it comes to social integration; having the option available could help nurture a stronger community” (2013).

In an exclusive cover article in games magazine Edge this feeling of community is intensified by its analysis of Sony’s development of the PlayStation 4: “The recurring theme [...] is written right there on the controller above its new button: share” (Edge 2013a). They state that a “new culture of sharing within Sony shaped PS4”, which wasn’t there five years ago. Communication within the company “wasn’t always easy” (Edge 2013a). Of course these statements can be seen as crafty Sony-sponsored marketing rhetorics, but that is not the main issue here.¹⁹ What is important to acknowledge is that they touch upon a new trend in the industry that is based on gaming’s spectating roots and niche. Fueled by current technological developments, this accessible form of ‘social play’ is aimed at a larger demographic of players. Westcott notes that this incorporation of user-generated content (here to be interpreted in the form of sharing gameplay) connects games to their wider cultural setting, where gameplay and surrounding context are intertwined in an expanding feedback loop. This marks a “tipping point of significance to the game sector, moving it beyond the passionate niche of gamer sub-culture to mainstream intertextuality” (2011, 93).

With a focus on easily accessible social sharing features and the discursive creation of a community culture around this new phenomenon, PlayStation 4’s Share-button is one of the most prominently featured recent developments in the games industry. While also aiming at a wider demographic, Microsoft’s new Xbox One offers a comparable integrated platform, but the accompanying controller does not feature a specific button dedicated to social sharing integration. Industry experts recognize Sony’s decision to condense sharing in a physical object as a bold move forward into a new gaming era and this deserves a critical analysis. It is therefore time to take a closer look at Sony’s button and the underlying platform itself.

5. THE SHARE-BUTTON AS AN OBJECT AND PLATFORM

Sony announced the PlayStation 4 in a keynote in New York on February 20th, 2013. In his introduction, president and group chief executive officer Andrew House stated that *the gamer* is now in many ways the center of the PlayStation ecosystem, instead of the living room (IGN 2013a). This is an important departure from the previous console cycle in which the living room constituted the center of a socialized gaming space, attracting new crowds to gaming and accessible to all. While Nintendo led the way with its revolutionary Wii, Microsoft and Sony soon followed with their improved but comparable Kinect and Move devices (Jones and Thiruvathukal 2012).

House explained that mobility and the ability to share content and experience has become an increasingly important part of the gaming experience for the casual as well as the core gamer. Mark Cerny followed this up with the new console’s five key principles: ‘simple’, ‘immediate’, ‘social’, ‘integrated’, and ‘personal’. Showing off the new DualShock 4-controller for the first time, Cerny introduced the Share-button as one of the few new

¹⁹ This became even more evident when Edge Magazine released their #256 July issue which, again, fully displayed the PlayStation 4 on its front cover, titling “This Is Your Next Console – Why the Only Option Right Now Is PS4”, and subtitling, even, “How Microsoft Blew It – The Titanic Errors on Xbox One’s Road to Ruin” (Edge 2013b).

features, along with the headphone-jack to “enhance social interactions” (IGN 2013a). The second peripheral, Eye, which was designed in tandem with the new controller, is a stereo camera that senses depth and tracks players via DualShock’s 4 integrated light bar. While talking about the ‘social’ principle, Cerny showed the video recording interface and talked shortly about the integrated video encoding and decoding hardware. He mentioned that the user can “just hit the Share-button, on the controller” (IGN 2013a), easily scan, trim, and tag the video and return to his or her game, while the video uploads in the background. It is clear that Sony wants the sharing of video to become as easy and popular as the sharing of screenshots.

Presenting the platform and interface, David Perry explained that the game developers are given new spectating tools. These might include selecting gaming experts and giving them “director-level status,” assisting players in their gameplay, developers inserting command buttons for certain levels, and friends dropping special items for the players. It becomes clear that these are just work-in-progress ideas, further to be established by developers using the capabilities of the platform. At that time, not Twitch, but Ustream was mentioned as the preferred partner with which players can broadcast their gameplay live to anyone they want to, with “multicasting capabilities” (IGN 2013a).

Keeping things simple, Sony has dubbed PlayStation’s 4 new controller the DualShock 4. Similar to its predecessors in shape and function, it comes with several extra new features. The DualShock 4 is a more refined, sleek update of a traditional design of a directional pad, two thumb grips, and the famous action (triangle, circle, cross, square) and shoulder (L1, L2, R1, R2) buttons. The Start and Select buttons have been merged into a single ‘Options’ button, while the Select button has been replaced by the Share-button. The Select and Start buttons have stood alongside each other on the DualShock-controllers since 1994, so the departure from this design is significant.²⁰

While the official specifications note a difference of almost twenty grams, the DualShock 4 does feel heavier than its predecessor, robust and solid. The Share-button is positioned to the upper right of the directional pad, making it easily accessible for the left thumb. The button integrates seamlessly into the matte black plastic building materials of the controller and is delineated by the word ‘Share’ in grey above it (see Figure 5).

