



International Conference on Japan Game Studies 2013

Conference Abstracts

May 24-26, 2013 @ Soshikan Hall, Ritsumeikan University, Kyoto, Japan

Organizer

Ritsumeikan Center for Game Studies, the Prince Takamado Japan Centre, the Canadian Institute for Research Computing in the Arts & University of Alberta with support from the GRAND Network of Centres of Excellence.

International Conference on Japan Game Studies 2013

Dates: May 24-26, 2013
Kinugasa Campus, Ritsumeikan University, Kyoto, Japan

Main Organizer:

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- Canadian Institute for Research Computing in the Arts, University of Alberta
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Cover design:

- *Kazufumi Fukuda*, Ritsumeikan University

Editorial & Layout:

- *Barbara Carter*, University of Alberta

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Conference Information

Conference Schedule

	May 24 (Fri) @Soshikan Hall		May 25 (Sat) @Soshikan Hall		May 26 (Sun) @Soshikan Hall	
	Conference Room	#312	Conference Room	#312	Conference Room	#312
9:00-10:30	Opening 9:30 Welcome Remark <i>Inaba, Mitsuyuki & Kabata, Kaori</i>		Session 3: Asian Game & Industry <i>Moderator: Nakamura, Akinori & Yada, Mari</i>	Demo/ Play <i>Super Mario Exp.</i> @#312 <i>(Map# 3)</i>	Session 7: Japanese Game Culture <i>Moderator: Rockwell, Geoffrey</i>	Demo/ Play <i>Super Mario Exp.</i> @#312 <i>(Map# 3)</i>
	9:45-10:30 Opening Plenary Talk <i>Uemura, Masayuki</i>					
10:30-10:45	Coffee break @ Conference Room		Coffee break @ #303&304 <i>(Map #3)</i>		Coffee break @ #303 & 304 <i>(Map #3)</i>	
10:45-12:15	Session 1: Serious Game & Society <i>Moderator: Inaba, Mitsuyuki</i>	Demo/ Play <i>Super Mario Exp.</i> @#312 <i>(Map# 3)</i>	Session 4: Education & Serious Game <i>Moderator: Inaba, Mitsuyuki</i>	Demo/ Play <i>Super Mario Exp.</i> @#312 <i>(Map# 3)</i>	Closing Plenary Session <i>Yoshida, Hiroshi & Uemura, Masayuki & Rockwell, Geoffrey</i>	
					Closing <i>Inaba, Mitsuyuki & Kabata, Kaori</i>	
12:15-13:30	Lunch @ Suekawa Memorial Lecture Hall (Map #1 & 4)		Lunch @ #303 & 304 <i>(see Map #3)</i>			
13:30-15:00	Invited Talk <i>Organizer: Hosoi, Koichi</i> <i>Speaker: Endo, Masanobu</i>		Session 5 (Panel): Arcade & Preservation <i>Organizer: Hosoi, Koichi</i>	Demo/ Play <i>Super Mario Exp.</i> @#312 <i>(Map# 3)</i>		
15:00-15:15	Coffee break @ Conference Room		Coffee break @ #303&304 <i>(Map #3)</i>			
15:15-17:00	Session 2: Game Design <i>Moderator: Yoshida, Hiroshi</i>	Demo/ Play <i>Super Mario Exp.</i> @#312 <i>(Map# 3)</i>	Session 6: Game Development & Localization <i>Moderator: Watanabe, Shuji</i>	Demo/ Play <i>Super Mario Exp.</i> @#312 <i>(Map# 3)</i>		
17:30-	Welcome Reception @ Suekawa Memorial Lecture Hall, <u>Restaurant Calme</u> <i>(Map #1)</i>		Conference Banquet @ <u>HOUSE YORK</u> <i>(Map #2)</i>			

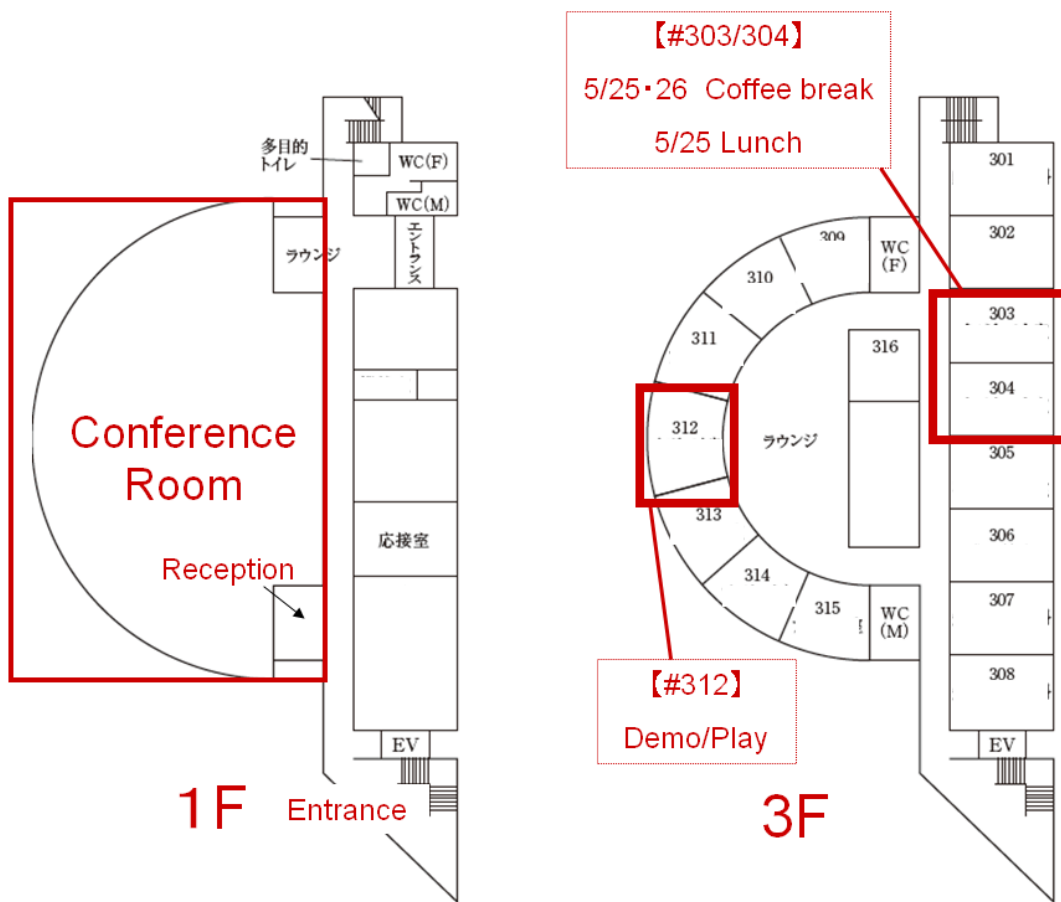
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13:30-15:00	<p>Invited Talk <i>Organizer: Hosoi, Koichi</i> <i>Speaker: Endo, Masanobu (President, Game Studio Inc.)</i> Several hints regarding the peculiarity of the Japanese games</p>	
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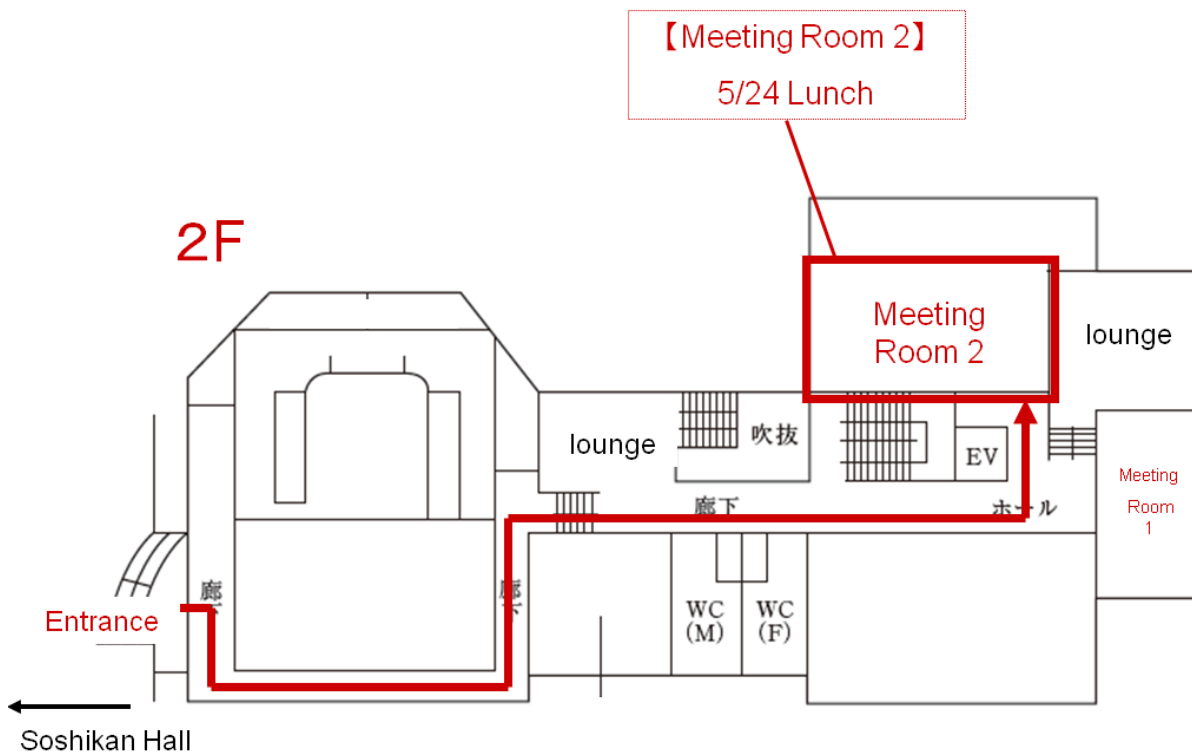
May 25 (Sat) @ Soshikan Hall		
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9:00-10:30	Session 3: Asian Game & Industry <i>Moderator: Nakamura, Akinori & Yada, Mari</i> <ul style="list-style-type: none"> ● <u>Xu, Long; Nakamura, Akinori</u> A Study of the Constitution and the Development of the China's Anime Industry Base ● <u>Nakamura, Akinori</u> The Present Condition of Computer Game Industry in China: A Sleeping Giant Awaken in the Realm of Digital Entertainment ● <u>Yada, Mari</u> The Present Condition of Computer Game Industry in Korea which has an Advanced Network Infrastructure ● <u>Xiong, Shuo</u> The problems with Japanese and Chinese Game Seclusion From the Outside World and In-depth analysis of the countermeasures 	Demo/Play <i>Super Mario Experiment @#312 (Map# 3)</i>
10:30-10:45	Coffee break @ #303&304 (Map #3)	
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17:30-	Conference Banquet @ HOUSE YORK (Map #2)	