While playing, video from the most recent fifteen minutes of gameplay is automatically and continuously recorded with the use of a semi-custom accelerated processing unit (APU), which has a built-in video encoder/decoder. This unit is activated by use of the Share-button, which has the basic operations of a single press for saving a screenshot or video clip (short press for using a menu, long press for on-the-go), or a double press for defining the start of a fifteen minute maximum gameplay recording session.²¹

²⁰ This departure is so significant, that influential gaming website IGN has made a comical ‘in memoriam’ tribute video for the Start and Select buttons:

<http://www.ign.com/videos/2013/02/26/in-memoriam-dualshocks-selectstart-buttons>.

The Select-button mostly functioned to open up a map of the game world while in-game, bring up the menu, or perform a specialized action, indicated in-game.

²¹ A short press displays the Share feature menu, offering to take a screenshot or save a video clip. A long press takes a screenshot without interrupting the gameplay flow, indicating with a camera and frame icon in the top right corner of the screen that the screenshot is finished and saved into a default directory. Double pressing the button sets the starting point for a video clip, indicated by an icon of a film strip with a red dot that is displayed in the top right corner of the screen. This is useful



Figure 5: The DualShock 4 and Eye (Sony 2014b).

The recorded videos can be saved, edited with the *SHAREfactory* application, and uploaded to Facebook, Twitter, YouTube, the PlayStation Network, and/or an USB drive.²² Broadcasting can be done through Twitch, YouTube, Ustream, or the PlayStation Network, now possible in resolutions up to 720p. Twitch streams can also be archived.

PlayStation 4 Eye, Sony’s new optional camera and motion sensing accessory, is available as a separate purchase. Pairing the DualShock 4 controller with the Eye allows the gamer to record him- or herself while playing, while also supporting voice recognition and control with the built-in microphone (see Figure 5). The player can use a voice command like “PlayStation” (which activates the listen mode), “Take screenshot” to save a screenshot while playing. The voice commands are also supported by the simple mono headset that comes with the PlayStation 4 system.

Combining the DualShock 4 and Eye, the PlayStation 4 turns into a gaming and broadcasting hub. A fast internet connection is a prerequisite, and showing your game to the outside world, compiling gameplay footage, or spectating other players is neatly summarized into the press of a single button. Are users then free to share, edit, and comment on anything and everything they want? No. As I will also elaborate on in the next chapter, not all content can be shared. PlayStation 4’s manual clearly states that “[f]or some games, there might be scenes in which video cannot be recorded” (Sony 2014c). This means that the Share-function can be restricted by developers at certain moments in games, like key plot points or boss fights. The sharing of spoilers is hereby prevented.

On March 4th, 2014, Sony announced that the Share-button had been used 100 million times. Since January 1st, PlayStation 4 gamers account for 20% of daily broadcasters on Twitch, with 3.6 million live broadcast streams and 56 million spectate sessions on Twitch

for the recording of a specific scene. Pressing the Share-button again at the end of the scene stops the recording. The maximum of gameplay video to be saved is 15 minutes, measured backwards from the moment when the Share-button is pushed to end the scene.

²² After initial complaints of users that they could not use third party systems to record gameplay via HDMI, Sony released the high-bandwidth digital content protection (HDCP)-patch. This allowed users to turn HDCP off and also save videos to an USB drive. HDCP is only optional for gameplay, playback of Blu-Rays is still protected.

and Ustream (Sony 2014a). The platform is widely being used to create and share gameplay videos. Jones and Thiruvathukal note that any platform is a social platform, shaped by the creative works that run on it, but also by the social contexts within which it is defined (2012). The most interesting social context to investigate now is that of the creative works and new forms of play that have started to emerge. As a part of the general social and sharing play development in the gaming industry, Sony's Share-platform facilitates but at the same time limits shared play in video gameplay culture.

I have analyzed the Share-button's origins, marketing discourse and its properties as an object and platform. To complement my other concentrated method-uses, it is time for a hands-on approach to understand what this means for the platform's social and cultural context.