May 26 (Sun) @ Soshikan Conf. Hall		
	Conference Room	#312
9:00-10:30	Session 7: Japanese Game Culture <i>Moderator: Rockwell, Geoffrey</i> <ul style="list-style-type: none"> ● <u><i>Gee, Domini; Rockwell, Geoffrey; Gouglas, Sean</i></u> Visual Novels Outside Japan ● <u><i>Obana, Takashi</i></u> Game audio revolution theory: Early research on the history of video game audio in Japan ● <u><i>Imai, Shin</i></u> Where is the indie game of Japan?: Conventions and creativities formed by technology, distribution, culture ● <u><i>Hichibe, Nobushige; Koyama, Yuhsuke</i></u> An analysis of a suppression factor in game self-production in Japan from the view of “non-economic” rewards in game creation activities 	Demo/Play <i>Super Mario Experiment @#312 (Map# 3)</i>
10:30-10:45	Coffee break @ #303 & 304 (Map #3)	
10:45 -11:45	Closing Plenary Session <u><i>Yoshida, Hiroshi</i></u> <u><i>Uemura, Masayuki</i></u> <u><i>Rockwell, Geoffrey</i></u>	
11:45-12:00	Closing <u><i>Inaba, Mitsuyuki & Kabata, Kaori</i></u>	

Map #3: Shoshikan Hall



Map #4: Suekawa Memorial Lecture Hall (5/24 Lunch)



Session 1: Serious Game & Society

Moderator: Inaba, Mitsuyuki

Effects of a card game teaching material on the long-term effects of social dilemmas on co-operational behavior

Yuki FUKUYAMA

Waseda University

f-wave@akane.waseda.jp

Yusuke MORITA

Waseda University

ymorita@waseda.jp

Social dilemmas are situations in which individual rationality leads to collective irrationality (Collock 1998). These social dilemmas are contained in many of today's problems, and their effects become quite significant (Yamagishi 1990). The negative effects of non-cooperative behavior are almost delayed. Consequently, negative effects are hard to understand, and cooperative behavior is hard to perform while in the midst of a social dilemma (Joireman et al. 2004). Nevertheless, traditional educational methods do not provide an efficient solution to this problem. In recent years, games have drawn attention as a method by which to learn complex problems. Therefore, the current study used games to facilitate the learning of social dilemmas.

In this research, a card game teaching material called "The Irreplaceable Gift" was developed. The game makes it possible to experience the delayed consequences of social dilemmas. The subject of the game is an environmental problem, and in the game players take on the roles of individuals who live in a virtual world. The purpose of the game is to obtain the maximum "happiness points" for all players at the end of the 7th turn. However, when the number of "environmental burden points" exceeds 40 the world's environment is destroyed and game ends. The game is played by players selecting whether to cooperate or not using cards (figure 1), and 5 years pass for every turn. At the end of the 2nd turn, a child is born to a player and then grows as turns progress. Through these rules, players experience the great influence environmental problems have on the future and acquire an understanding of the need for co-operation.

An experiment was conducted to examine the effects of the game. Sixteen university students participated in the experiment in July 2012. The experiment included the following: a) Pre-questionnaire, b) Gameplay, c) Post-questionnaire, d) Interviews. Before and after gameplay, the questionnaires on "Morals to social problems" (Wada and Kuze 1990) and "intentions for co-operational behavior to environmental problems" (Suwa et al. 2008) were administered. Then, short interviews about the effects of the rules introduced to the game were held after gameplay as a supplementary investigation.

The results of paired t-tests indicated that the participants' "morals" and "intentions for co-operational behavior" increased intentionally ($t = 3.15, p < .01, df = 15$, and $t = 2.35, p < .05, df = 15$, respectively). During the post-gameplay interviews, many players answered that they understood the influence of environmental problems on the future. These results indicate that "The Irreplaceable Gift" effectively makes participants experience the delayed consequences of social dilemmas, which shows effects on enhancement of "morals" and "intentions for co-operational behavior." In future research, examination of interaction within the game is required.



Figure1. Card examples of "The irreplaceable Gift"

The effects of human relations in the workplace: Temperament test using a computer role-playing game

Hironori SAKAI
Waseda University
sunaonahito@toki.waseda.jp

According to a survey by the Ministry of Health, Labor and Welfare, 58% of workers have had strong concerns about work or trouble that caused severe stress. “Problems with human relations in the workplace” is the most common stress factor.

Among individual labor disputes, “bullying and harassment” has more than doubled in the past 10 years. In addition, “problems with human relations in the workplace” and “bullying and harassment” will not only damage the mental health of workers but also degrade workplace morale. We seek to improve the morale of the entire workplace and maintain and improve mental health among employees by improving appropriate communication and promoting mutual recognition and understanding.

As an experiment, we conducted a temperament test among employees. We distributed cards printed with character illustrations that use common motifs of computer role-playing games (RPG) in Japan. Experiment participants (employees of a telemarketing company) tried to make appointments by phone with people on their lists. All employees had their own computers and could see the activities of the others across the network. Employees who made the most appointments received more rewards. This scenario resembles a computer RPG where characters follow a request form to earn money and experience by defeating monsters. In addition, since the Nintendo Entertainment System (commonly known as NES) first appeared in 1983, video game software has grown tremendously. “Final Fantasy” and “Mario Bros” are very famous and familiar to the younger generations in Japan. There are fewer gender differences in the video game audience compared to sports and comics. Therefore, we designed the character illustrations based on the motif of a computer RPG. This technique was less mentally damaging for employees. Moreover, it was expected that employees would accept each other’s characters, and their communication would be facilitated by recognizing the value in the computer RPG representation.

We shared the results of this experiment on a daily basis and researched the effects of human relations in the workplace. This is the report of our findings by using a survey and the Brief Job Stress Questionnaire, which was administered about one year after this experiment.

Materials and methods

1. Participants

Subjects were employees working for the company shown below. Company A: about 50 employees, call center operations. Completed surveys were received from 32 employees (64% response rate), 18 men and 14 women. The average age was about 27.

2. Tools

We investigated job stress using a tool called the Brief Job Stress Questionnaire.

We used a “HAT” (Humor Assessment Tool) to measure the temperament of the participants.

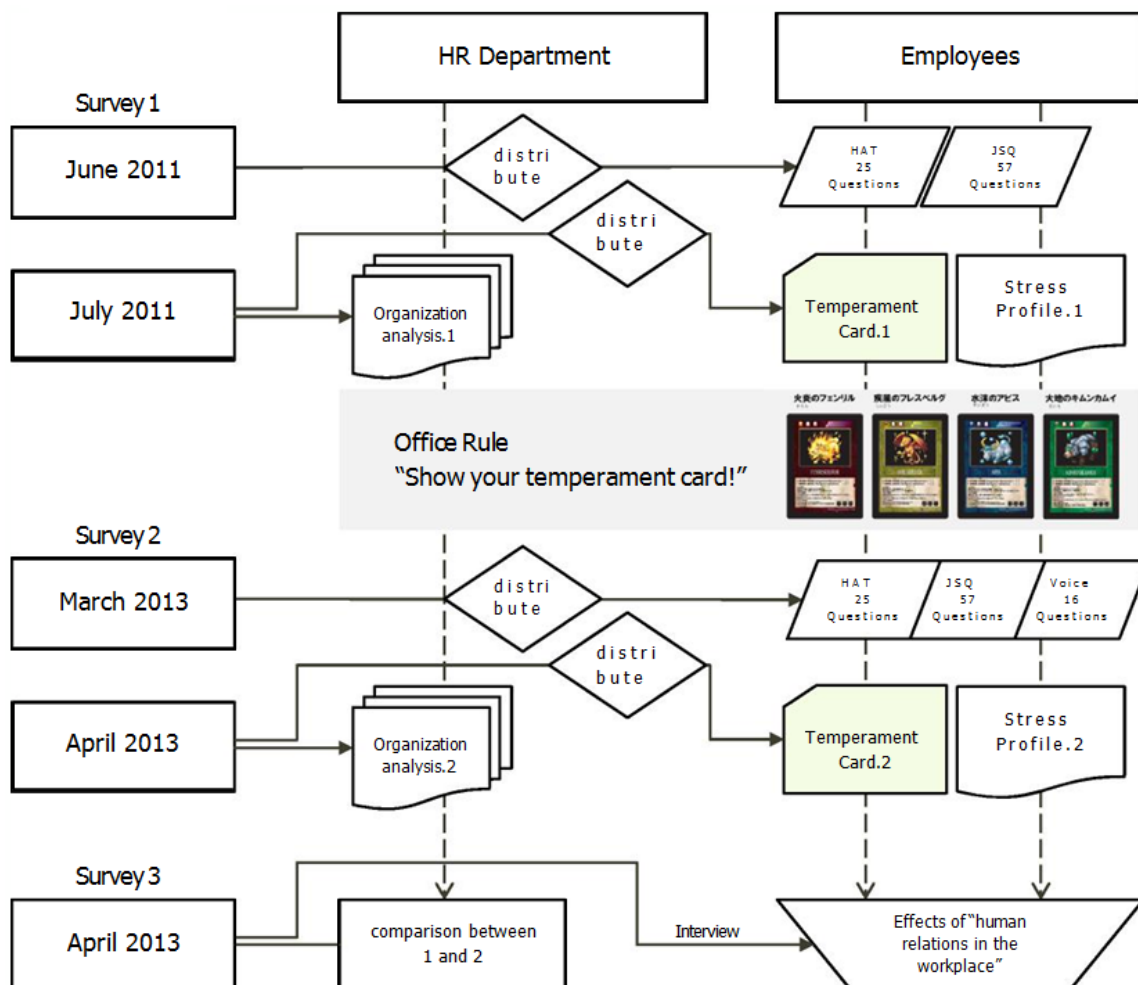
3. Method

Survey 1: We distributed the questionnaires in June 2011, and collected them in July 2011. Cooperation in the survey was by employees was on a voluntary basis. We sealed the results of the temperament test and the Brief Job Stress Questionnaire envelopes which were passed to employees by way of the HR department.

Survey 2: We distributed the questionnaires again in March 2013, and collected them in April 2013. Cooperation was again on a voluntary basis. Again we sealed the results of the test and Questionnaire in envelopes to be passed to employees by way of the HR department.

Survey 3: We conducted interviews in April 2013 with five people selected at random from within the participants.

Flow Chart



Archiving Games for Governmental Public Relations
– Digital Official Documents and Web Contents
of the Government on Game Archives –

Dai KURAHARA
J-brain co.ltd.
kurahara@jbholds.co.jp
Daisuke YOSHINAGA
Yamagata University
yoshinaga@kdw.kj.yamagata-u.ac.jp

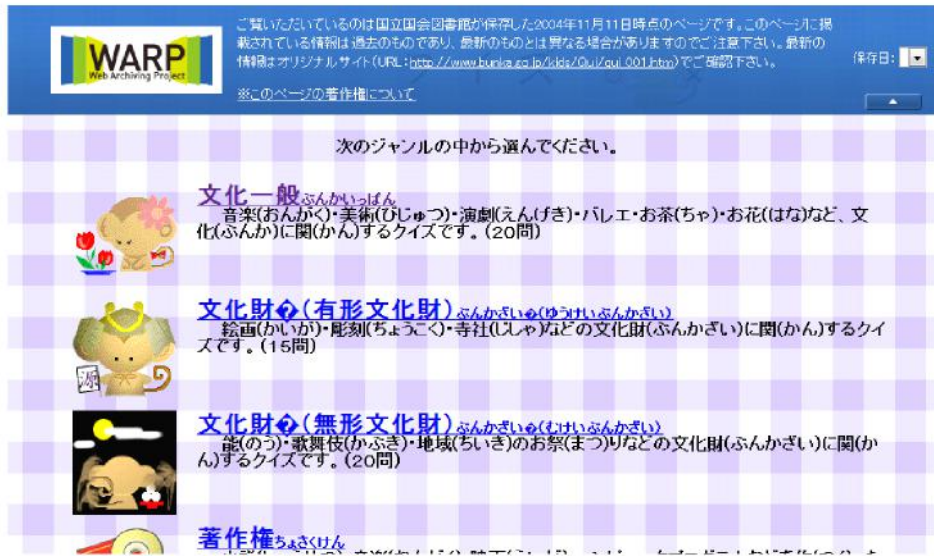
Even though there is a global trend toward the greater use of games in the public sector, it seems that game scholars have barely recognized the fact that in the past few decades the Government of Japan has developed various games (including analog games, game software, and web browser games) for use in governmental public relations activities.

Such games for governmental public relations (GGPRs) and their related documents, project proposals or contract documents, for example, can be considered as governmental documents that shall be archived and ensured public access. In fact, many of them have been already disposed of or scattered after their preservation time limit had passed.

However, when aiming towards the future social utilization of games in Japanese society, it is necessary to establish an archive system that retroactively saves these early examples in a verifiable condition.

In this presentation, we provide a brief overview of the process of development and disposition of GGPRs obtained by an interview survey with government officers. After that, we discuss the importance of archiving GGPRs and their related documents.

Figure 1



A list page which the URL data was retrieved in Nov. 2004 by the WARP, Web Archiving Project, of the National Diet Library of Japan (NDL) (<http://warp.da.ndl.go.jp/>). The links in this above page should have jumped to games of the Agency for Cultural Affairs, but their hyperlink destinations are unfound at present (2013).

Figure 2



TaxFamily Computer Game: Planet Aton -Another Story(1990),
a digital publication by the National Tax Agency of Japan (Preserved in NDL, Japan)

Session 2: Game Design

Moderator: Yoshida, Hiroshi

LBG Design Praxis: A Cultural Analysis

Vicki MOULDER
Simon Fraser University
vmoulder@sfu.ca
Carman NEUSTAEDTER
Simon Fraser University
carman_neustaedter@sfu.ca
Ron WAKKARY
Simon Fraser University
rwakkary@sfu.ca

This abstract briefly describe the authors' findings in location-based game (LBG) design research, along with their goals for attending the International Conference on Japan Game Studies (ICJGS).

Within the field of LBG design researchers use the terms location-based, mobile, unique artworks and transmedia storytelling to express the use of technology to the broader social and cultural context of the medium. More commonly the term is used to describe a type of story-narrative that is delivered through multiple channels. The LBG narrative is usually broken into segments of which the audience must find and assemble^[1]. The audience sometimes works as a collective and may play a key role in creating the fiction^[9].

Over the last 5-years, our research lab has used various ethnographic methods to compare the design of location based narratives to the participants' experience^[3]. This cross-analysis has lead to a deeper understanding of how people engage with the cultural phenomena of play, and more importantly - meaning. In the sections that follow we introduce two experimental case studies we plan to present as examples of LBG cross-analysis studies.

In 2010, we analyzed the participant contributions to a new media event concerned with the world's dependency on oil. Like an LBG, the event narrative was distributed through various channels including: a film, magazines, a live performance and online social media contributions. At the live performance 40,000 people watched the ignition of 900-gallons of jet fuel. Curious to understand what people choose to publish to the Internet we analyzed the video documentation of the live performance posted to YouTube. Among the many findings, we learned that 61% of the people choose to use video much like a snap-shot (under 30-seconds) capturing the narrative arch of the story; while others edited the video to create unique artworks (video footage between 3 to 14-minutes in length) extending the ethos (meaning) of the live performance^[4].

Based on these findings, in 2011 we decided to advance our research by collaborating with a theatre company to produce LBG on our existing See it platform. Babyli.ca was completed in March 2012. We studied the collaborations between artists, designers and technologists to learn how technology was used as a boundary object to support the dialogic process and generate new knowledge^[3]. Among the many findings, this study revealed that writers are highly skilled at crafting transitions called directives, and if properly interpreted through the system design can propel a participant through the story-narrative with performative action. The implications of this research are important, as it suggests that collaborative authorship and group decision-making is a social practice, both in the design process, as well as in the participants' experience^[3].

Conference Goals

Our goal for the ICJGS conference is to present our design research with the intent to discuss: What are the benefits of understanding the cultural implications of LBGs? How can we work with artists to create richer story-narratives? How does the perception of engagement differ in other disciplines such as computer science, the humanities, and in artistic practice?