6. PLAYING AND SHARING WITH SONY'S NEW PLATFORM

As stated in the introduction I have also played with Sony's platform myself, to get a grip on its workings. To use play as a method "completes the arguments of meaning by means of accounting the play experience" (Sicart 2011). In this chapter I describe my experiences with the Share-platform. I describe sensing its functionalities and limitations and to what extent there is 'freedom' of creativity. Followed by a case study, this direct experience helps us to critically reflect on the platform, its cultural and social context, and augments the multi-angle approach of the research.

When the PlayStation 4 is turned on and logged in to the appropriate user, the user's attention is immediately drawn to a 'What's New' section of the clean, tiled interface. The interface somewhat resembles a mating between Apple's iOS and Microsoft new and now infamous tile-based look, but still is the Sony-shade of blue.²³ When the 'What's New'-tile is selected, the bottom side of the first screen is filled with 'social' events: games that your contacts have played or are playing right now, recorded and shared video clips, planned events, and other miscellaneous activities to partake in. Immediately to the right of the tile is that of the *SHAREfactory* application, which provides a link to the installation that is required before opening.

Before one can start producing, gameplay footage has to be recorded to work with. So, I started up a game of my choice and after playing for about half an hour, I decided to push the Share-button. The game was paused, a menu box popped up, and I was presented with three simple choices (see Figure 6):

- Upload Video Clip, - Upload Screenshot, - Broadcast Gameplay.²⁴

²³ Starting its life on Windows Phone 7 before moving over to Windows 8 (on PCs) and also Outlook (previously Hotmail), The Interface Formerly Known as Metro (TIFKAM) is Microsoft's current main user interface for new products and designs. It is an interface that leans heavily on the use of labeled tiles, relying more on typography and less on graphics. The jokey title apparently originated from copyright issues over the name 'Metro' in Europe. Microsoft has since dubbed it 'Modern UI'. Design changes were made that caused great uproar. The removal and complete restyle of Windows' archaic Start-button and -menu brought about such controversy that Microsoft hastily re-implemented the Start-button, albeit functioning a bit differently. After widespread critique from consumers and reviewers the Start-menu will also make its return to Windows (Keizer 2014).

²⁴ It was also possible to just *record* (saved to internal storage) a screenshot or video clip, by pushing the accompanying triangle or square buttons. By pressing one of these a message ("screenshot saved"/"video clip saved") shortly blinks on-screen.

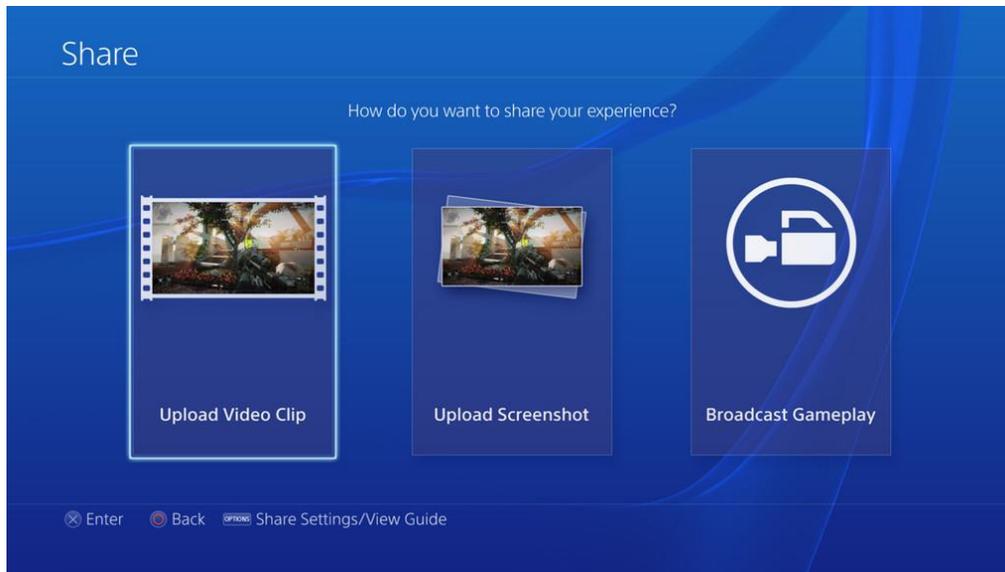


Figure 6: The Share-menu with its three options (Hurley 2014).