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Interactive Frame Narrative and Player Evaluation-based Story Evolution in Ace Combat Zero: The Belkan War

Christopher Michael YAP

Nara Institute of Science and Technology
christopher-y@is.naist.jp

Shigeru KASHIHARA

Nara Institute of Science and Technology
shigeru@is.naist.jp

Youki KADOBAYASHI

Nara Institute of Science and Technology
youki-k@is.naist.jp

Suguru YAMAGUCHI

Nara Institute of Science and Technology
suguru@is.naist.jp

In general, the Playstation 2 game "Ace Combat Zero: The Belkan War" is classified as a "Flight Shooting" game. However, unlike other games of this genre, Ace Combat Zero exhibits a unique depth of narrative that is atypical of the Flight Shooting genre. This is primarily achieved through the use of two major mechanisms: 1) a hidden player evaluation system which guides the evolution of the game narrative, and 2) a multi-faceted interactive frame narrative construction which contextualizes the consequences of the player's actions during missions. Both of these mechanisms work in concert with each other to provide a uniquely-molded story experience upon each playthrough.

In this paper, we attempt to deconstruct the relationship between these two mechanisms within Ace Combat Zero. We will analyze and discuss the effects, merits, and demerits of the combination of the hidden player evaluation system with respect to the interactive frame narrative construction of the game in order to gain new insights into the literary merit of this game and others like it. We conclude that while the hidden nature of the story evolution mechanic may preclude players from exploring all possible story branches, this unique recipe of game mechanics can still result in a deeper, customizable narrative capable of creating and employing potent multi-layered metaphors.

Meaningfulness in Digital DIY: Creative Labour in Little Big Planet

William ROBINSON
Concordia University
william.robinson@concordia.ca
Bart SIMON
Concordia University
simonb@alcor.concordia.ca

Critical Marxist media theory has found fertile territory in a renewed critique of game cultures (Dyer-Witheford and de Peuter 2010). The claim is that the only thing that separates the image of the button-pressing gamer from the lever-pulling factory worker is that the gamer loves her job. This is doubly true with the ongoing monetization and surveillance of player labourers who willingly work without pay. This leads critics to consider the player as a dupe, entangled in a nefarious false consciousness, unable to notice exploitation. We hope to challenge this work by positioning players in the video game *Little Big Planet* (Media Molecule 2009) as creative producers of their own intrinsic value. Despite the capital gains made by Media Molecule, these players exist outside of capital concerns. It is not that they are tricked, but that they do not care. Their consumption of the game involves creative fulfillment, which in turn enables the continuation of the means of creative production. While this cycle propagates capital, this is secondary to a much more meaningful system of self-satisfaction. While it might be argued that this satisfaction is yet another instance of false consciousness, our rejoinder is that it is intrinsically valuable play. Following semi-structured interviews of *Little Big Planet Central's* spotlighted creators, we deploy analytic and Marxist philosophy to account for their exclusion from what game scholars dub "playbour" (Kücklich 2005; Sotamaa 2007).

Ludo and *Narreme*: Fundamental Relationships Between Game Mechanics and Interactive Narrative

Akinori NAKAMURA
Ritsumeikan University
s1nakamuraamk2@gmail.com
Shuji WATANABE
Ritsumeikan University
wash@im.ritsumei.ac.jp

Introduction

In this paper, an attempt is made to understand the fundamental relationship between game mechanics and the interactive narrative, which constitute the digital game as a whole. Until now, game researchers have analyzed videogames from the game design perspective (Salen and Zimmerman 2003) as well as the interactive narrative perspective (Juul 2011). Both arguments have contributed substantially to digital game studies in terms of gaining deeper understanding of what they are. The present paper attempts to take these concepts further as it scrutinizes digital games by dissecting them into a fundamental basic unit.

Research Methodology and Analysis

Since the present study is mostly theoretical, comparative analyses are conducted among three sets of games. Namely. 1) Breakout and Space Invader; 2) Clean Sweep and Pac-man; and 3) Dynasty Warriors, Gundam Warriors and Fist of North Star Warrior. In analyzing each set of games, instead of attempting to scrutinize the game design and narrative holistically, basic units of both game design and interactive narrative for the games are pursued. The present study refers to these respectively as *ludo* and *narreme*. Analysis reveals the relationships between the degree of acceptance of each title and the degree in which *narreme* is integrated with and even influenced by *ludo*. In this study, the degree of ‘acceptance’ is determined by how popular they become when they are introduced in the market, and the relationships between interactive narrative and game mechanics are considered from the *narreme* and *ludo* mechanics perspective.

The analysis reveals that the basic unit of *ludo* for Breakout, which uses a paddle to respond to a ball as it is bounced back by walls, did not directly tie to background story (which is to help a prisoner escape from jail). Space Invader, on the other hand, became a world-wide phenomenon, as the basic unit of *ludo*, which is to shoot the enemy who is attempting to destroy the player, is directly tied to the story of invaders coming to conquer the world. Such a direct influence over game design was unprecedented at the time, which may be one of the reasons why the title had become a world-wide phenomenon. For the pair of Clean Sweep and Pac-man, a similar analysis can be made as both have identical *ludos* of destroying dots on the screen, but *narreme* separates one from the other as in Clean Sweep literally let players sweep dots, while the other makes the player character ‘eat’ dots as food while avoiding monsters. This demonstrates the case where *narreme* completely changed the context of *ludos*. The last analysis also demonstrates the case where a group of *ludo* is virtually identical but some changes are imminent due to the differences in the *narreme* under which *ludo* operates.

Conclusions

In the present paper, a theoretical concept of analyzing game mechanics and the interactive narrative of digital games is introduced: the basic units of analysis *ludo* and *narreme*. Comparative analyses of three sets of video games reveal that *ludo* and *narreme*

must, in fact, go hand in hand in order for players to appreciate the titles to their fullest potential. In other words, developers need to carefully observe how any of the *narreme* influence *ludos* and vice versa as they carry on the task of designing interactive experience.

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Determining the border line between real world and the world of game design: Possibilities and Potential of “Game Sketch” Workshop A Case of Game Design Education in Japan

Shuji WATANABE
Ritsumeikan University
wash@im.ritsumei.ac.jp

In the actual workplace of Game Development studios, professionals tend to be required by managers to either imitate or edit core game mechanics of the past in order to efficiently develop digital games with high productivity. Thus, many educators of game design tend to educate students on alternative game aesthetics while maintaining core game mechanics - called ‘game design education.’

Imitation alone, however, only leads to internal reproduction. And while imitation has been crucial to the development of the digital game industry in Japan and expanded the horizons of the digital game industry, the Japanese digital game industry has still been regarded as highly innovative.

My study looks at the trends in real-world cognitive processes of Japanese people. As demonstrated by “The Michigan Fish Test” (Masuda & Nisbett, JPSP 2001), Japanese people tend to look at an image and analyze it more as a whole, while westerners tend only to look at specific items (in particular, the fish). I believe this holistic approach in analytical thinking allows Japanese game designers and researcher to: 1) observe and recognize the world from a holistic perspective, and 2) Modeling of a holistic perspective game design. Both stages can be explained as follows:

1) Observing and recognizing the world from a holistic approach

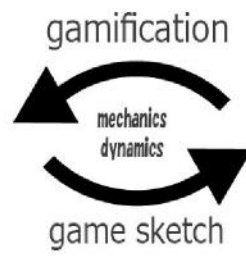
The real world and the world of digital games share the idea of ‘abstraction,’ which can be further defined as the abstraction of the body, relationships and affordance. The abstraction of each of these elements, however, are related to each other and cannot be established separately. In other words, designing these abstractions independently would eventually lead to dysfunction. Thus, it is important to create a system in which each element is closely related to one another. In this study, the method of abstraction and integration of the phenomena of the world is called a ‘Game Sketch.’ Work conceived by this ‘Game Sketch’ process will be introduced in the presentation.

2) Modeling of a holistic perspective game design

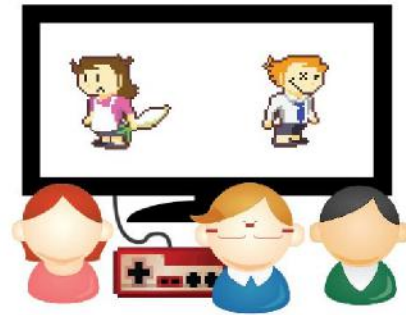
When game designers in Japan design a game, they not only consider the source code or input output device, but also the players who will hold the controller as well as the relationship between players during game play. This is considered holistic game design or ‘Asobi-design.’ In order to properly design games in such a manner, the integration of the real world and that of the virtual world is necessary. By doing so, designers are able to analyze and design the game play experience as a whole. The current study analyzes the mechanism involved in developing game play experiences.

The presented method brings together ideas from gamification research, but the approach is opposite: while gamification attempts to add game-like element to everyday life, our approach tries to retrieve a core game mechanic from everyday life. Both approaches, however, are considered to complement one another and allow for the further development of game design studies.

Real world



World of game design



Session 3: Asian Game & Industry

Moderator: Nakamura, Akinori & Yada, Mari

A study of the constitution and the development of the China's Anime Industry Base

Long XU
Ritsumeikan University
kani624@gmail.com
Akinori NAKAMURA
Ritsumeikan University
s1nakamuraamk2@gmail.com

There has been rapid economic development over the past three decades in the People's Republic of China. With the enormous economic success, China's central government also wants to promote cultural industry. The Anime industry and game industry, being key fields in cultural industry, have drawn increasing attention from the central government which has adopted a series of policies to stimulate their development. Due to these policies, in less than 10 years the number of animated TV programs made by Chinese companies has already increased by 20 times and the game industry has also become an important industry in China. One of the most important plans to promote the development of the anime and game industries is to construct an Anime Industry Base. In 2011, the 23 Anime Industry Bases, scattered in various geographical areas, made 276 TV animated programs and films, totaling 190290 minutes. These account for 72% of all of anime production in China. Many game companies found in Anime Industry Bases also developed quickly. So the Anime Industry Bases have become a very important part in China's anime industry. Moreover, based on government research, the Anime Industry Base should promote not only the development of the anime industry, but also the development of the cities where the bases are found. The purpose of this thesis is to research the companies in Anime Industry Bases to elucidate the present situation of the China's Anime Industry Bases.

The Present Condition of Computer Game Industry in China: A Sleeping Giant Awaken in the Realm of Digital Entertainment

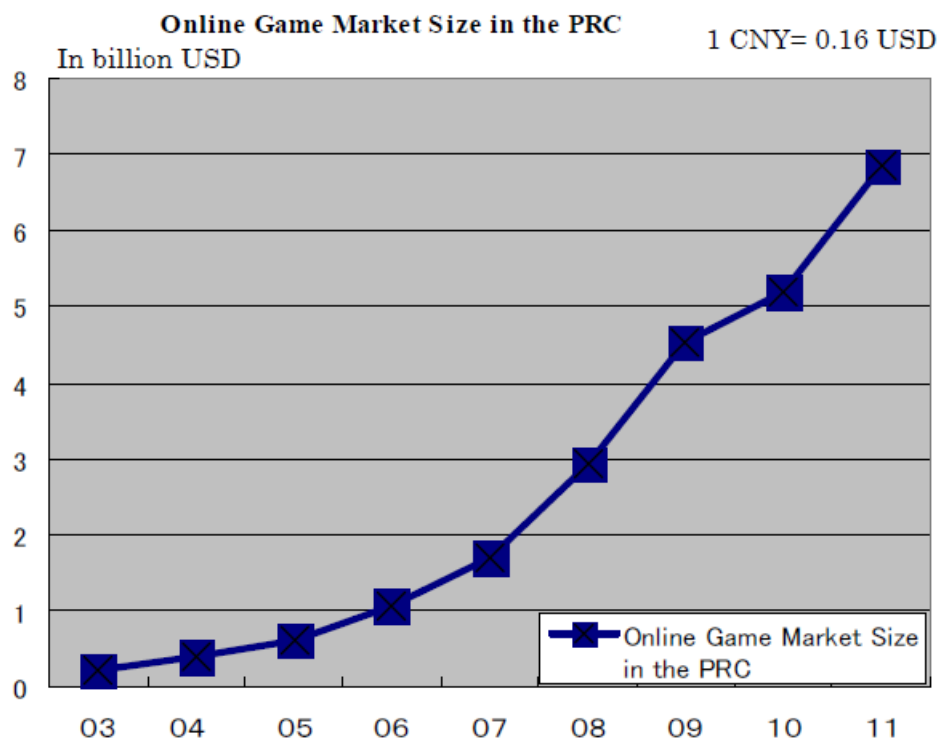
Akinori NAKAMURA
Ritsumeikan University
s1nakamuraamk2@gmail.com

With the Gross Domestic Product being worth 7.3 trillion US dollars, the People's Republic of China (henceforth the PRC) has become an economic giant next to the United States of America. With this fundamental shift in the economic landscape, changes in the realm of digital entertainment are also taking place. Being infested by piracy, it used to be literary impossible to make money from the computer game business in the PRC, let alone generate profit.

Online game, however, changed all this, as numerous companies made an enormous profit from their services, eventually leading them to go public. The present study attempts to show various causes which lead the online game industry in the PRC grow. In this attempt, various industrial data as well as incremental sales revenue of market leaders in this industry will be analyzed

The findings from this present study reveal that there are three phases in the online game industry in the PRC, which are namely, 1) Development of business architecture, 2) adaptation of freemium and microtransaction models, and 3) the expansion and adaptation to the era of smart phones.

By carefully examining available data, the present study attempts to reveal that optimization of the business model as well as product/service innovation, which are congruent to market conduction, allow the present success of the online game industry in the PRC. The role of the government in each phase will also be discussed.



The Present Condition of Computer Game Industry in Korea which has an Advanced Network Infrastructure

Mari YADA
Ritsumeikan University
ritsumei.yada@gmail.com

- Korea confronted a large economic crisis in 1997. At that time, President Kim promoted the construction of an advanced information technology infrastructure. As a result, the PC online game market has been expanding rapidly, and the Korean computer game industry has been growing.
- At present, there are many computer game makers which excel at the development of PC online games, including Nexon, NCsoft, Hangame (NHN Group). These companies make a profit in foreign countries including China, Japan, and the U.S.
- Korea has the most advanced mobile internet infrastructure in the world. Smartphones with 4G and LTE are presently used by most people in Korea. With the rapid penetration of smartphones, the market of game contents for smartphones has also been expanding greatly.
- Various casual and simple games are very popular among smartphone users.
- Many small companies develop games for smartphones, but recently big companies such as Nexon have noticed the potential business of smartphone games and have begun to make them by M&A and using their own IP.
- While PC online games contributed to the development of the Korean computer game industry up until now, from now on, smartphone games are going to promote the expansion of the Korean computer game market.
- Social games for smartphones have begun to be popular in Korea as well as in Japan.
- The present computer game industry's "Keyword" is "Smartphone, Social, Globalization (including new developing countries)" worldwide.

The problems with Japanese and Chinese Game Seclusion From the Outside World and In-depth analysis of the countermeasures

Shuo XIONG

Japan Advanced Institute of Science and Technology
xiongshuo@jaist.ac.jp

In recent years, the game industry is rapidly developing in many countries. The Japanese and Chinese game industries both have opportunities and problems, and while in both the most serious problem is "*Seclusion From the Outside World*" (鎖), the reasons for that are different. The Chinese game industry is currently in a development period, while the Japanese game industry is in its heyday. However, if the *SFLOW* problem is not solved, the Japanese game industry will decline and fall behind that of the Western industry, which some Japanese game designers such as Kojima Hideo^[1] and Inafune Keji^[2] have realized. Furthermore, in the case of the Chinese game industry, it is at risk of both missing out on its chance to improve and future development coming to a stop.

What is Sakoku?

Many Japanese people may feel confusion from or even unhappy with the word "*Seclusion From the Outside World*" when it is written in Chinese character "鎖国." In actually, there is some difference in the Chinese and Japanese meanings of this word. In Japanese, "鎖国 (sakoku)" is strongly related to the government behavior, such as the Dokugawa Bakufu. However, the meaning of the word "鎖国(suoguo)" is more general in Chinese, referring not only to the government's behavior, but the economy, market health, company short-sightedness and national character or mind.^{[3][4]}

Method

Firstly, field work on the Japanese game industry was carried out in Osaka.^[4] "Otaku" and "Slash" games, which are similar to each other, are mass-produced like e-novels but can be sold at a high price, even higher than famous games such as Assassin's Creed or Call of Duty. I also observed the customs and interests of many Japanese players, and the differences between them and other players in the world.

Next, in regard to the Chinese game industry, I will research ways to inform game companies how they could adapt to and sustain the Chinese market. For example, the phenomenon of *warm boiled frog*: Chinese players are more accustomed to paying smaller fees many times over an extended period of time, so they do not like pay a onetime high price.

In this lecture, I will analyze methods to internationalize Japanese game designers and players as found in my questionnaire data. The questionnaire has 59 questions in the Japanese version (answer n=22), 60 questions in the Chinese version (n=615) and 58 questions in the English version (n=17).

Results

In my lecture, based on the research data, I will detail the "sakoku" problems the Japanese game industry faces in four points: 1) Irrational game prices and excessive commercialization; 2) "Opposite phenomenon" (See Table1&2); 3) Weakness in innovative ability in recent years; 4) Low adaptability in the overseas market. There are also three points in regard to the Chinese market: 1)Policy, law and review mechanisms; 2) Rampant piracy versions; 3) Players' economic capability and consumption customs. These three points and the four Japanese points are closely connection to why Japanese games failed in the Chinese market.

Table1&2: Questionnaire result of "game cognitive ability"

Do you know the Starcraft series?

	Japanese	Chinese	Western
I'm the fans of it	4.5%	17%	35.3%
I have played it	0%	24%	41.2%
I heard about it	41.0%	53%	17.6%
I don't know	54.5%	6%	5.9%

What do you think of the Monster Hunter series?

	Japanese	Chinese	Western
I have played it	40.9%	38%	29.4%
I heard about it	59%	46%	17.6%
I don't know	0.0%	16%	53.0%

We can see the "Opposite Phenomenon" clearly; some games are popular in the rest of the world but unknown to many Japanese people, and the games which are famous in Japan may be unpopular in the Western world such as Monster Hunter.