The Share-functionality can be linked to Facebook, Twitch, Twitter, YouTube, and Ustream from the PlayStation 4 menu settings. Successfully trimming the video clip required no prior video editing. After selecting a name, optional comment, and, in this case, the Facebook audience with access to this exclusive screening of my newly recorded gameplay video, everything was set. I pressed the on-screen button labeled “Share” and my digital video game skills were made public, available to the community.²⁵

The *SHARE*factory application enables gamers to produce their own recorded gameplay footage into themed short movies with added special effects and soundtracks. Creativity is sparked by the ability to add commentary, soundtrack, themes, stickers, text, and picture-in-picture video. With Sony’s ‘toolbox’, the player can add layers on top of the gameplay footage that is recorded. This may remind the player of the creation of machinima movies. While the final product usually presented a traditional linear narrative, the creational process of machinima itself was a fascinating new medial convergence of 3D computer games, filmmaking, and animation (Berkeley 2006). Machinima were created by making use of the engine of the game, thus allowing gameplay to be scripted, directed, and cameras to be programmed or even live controlled while recording. Programming expertise, playing skills, and artistic vision allowed a freedom of theatrical performance that led to a plethora of differed creative work, including cultural and political critique (Lowood 2008).²⁶

²⁵ All in all, this took less than a minute, while the experience was remarkably smooth in comparison to the PlayStation 3 interface controls. The previous console was notorious for its sluggish and immersivity-breaking user interface. Sony has stated on numerous occasions that they worked hard at interpreting the received feedback in order to improve the user interface experience (Peckham 2013).

²⁶ “Machinima is now capable of producing animated shorts (such as the Ill Clan’s *Hardly Workin’*), music video’s (Ken Thain’s *Rebel vs. Thug* or Fountainhead Entertainment’s *In the Waiting Line*), feature-film length animated movies (Jake Hughes’ *Anachronox*), avant-garde shorts (Dead on Que’s *Fake Science* or Fountainhead’s *Anna*), cutscenes and trailers for video games (*Metal Gear*



Figure 7: Broadcasting a play session (LaBerge 2013).

The PlayStation 4's Share-functionality and *SHAREfactory* are not aimed at giving users this kind of technological and/or artistic freedom. As noted before in chapter four, the Share-features are a part of Sony's approach of easily accessible gameplay footage creation, with the gamer (i.e. you) at its center. Sony's intention is that these creations are shared, via social networks of players, and therefore connecting the content of these video games to an ever growing public. At the beginning of a shared video it is possible to add Sony's official PS4 introduction short (consisting of an image of the console followed by its logo), making the video look like an official game trailer. It turns these videos into a form of 'audience commodity', a practice where the media manufactures audiences and then sells them to advertisers (Smythe 2006).

As Sotamaa states, console gamers will be invited more and more to create and to share, not only to play (2010a). Since these tools to create and share are an essential part of the intended use of the platform, the subversive aspects of these actions are questionable at best: "Agency has become a pre-programmed feature of the corporate media environment in which subjectification occurs" (Arvidsson and Sandvik 2007, 102).

In the next chapter, I will show that there was still room for unintended use of the Share-platform, its broadcasting functionalities in particular. As an unintended byproduct that slipped under the corporate radar Sony's *Playroom* and the Eye-camera were very easily used and abused in unpredicted ways. This brings us to the other, probably even more significant feature of the Share-platform: the live broadcasting of gameplay.

To live broadcast my gameplay, it was as easy as selecting this option in PlayStation 4's Share-menu. Connecting the Eye-camera provides additional picture-in-picture functionality, which is not mandatory. Microphone audio is also possible, if connected. Facebook integration is possible, offering to share a link to your broadcast on your

Solid), episodic comedy programs à la television (*Red vs. Blue*) and even live improvisational comedy (Ill Clan's *Common Sense Cooking with Carl the Cook*)" (Lowood 2006, 39).

Facebook wall. Pressing the big button labeled “Start *Broadcasting*” does what it says but it is interesting to note the use of this specific word (not “sharing”, or “streaming”). While playing, your elapsed broadcasting time is displayed in the left bottom corner of the screen. The largest visual representation of your broadcasting is on the right part of the screen. The right side of the screen is filled with a vertical bar, which is topped with a sign that states “ON AIR” (with the classical red dot camera recording symbol), accompanied with your personal profile picture (indicative of the ‘social’). If the Eye-camera is connected, the user sees his- or herself playing in this very same spot as a picture-in-picture frame. Underneath this is technical information represented in symbols (camera connected, microphone connected/active) and other broadcast information like number of spectators or number of comments. The rest is filled with a large chat box in which the spectators’ comments are displayed. The broadcaster can then respond to these messages by talking into the microphone or addressing the Eye-camera (see Figure 7).

By broadcasting a gameplay session, a social hub is created where people can log in and participate by spectating and chatting with the broadcaster and other viewers. As stated in the introduction of this thesis, this camera also played a central role in Sony and Twitch’s *PlayRoom* debacle. In order to focus the aspects of spectatorship, user-generated content, and sharing touched upon so far, the Eye-camera provides us with a short, but very interesting case study.

7. CASE STUDY: HUMANITY AT ITS FINEST IN SONY’S PLAYROOM

What could happen when you provide access to uncensored live online broadcasting to people with a camera installed in their living- or bedroom? Sony seemed to have underestimated the impact of their collaboration with Twitch, ‘*The PlayRoom*’. With its powerful tech demos featuring cute augmented reality robots, Sony’s *PlayRoom* seemed like the perfect demonstration of the DualShock 4 and Eye’s capabilities. As an augmented reality simulator that basically consists of three tech demos, it is more a toy than a game (Sliva 2013). Of course, *The PlayRoom* could also be streamed via Twitch. However, only two weeks after its launch, the results of the broadcasts were: sexual abuse, threats to children, drug use, sex shows, promotion of weaponry, and attempts to tip off cops to suspected crimes. Twitch decided to ban live streaming of at first seemingly harmless application. Sharing via *The PlayRoom* “brought out the worst in gamers” (McCormick 2013) and is a great example of the (unintended) social impact the Share-platform can have.

The stars of *The PlayRoom* were intended to be the little white robots that wiggle and jump around in the screen at the feet of the player, filmed with Eye. As soon as players discovered that this provided them with the simple opportunity to broadcast their living room (and the activities performed in it) to the world, they themselves became the central ‘stars’. PlayStation 4’s Sharing-platform is mainly designed for streaming video games, comparable to having someone watch over your shoulder, spectating, as covered before. *The PlayRoom*, however, was about showing your living room. Players did not share a designed and rendered video game graphical universe, but were broadcasting themselves, their family members, and the interiors of their houses. “The Spartan Show”, a live broadcast show by a husband-and-wife duo with over 5000 viewers on PlayStation 4’s launch night, was one of the first live streams that gained a noteworthy following on Twitch. Initially met with positive reactions from the public as well as Sony executives, the show’s later public response (in the form of calls and text chats) became infused with profanity and negativity (McCormick 2013).



Figure 8: A man consuming drugs and a couple engaged in sexual activities in *The PlayRoom* (Reddit 2014).

The PlayRoom invites users to interact with the tiny robots on screen in an augmented reality game, but gamers also started to do stranger, darker things. These included having (consensual) sex but also forms of sexual abuse, doing drugs, harassing children, death threats, and performing acts with real, live weapons (see Figure 8).²⁷

After two weeks of live stream mayhem, Twitch decided to remove *The PlayRoom* from their directory, effectively making the streaming of the game impossible. The accounts that performed these subversive acts have all been banned and Twitch's Terms of Service have been updated to reflect the website's moderation in which "[n]on-gaming content is not allowed" (Twitch Support 2013).²⁸ Neither Sony nor Twitch provide a guide for streaming, or warn in any way about the potential dangers of doing this to an essentially unregulated audience. *The PlayRoom* taught Sony the valuable lesson that "racing to be part of the fastest-growing subsection of the largest entertainment medium in the world is more difficult when the people who inhabit that space already are entrenched, and have their own specific ways of doing things" (McCormick 2013). It might just be human nature that a camera and means to communicate inspires this kind of resourceful as well as very unsettling use.²⁹

²⁷ A few examples: A user by the name of 'Darckobra12' used *The PlayRoom* to broadcast his partner naked on camera. The woman appeared to be unconscious, and Darckobra12 was banned later in the weekend by Twitch (Crossley 2013). A drunk young man that shares his actual telephone number had to explain to local law enforcement that he did not have a child locked up in his basement, after viewers of his live stream called the police to tip them off of the suspected crime (cido 2013). A young child is threatened that someone is 'outside his window', and looks outside, wide-eyed with fear (CrowbCat 2013).

²⁸ Although Twitch' Rules of Conduct specifically asks to respect publisher of developer enforced non-disclosure agreement periods, the live streaming capabilities of the PlayStation 4 also offers room for early access public screening of games before their release date. *Wolfenstein: The New Order*, the latest update of the classic Nazi shooter, was leaked early and streamed live in full a few days before its release date (p5yk0t1km1r4ge 2014). This could of course also be a clever marketing ploy to generate buzz for the game, but still there are unintended uses of the easy accessible Share-platform that developers and publishers have to be aware of.