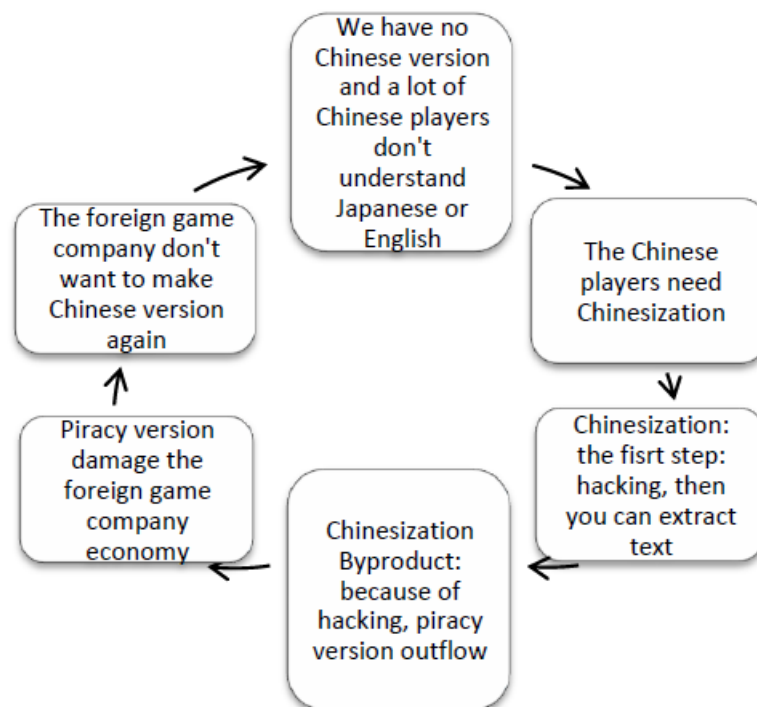


Figure3: Why the Chinese market is full of piracy versions

Conclusion

In order to change these conditions I propose planning methods which could improve the sustainable development capacity of the two countries' game industry. First, modify the existing problems, then, increase the East-Asian cultural influence throughout the world. In doing so, Japan companies also earn more money in the Chinese market, and strengthen communication between Japan, China and the world.

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Session 4: Education & Serious Game

Moderator: Inaba, Mitsuyuki

Elementary Gameducation: The attempt of teaching the experience of "making games" at an elementary school

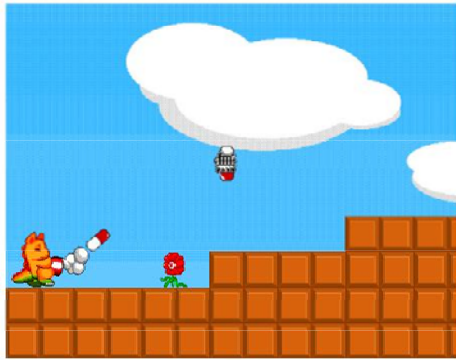
Yoshihiro KISHIMOTO
Tokyo University of Technology
kishimotoy@stf.teu.ac.jp,
Koji MIKAMI
Tokyo University of Technology
mikami@stf.teu.ac.jp

Gamification, which has been gaining popularity since 2010, is commonly defined as the implementation of thought processes used in the creation of game design or mechanics for use in societal activities and services outside the scope of games. Under the research theme of "taking advantage of games for education," we hypothesized that introducing a gamification class to students has a significant effect on improving academic achievement and motivation for learning. In order to verify this hypothesis, we designed and implemented a new gamification-style of classes. In this study, we have applied this in a practical environment, using elementary school students as test subjects.

In Japan, the New National Curriculum (effective April 2012) recognizes the need to foster creativity, critical thinking, and skills in expression/communication in the classroom. In this study, through a class where video games familiar to the children are used as the subject matter, we verified that when children were able to experience the fun involved with creating a product (which conversely cannot be experienced with the end finished product), there was a connection between gamification and motivation for learning. At the same time, we made an attempt to form a new class by applying gamification to the entire management of the class, referred to as a "learn while having fun."

We performed a 90-minute class for 52 people in two sixth grade municipal elementary school classes in Katakura, Hachioji, Tokyo, on November 14, 2012. In the first hour of the lesson (the "Thinking about Games" portion), each student had to think about and report on the following questions: "How do televisions and games differ?" and "Why is a game interesting?" In the second hour (the "Create a Game" portion), students were paired up two to a PC and each team attempted to create a scrolling action game. The children then participated in what is normally referred to in game production as level design, where they had complete freedom to arrange the placement of blocks, enemies, items, etc. throughout the stage. While this was occurring, the children were able to play the game with each other and freely exchange their impressions about the games. Through the use of gamification for classroom management, the concepts of "directing praise," "immediate feedback," "achievable goals," and "active participation" were introduced.

The results of the descriptive questionnaire after the class showed that all the students felt that "the class experience was fun," and, further awareness about "the importance of the study of the usual" and "the struggle of making things" comprised 40%. Given these results, it can be confirmed that utilizing a gamification theme which is familiar to children is an effective method for improving learning motivation in students.



The design of mentoring simulation game for training teacher's mentoring ability

Takehiro WAKIMOTO
Aoyama Gakuin University
wakimoto@aim.aoyama.ac.jp
Yuki FUKUYAMA
Waseda University
fywage@akane.waseda.jp
Tomoko AZAMI
IBM Japan,Ltd.
satoko8@jp.ibm.com

This study demonstrates the design of a mentoring simulation game for training teachers' in their mentoring ability. Mentoring is defined as a process in which a mentor (an experienced teacher) supports a mentee (a young teacher) to improve a mentee's teaching. (Kram 1998). Since the percentage of young teachers has increased, experienced teachers are expected to support them (mentoring). However, experienced teachers are not necessarily effective in supporting young teachers, and their teaching skills are not always reflected in the results of mentoring. Because experienced teachers' mentoring capability influences the result of mentoring (Kennedy 1991, Evertson and Smithey 2000), experienced teachers should receive training. However, as they are quite busy with their own work it is difficult for them to find the time for training in mentoring and acquiring the appropriate skills.

Therefore, we developed and evaluated simulation teaching materials with which experienced teachers can study mentoring. Two aims of introducing the simulation game are as follows: Firstly, by using a simulation game, experienced teachers can study autonomously. Secondly, they can gain various experiences in mentoring in a virtual environment. By reflecting on their learning experience, the experienced teacher can then make accurate judgments during an actual mentoring situation. These are the same benefits as learning using a game (Betrus and Botturi 2010), so it is assumed that these two aims can be attained by using a game.

The contents of the actual mentoring simulation game are as follows: In the simulation teaching materials, experienced teachers can experience mentoring episodes which often happen in an actual classroom (Figure.1). The important part of mentoring is to support young teachers so that they can grow and become independent. In the simulation game, experienced teachers choose their response to a young teacher from a multiple-choice question. Their choices are visualized in a graph whose axes indicate a young teacher's growth and independence, and then they are judged after the end of episode where the explanation of mentoring theory and the voice of the young teacher are displayed. The goal of this game is for the young teachers to learn autonomously through mentoring. The experienced teacher's action is demonstrated on the graph's 2 axes after the end of episode. If the experienced teacher's action for the young teacher nurtures a dependent relationship which prevents the young teacher from learning, the game is over. The experienced teacher can beat the game if he or she has chosen an action which stimulates autonomous study by the young teacher. Through the feedback the experienced teacher receives while playing, the mentoring simulation game enables experienced teachers to learn about mentoring methods.

The episodes which are used in the game were collected from interviews with teachers, and then the fundamental flow of the game was designed (Wakimoto et al. 2013). The presentation will focus on the design of the game.

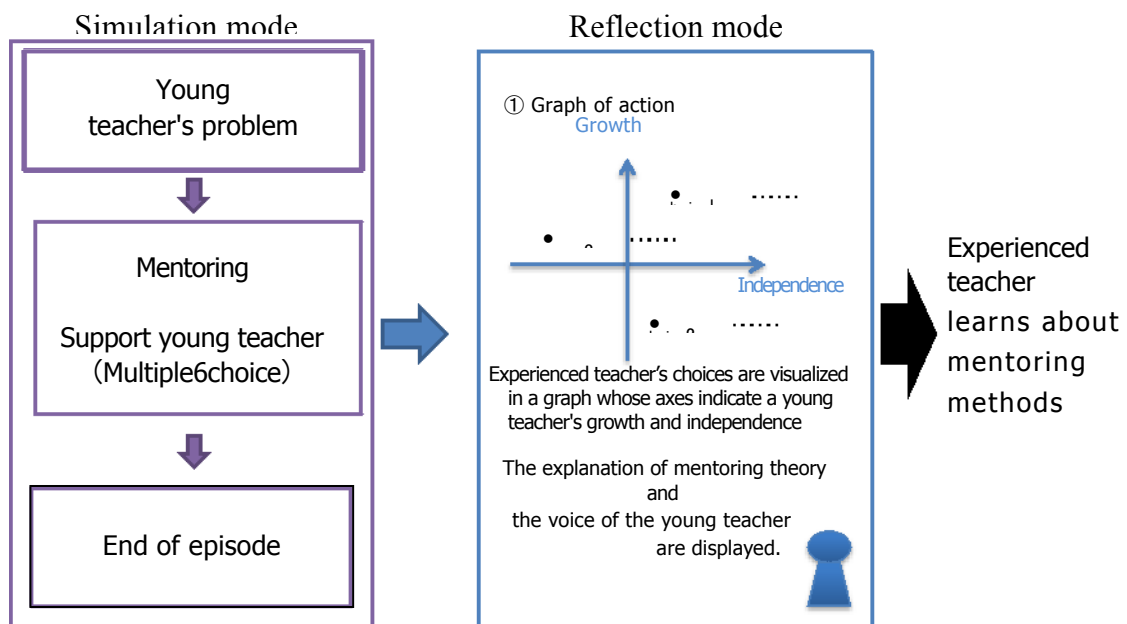


Figure.1. Mentoring simulation game

Collaborative game playing support by learning of Japanese traditional culture in the 3D metaverse

Michiru TAMAI
Ritsumeikan University
ps0081pp@ed.ritsumei.ac.jp
Mitsuyuki INABA
Ritsumeikan University
inabam@sps.ritsumei.ac.jp
Koichi HOSOI
Ritsumeikan University
hosoik@im.ritsumei.ac.jp

Akinori NAKAMURA
Ritsumeikan University
nakamu-a@im.ritsumei.ac.jp
Masayuki UEMURA
Ritsumeikan University
m1012u@ce.ritsumei.ac.jp
Ruck THAWONMAS
Ritsumeikan University
ruck@ci.ritsumei.ac.jp

This research introduces collaborative game play supporting the learning of Japanese traditional culture in the 3D metaverse. The metaverse is a platform where numerous participants, through avatars, can share in a virtual 3D space online. It also can create a situation similar to the real world through the virtual space and interaction between avatars. These features of the metaverse are beneficial to the implementation of a study platform for those who cannot visit a country or area.

First, we give a summary of a learning environment built as a part SecondLife (SL). There are real cultural properties such as a Shinto shrine, Noh stage and Exhibition halls. We also implemented a mechanism to allow participants to experience real culture such as a Noh dance performance or the ritual practices of visitors to shrines. Next, we show the results of collaborative game playing. In this experiment, both international students (newcomers) and Japanese students (old timers) participated. Both talked about the culture and customs surrounding the Shrine while searching together for a virtual space based on a set of rules. In the process, the situational cultural learning between newcomers and old timers was enabled. Finally, we discuss the advantages and limitations of the learning process in our metaverse platform in terms of collaborative game play simulating Japanese culture.

Session 5 (Panel) : Arcade and Preservation

Organizer: Hosoi, Koichi

Mapping the Game Centre Space: An Analysis of Arcade Game Cabinets

Jérémie PELLETIER-GAGNON

Wako University

jeremie.p.gagnon@gmail.com

The recent explosion of Japanese works dedicated to digital game research has contributed to debunk popular suspicions that had previously prevented a thorough study of the media. Researchers Yahiro Shigeki and Kato Hiroyasu have confronted the “bad influence discourse” (akueikyōron) that plagued early video game discussions and denounced the unconvincing research methodologies used to support it. In particular, Kato's study focused on the game centre environment—a venue once considered as a hotbed of criminality—and revealed a rich web of positive social interactions involving youth subculture. He demonstrated how both digital games as a common language, and the game center as a neutral space provide youths with a certain freedom to reinvent frameworks of interaction outside the social structures of the school and the family. Such insider perspective successfully repositions arcade gaming in Japan as a practice worthy of critical attention within game studies.

Building on those conclusions, this paper aims at exploring new avenues in the study of the game center space and the games they house. While home console games are frequently the object of critical investigation, the machines and software housed in game centers seem to fall under researchers' radar, resulting in a relative absence of theoretical framework to address their specificities. As a way to shed more light on the matter, this presentation's main focus will be the analysis of both the game cabinet and software as a play space assemblage structuring the player's experience and providing different social affordances. Taking the trading card arcade game genre now commonly found in most game centers as a case study, we will see how the cabinet's design and the game's mechanics combine to provide a more exclusive game experience—an imaginary closed space within the public venue. Game design and technological innovations such as personalized card-based strategies and nation-wide competitive play over the Internet provide the elements that partly shape today's game center experience, where local structures are being increasingly challenged by national imagination. This paper will hopefully contribute to a greater understanding of the Japanese game center video game culture and inspire new avenues of inquiry in the study of arcade gaming.

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Pachinko: Adaptation in the Game Industry

Keiji AMANO

Seijoh University

amano-k@seijoh-u.ac.jp, keiji.amano@gmail.com

Geoffrey ROCKWELL

University of Alberta

geoffrey.rockwell@ualberta.ca

Pachinko, as a game of chance, is one of the most popular games in Japan. The entire size of the leisure industry in Japan is about 65 trillion yen (720 billion US dollars), and pachinko accounts for a third of that. However, it is rarely discussed not only in game studies but also in other academic contexts in the West or in Japan, largely because it is an embarrassing form of gambling that hasn't had much success outside of Japan. This presentation will look at pachinko from a game studies perspective focusing on the following;

1. We will describe the game,
2. We will look at the economics of pachinko, and
3. Look at how the industry is responding to a steady decline in player numbers.

1. What is pachinko?

In pachinko the player fires steel balls that arch over the vertical playfield to the drop through pins, spinners and other obstacles. Unlike pinball, the goal is not to keep the balls in the playfield, but to get balls into special “win pockets” or “start pockets” that win you more balls or start a video-slot game to win Jackpot. Therefore, the player fires balls continuously so that they fall through with the greatest likelihood of dropping into the win pockets. The player does this by controlling the handle which launches the balls. Finding a proper balance in shooting strength is the key to playing, as not turning the handle enough will cause the balls to stay put, while turning the handle too far will send the balls directly into the exit chute. You turn the handle to the left and right until you find the right shooting strength. In addition, video-slot minigames also play an important role. Video-slot games and digital sound technology were introduced into pachinko to broaden the expressiveness to attract more players.

2. What are the economics of pachinko?

The modern history of pachinko in Japan started in 1920-30's with imported Corinth games and wall machines from Europe and US. Instead of using coins or tokens, pachinko uses steel balls. Today there are a large number of Pachinko parlors, but the golden age was around 1952 when there were 38,700 parlors (in 2012, there was less than 12000 parlors). The peak population of Pachinko was recorded in 1995, with 29 million players compared to 12.6 million in 2012. The cause of the decline in player numbers has been blamed on diversification of entertainment, loss of interest among youth in what is considered an old-fashioned game, revised laws, and public concern about so-called “pachinko addiction.”

It difficult to accurately grasp the situation of the pachinko industry as a whole, since data and information are limited to the Japan Productivity Center's "White Paper on Leisure" and annual report, and "Control Over the Pachinko Industry" by the National Police Agency. Detailed data especially about the pachinko parlors that show the actual business conditions does not publicly exist. Therefore, in this presentation we will discuss the manufacturers and their marketing strategies. How are pachinko manufacturers responding to the decline in numbers of players?

3. How is the industry responding to declining interest?

There are two major ways the pachinko industry is creatively adapting to declining interest:

- Manufacturers are licensing fashionable content. Using popular singers, famous anime characters and popular TV dramas in the video-slot screen allows the industry to explore ways to attract new customers with transmedia content.
- Manufacturers are establishing holding companies or capital alliances to connect with existing game software companies to unite their know-how to make pachinko more game-like. At the same time they are trying to encourage video game players and those who never played pachinko into pachinko parlors for an increasingly videogame-like experience.

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Game Emulation: Testing Famicom Emulation

Koichi HOSOI
Ritsumeikan University
hosoik@im.ritsumei.ac.jp
Geoffrey ROCKWELL
University of Alberta
geoffrey.rockwell@ualberta.ca
Kazufumi FUKUDA
Ritsumeikan University
fukudakz@gmail.com

Jaakko SUOMINEN
University of Turku
jaasuo@utu.fi
Akinori NAKAMURA
Ritsumeikan University
nakamu-a@im.ritsumei.ac.jp
Shunsuke KAMADA
Ritsumeikan University
find.the.blue0416@gmail.com

Emulation

Emulation is one of three strategies commonly discussed in the videogame preservation literature (Feeney 1999. See also Lowood et al. 2009; Swalwell 2009; Guttenbrunner et al. 2010; Barwick et al. 2011). Other strategies include preserving the original technology (consoles and cartridges) and migrating games to new platforms. A related strategy of preserving secondary materials from recordings of gameplay to game design documents is also important, but doesn't actually preserve the game so it can be played. All four strategies are important and institutions around the world including Stanford University, the British Library, the Berlin Computerspielemuseum and the Smithsonian have been exploring them. Emulation offers the greatest promise as it is less expensive than completely reprogramming games on the one hand, and more likely to provide long term preservation than preserving hardware that was never designed to survive over the long term on the other (for a critical discussion about the need of emulation in game preservation, see Newman 2012).

There are, however, problems with emulation. The first is that emulation is illegal under most circumstances. As a Nintendo official web page on "Legal Information (Copyrights, Emulators, ROMs, etc.)" puts it, "The introduction of emulators created to play illegally copied Nintendo software represents the greatest threat to date to the intellectual property rights of video game developers."¹ The second problem is that emulators themselves need to be maintained. It is no use developing an emulator to preserve games if the emulator itself can't be preserved.