²⁹ At the time of writing, there is even a specific 'Subreddit' (comparable to a subforum) dedicated to *The PlayRoom* (/r/thePlayRoom) with just under 1800 subscribers who are still sharing these acts,

This case study shows us that play does not always abide by the original design rules, and can have some extraordinary and unforeseen consequences. While the technology functions, people do not always follow its intended use. It is often difficult to anticipate what will happen when a new platform is released into social space with all its unpredictable interactions (Jones and Thiruvathukal 2012). In this case, the technology that enables the sharing and spectating of this new and subversive form of play clashed with common decency and corporate guidelines. It is an example of a new, unexpected play practice that makes us question the nature of play and spectatorship.

8. CONCLUSION: SHARED PLAY

In each of the previous chapters, I have used different focused methodological approaches to look at Sony's Share-button. This has also led to the definition of new play practices, which brings me to my final chapter. In this chapter, I critically reflect on my research results and look for commonalities within these new play practices to unite them as a specific new form of play. In doing so, I connect the results of my research methods in the previous chapters. This synergizes into my concept of shared play, which I will elaborate on in this concluding chapter.

Early machinima works and video gameplay recording were the result of the expression of playful, experimental creativity and subversiveness. These forms of user-generated content were created in a socio-technical 'do-it-yourself'-style context, apparently free from corporate control.³⁰ In the last decade, a paradigm shift seems to have taken place. The game industry and its players are not mutually exclusive spheres. There is an increased production and development of games where player productivity is built into the game itself, as an inseparable part of the playing experience, dubbed 'Game 3.0' (Newman 2008). In recent years, we have seen the growth of platforms like Twitch and recording and broadcasting functionalities in the new generation of video game consoles. It has become clear that corporate control of these technological developments both fuels and limits user creativity. As illustrated in the case study of *The PlayRoom*, subversive acts seem to be restricted to accidents, 'misuses' of platforms, overlooked by the companies that provide them.

What is important to note here is that user-generated content is deliberately incorporated into the products and practices of global new media companies. As with other forms of media, the gaming industry and its consumers increasingly participate in 'co-creative' media production: making media as co-creators of content and experiences (Banks and Deuze 2009). The content that is produced with PlayStation 4's Share-platform serves as a way to maximize the customer's commitment. Only being able to create video content with the game's engine does limit user creativity, but makes sharing and broadcasting of this material available to a wider public. This can be seen as the internalization of agency, a form of 'programmed creativity' (Arvidsson and Sandvik 2007).

mostly sexual in nature and the latest addition just a few hours old (Reddit 2014). The relationship of these incidents to video games is debatable at best. Apparently a community has been formed.

³⁰ Copyright issues and access to the proper tools to work with the games' engines were still very much present.

With their ‘Channels’-directory, Twitch and PlayStation Now are the main points of access to the PlayStation 4 live streams. *SHAREfactory* allows gamers to record and edit their favorite video gaming moments, while optionally adding Sony marketing assets (e.g. logos, trademarks, screenshots) before sharing them to their personal Facebook and/or Twitter profile pages. Some of these videos are nearly indistinguishable from official game trailers. All in all, everything comes together in Sony’s Share-button, which is the material representation of a streamlined process of integrated platforms that clearly delineates and regulates the user’s creative input.

The gamer-centric focus of PlayStation’s Share-platform integrates peripheral hardware devices as the Eye-camera and/or microphone with software applications as *SHAREfactory* that add a personal touch to the shared gameplay content. Sony connects this to an overarching content platform and neighboring social network sites to create and engage the community. The game industry tries to maintain the perception that gaming and the creation of user-generated content, “everything to do with digital games is a form of play, and therefore a voluntary, non-profit oriented activity” (Kücklich 2005, 5). We can clearly see this in the discourse surrounding the Share-platform: the creation and distribution of user-generated content in the form of recorded gameplay footage or broadcasts is stimulated and celebrated as personalized acts of individual expression. Still, this is highly commoditized content, which can be seen as a form of audience commodity (Smythe 2006). Sotamaa states that the relationship between players and corporations “should be understood as a continuum where the self-expression of players is both encouraged, supported, directed and limited in varying ways” (2007a, 398).

As stated in chapter five, Sony encourages developers to implement new features in their games that make use of the Share-functionality to stimulate player-spectator interaction. A good example of this is the twin-stick shooter game *Dead Nation: Apocalypse Edition* (Housemarque 2014). It features a ‘Broadcast+ mode’: while players stream their game, viewers of the live stream can influence the difficulty by voting through their PlayStation 4 or web browser and thus introducing positive or negative in-game effects. These effects vary from spawning ammo packs to disabling the players’ sprint ability. The voters also appear in the streamer’s game, by their screen names. Additionally, Sony is implementing an ‘assist’-feature into its platform. Players can ask a spectating friend on the internet to take over their controller and game, and play for them to help them continue when they are stuck. These functionalities add very interesting new social dimensions to gameplay, as Kotaku reviewer Patricia Hernandez notes: “when it comes to friends, the feature feels more personal. [...] When it comes to being unable to actually sit next to someone on a couch, being able to watch them play is the next closest thing we have” (Hernandez 2013).

Broadcasting to an audience also influences gameplay. Smith, Obrist, and Wright note that “[t]he act of performing to someone changes the way a player plays” (2013, 135). Incentives for performers and viewers cause a reciprocal nature in this practice of sharing play that forms communities around these broadcasts. These new forms of play connect to interesting new media practices that have developed with the rise of Twitch and live streaming of gameplay footage. One of the most peculiar is the crowdsourced phenomenon of “Twitch Plays”. Originating as a social experiment with the *Pokémon* video games (Game Freak 1996), Twitch Plays consists of a broadcast of a single video game that is being played by thousands of ‘spectators’ *at the same time* (see Figure 9).

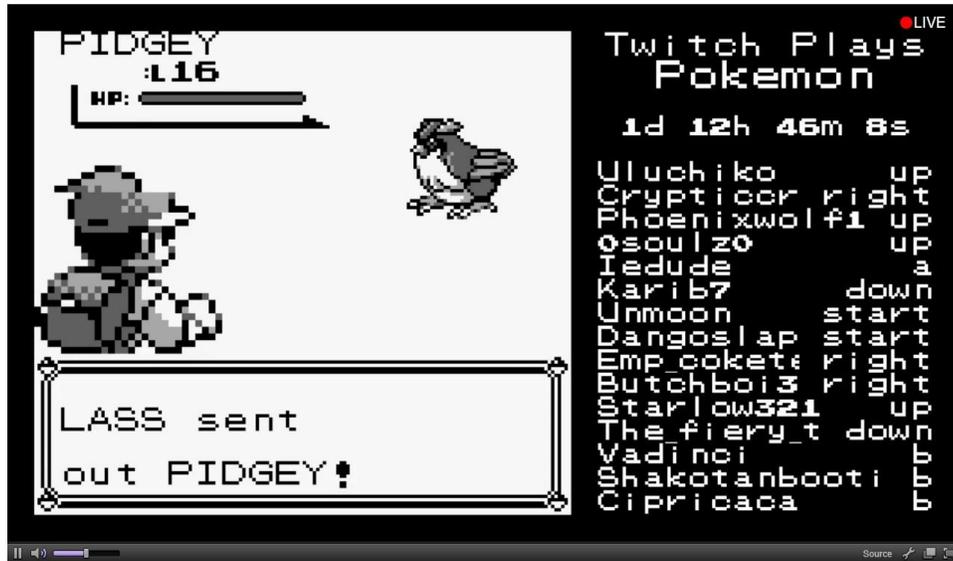


Figure 9: Twitch Plays Pokémon.

This is achieved by a protocol that parses the commands that users send in the channel's chat room, which are translated into a control scheme and gameplay commands. This erratic nature of user input fundamentally changes the experience of the game.³¹ Twitch Plays is now also broadcasted with various genre titles like *Minecraft* (Mojang 2011), *Street Fighter Alpha 3* (Capcom 1998), *Super Meat Boy* (Team Meat 2010), *Diablo II* (Blizzard North 2000), et cetera. In all of these cases, the 'original' game flow is changed drastically because of the transformed nature of user input. For example *Street Fighter*, a game famous for its extremely fast button-bashing, combo-fighting play, is turned into a strategically planned, slow-paced game. eSports, speedrunning, Let's Play, and Twitch Plays can be seen as meta-games on top of the original game, broadcasting new kinds of gameplay that construct entertainment for its spectators (Smith, Obrist and Wright 2013).

These practices and Sony's Share-platform have social and technological properties that I would like to view as a distinctive new form of play: *shared play*. With shared play, a social platform facilitates gameplay with which the player-spectator relationship is redefined. Negotiations between developers, players (performers/spectators), and corporations that are defined by shared play features cause even more ambiguity in the distinction between performer and spectator. With Sony's Share-button and platform, creativity and the social touch are limited to their corporate strategy of gamer-centric social play. As a trade-off for easy access to increasingly popular recording and broadcasting functionalities, users have to work within the confines of the Share-platform. The content that is shared is always within the designed course and boundaries of the game engine. This is central to the current industry's strategy of guided user creativity and social connectivity.

Shared play as a new form of play is a result of this corporate controlled self-expression. It makes use of community-driven gameplay broadcasting technologies and redefines our notions of the player-spectator relationship. The social features that define the current video

³¹ In the original Twitch Plays Pokémon experiment, this made the game longer and harder to play. Systems that throttle certain inputs (like the overabundant use of the Start-button that disrupted the game) were later implemented to mitigate this effect (McWhertor 2014).

game industry's platforms and software releases are central to this form of play. Users connect with each other through different levels of commitment: be it by sharing their recorded gameplay footage, broadcasting a play session, teaming up for a Twitch Plays session, or through design features that let them spectate and interact with fellow gamers online at the same time. This study is helpful in analyzing new and comparable practices in video game culture.

My research has highlighted the role of spectating and user-generated content in the historical origins of shared play. I have connected the historical development of video game spectatorship and user-generated content with the medium-specific properties of Sony's Share-functionality, exemplified by its Share-button and underlying platform. With a mixed-methodological approach this thesis has analyzed the materiality and functionality of the Share-button while connecting it to its cultural and social context. By questioning the role of Sony's platform I have shown what this means for subversive and creative play. Corporate control facilitates easy access to and use of content creation tools. However, this ever-quickenning incorporation of non-direct player activities leaves little room for creativity and subversiveness, and mostly results in programmed creativity, commodified content that is easily distributed and marketed. By using a wider cultural perspective, I also demonstrated that shared play questions long-held assumptions about playing, spectating, and sharing. These are not separate practices, but intermingling and collective acts of play that are at the core of our modern networked video game community culture.

Sony is not the only video game console developer to incorporate social video game recording technology in its products. Microsoft's Xbox One has the 'Upload Studio', which pairs with the Kinect-camera and supports sharing of gameplay screenshots and video through mostly the same platforms as the PlayStation 4 (IGN 2013b). On the platform where it all began, the PC, developers are including easy Twitch broadcasting connectivity in for example Nvidia's ShadowPlay-application and AMD's Gaming Evolved client (AMD 2014; Nvidia 2014). The PC version of *Grand Theft Auto V* (Rockstar North 2015), like its predecessor, gets a video-editor, designed "for advanced movie-making" (R* Q 2014). Remedy Entertainment is creating *Quantum Break* (2015), a 'game' which features live-action videos blended with regular gameplay, to combine play and passive viewing on the Xbox One (Cook 2014). Game website Polygon video game journalist Brian Crecente is experimenting with live streamed game journalism via Twitch, while Forbes journalist Jason Evangelho argues for Twitch as the new platform for reviewing video games, because the experience is put into the "community's hands" (Evangelho 2014a; 2014b).

All these advances point to new and interesting practices of shared play that could form the basis for other important new game studies. For example, research could be done into the implications of shared play within crossmedial applications such as portable devices like mobile phones and tablets (video game-accompanying mobile apps), or handhelds (such as Sony's PlayStation Vita, Nintendo's 3DS, and Nvidia's Shield). Additionally, the nature of shared play's user-generated content within corporate control raises questions of authorship, ownership, copyright, and games journalism that could be explored further. Plus, there is an enormous eSports industry, where fans increasingly connect and interact with the matches played by their favorite stars. These competitions are also the source for vast amounts of online broadcasted video game play material.

Sony's Share-button exemplifies commodified creativity within its corporate control sphere. On the one hand, there are clear commercial benefits to the (online) publicity of a flood of user-generated, Sony-labeled video game play material. On the other, this shared

content also provides valuable and interesting information for analysis: ‘big data’.³² This thesis has shortly touched upon the distribution of user-generated content with Sony marketing assets. Interesting and important studies, for example with a political economical approach, could also be done into the big data aspect of the Share-button, or shared play in general.

Twitch, recently acquired by Amazon for just under 1 billion dollars, is a fast-growing platform that has come to play a central role in the development of a new form of entertainment in the current game industry. With my research I have made a first step into analyzing this fascinating development and understanding the notion that “in this decade, *playing* a game will often be the same thing as *broadcasting* a game” (Totilo 2012).

Generating video game content has been around for decades. Streaming gameplay is an exciting new object for gamers, viewers, journalists, developers, publishers, and academics. With the push of a button, this will be the decade of shared play.

分かち合う、ソニーは述べています!

³² ““Big data” refers to datasets whose size is beyond the ability of typical database software tools to capture, store, manage, and analyze. [...] [It] can create significant value for the world economy, enhancing productivity and competitiveness of companies and the public sector and creating substantial economic surplus for consumers” (Manyika, et al. 2011).

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