Testing Protocol and Preliminary Results

Important to emulation is testing the fidelity of emulators. For this project we developed a protocol for testing emulators by playing the same games on the emulator and a control system (original or other emulator). The gameplay was videotaped and then merged so that we could watch the same game on the emulator and control on the same screen. These were then studied to see what differences there are, if any. We are happy to report that there isn't much of a difference between the Nintendo Emulator and the original machine (NES). The graphics, sounds, movement of objects on the screen, and speed of play were almost exactly the same. The players when interviewed also reported that they couldn't tell the difference. In a second test we compared the Emulator to the Wii Virtual Console versions of the same games. In this experiment, we used a CRT monitor for the Emulator as that is what players at the time would have had, but the Wii was designed for LCD monitors. Comparing the Emulator with a CRT monitor to the Wii Virtual Console we found that the Wii's screen's color brightness is darker than the Emulator. Further, because the Wii controller is different from that of the NES, the physical experience of the player holding a controller is different.

¹ <<http://www.nintendo.com/corp/legal.jsp>> Retrieved Feb. 13, 2013.

The Nintendo Famicom Emulator

The RCGS has dealt with the legal issues through an innovative collaboration with Nintendo. In the presentation we will demonstrate this emulator that has to be plugged to the original Nintendo Entertainment System (NES) to be run. The original NES provides the authentic game controllers for the emulator.



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International cooperation and development of the game preservation activities in Japan

Koichi HOSOI
Ritsumeikan University
hosoik@im.ritsumei.ac.jp
Masayuki UEMURA
Ritsumeikan University
rcgs@st.ritsumei.ac.jp
Akinori NAKAMURA
Ritsumeikan University
nakamu-a@im.ritsumei.ac.jp
Kazufumi FUKUDA
Ritsumeikan University
fukudakz@gmail.com

1. Development of public policy on game preservation in Japan

The Agency for Cultural Affairs and the National Diet Library have signed the "Agreement on secure succession of valuable cultural sources in Japan to the next generation (May 2011)." This agreement also included the promotion of game preservation as one of the materials that have historical and cultural value for Japan. In addition, the Agency for Cultural Affairs has been implementing the "Project to construct Media Arts Digital Archive (2010-)" and the "Project to construct Media Arts Information Base / Consortium (2010-)" as a more aggressive game-related policy. In the "Media Arts Digital Archive" project, especially, various digital archives of Japanese Manga, Animation, Games, and Media Art (defined by the agency as "Media Arts") are progressing.

2. Framework for game preservation as a public policy

Ritsumeikan University Center for Games Studies (RCGS) has joined the "Media Arts Digital Archive" project as a leader in the game field, and is advancing towards building a comprehensive digital game archive by constructing an integrated database of other fields. We decided to limit the object of the digital archive to console games, PC games, arcade games and mobile games for the time being. Furthermore, we proposed that the content and level of the archive should advance step by step; namely: 1) Basic Database, 2) Model Archives and 3) Self-Archiving System. At present, we think that the following issues should be resolved to construct a comprehensive digital game archive: 1) the difficulties in building the Basic Database; 2) the selection criteria and objects to be collected in the Model Archives, the range of related information of games (in the middle of primary and secondary sources), and a specific method to preserve games for the long-term; 3) the format and content of the Self-Archiving System that leads game developers and companies to want to voluntarily continue with building the archives.

3. Toward international cooperation of the game preservation activities

Recently, people around the world are becoming quite active in the "game preservation endeavour." Many enthusiasts as well as researchers are particularly interested in preserving console and handheld game titles. We are continuously discussing global cooperation with the Library of Stanford University and the UK National Video Game Archive. In the discussion, we have organized the issues as follows: 1) establish an international standard ID for game titles, 2) organize all game titles by genre or some other

category, 3) make an experimental emulator for game preservation, 4) establish a standard of Model Archives.

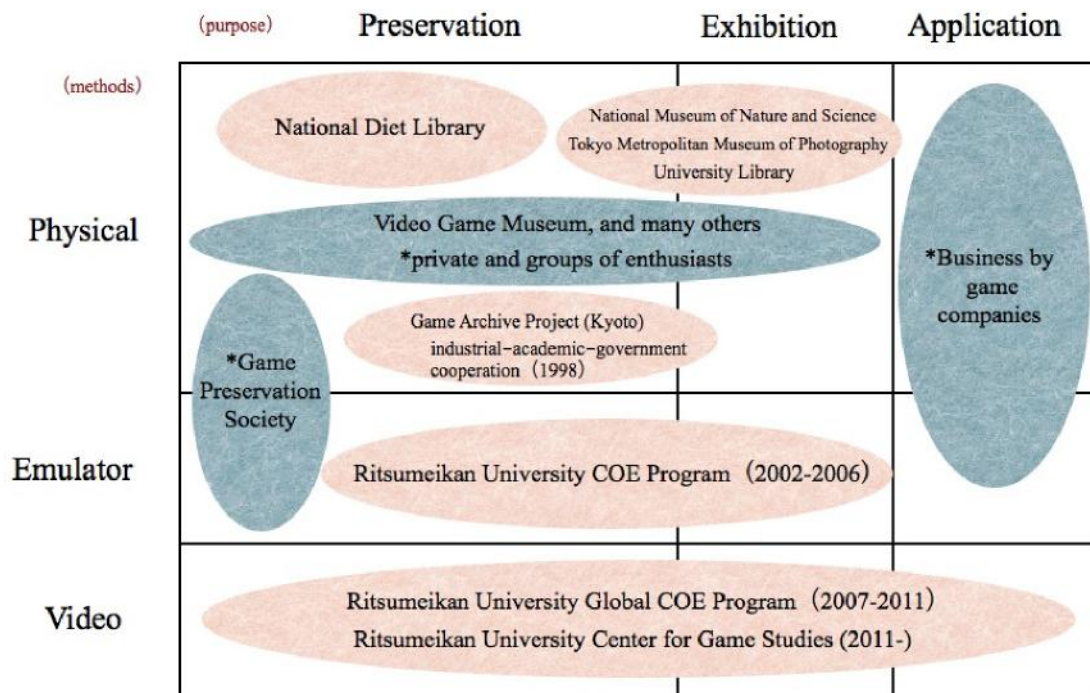


Fig. Purpose=Methods mapping about game preservation
note: * are not public sectors

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Session 6: Game Development & Localization

Moderator: Watanabe, Shuji

Cultural Game Development: An Investigation into the Effects of Gamer Tastes and Cultural Influence in the Development of *Valkyria Chronicles* and *Mass Effect*

David HOLMES
University of Alberta
dmholmes@ualberta.ca

While video games are popular in both Japan and North America, there exist differences between games developed in the two regions. This paper will start by examining some of the differences as discussed in the literature. Some have suggested that these differences are not only the result of differing tastes between individual consumers, but also the cultural differences that remain between Japan and North America (Ngai 2005). North American games tend to emphasize the value of the individual with clear conflicts between what is right and what is wrong, and characters that embody this conflict. Japanese games prefer to emphasize the value of hard work and social values, and conflicts based on circumstances that force characters to make either good or bad choices regardless of their position as either the “protagonist” or the “antagonist” (Ngai 2005). In addition, the relative popularity of video games in Japan among women may account for the proliferation of “cute” characters and storylines that do not appeal to North American gamers who, despite recent shifting trends, remain predominantly male (Entertainment Software Association 2012; Ngai 2005; Sakey 2004; Tsurumi 2000). Studies have also shown that Japanese gamers prefer to focus on completing tasks as a process of development and a reflection of characters, while North American gamers prefer completing tasks that grant freedom in discovering possibilities. American games have traditionally preferred to unveil story through either direct or indirect interaction whereas Japanese games have traditionally utilized cut scenes, full-motion videos, and non-interactive dialogue to reveal narrative progression to the player. Japanese gamers also prefer character attachment through characters’ dialogue, actions, and background (Ngai 2005).

This distinction between Japanese and North American gamers is reflected in the game designs between Japanese and North American developers. We will examine two case studies that exemplify Japanese and North American design. The game *Valkyria Chronicles* was developed and published by SEGA in 2008. It features third-person RPG shooter gameplay with tactical squad combat in a setting reminiscent of World War II era Europe. Players take control of Squad 7, a misfit squad of soldiers from the tiny Kingdom of Galia caught in between the warring behemoths, the Atlantic Federation and the Eastern European Alliance, guiding them through a series of missions to drive the invaders out of their homeland. *Mass Effect* was developed by Canadian developer Bioware and published by Microsoft in 2007. Like *Valkyria Chronicles*, *Mass Effect* features third person RPG shooter gameplay with tactical squad combat. Players are Commander Shepard, the first human admitted to the galactic organization known as the Spectres, as they investigate a troubling galactic threat. Narrative notwithstanding, the two games sound similar, but in reality they provide quite different experiences. *Valkyria Chronicles* tells its story through a set of full-motion videos that players watch in between gameplay missions, whereas *Mass Effect* integrates its narrative into gameplay through its use of an interactive dialogue and event system. This paper will analyze the difference in development and design, specifically investigating the difference between the narrative structures and other design choices of *Valkyria Chronicles* and *Mass Effect* as the by-product of both gamer tastes in their respective countries, as well as the cultural influences on the games’ development.

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Localizing Culture in *Gyakuten Saiban*

Stephen MANDIBERG
University of California, San Diego
smandiberg@ucsd.edu

Japanese video games have regularly found their way to European and American shores since the 1980s through practices of video game localization. Not simply translation, localization begins with linguistic translation of the game's text, but extends to the alteration of graphical, audio, and gameplay elements (Chandler and Deming 2012; Bernal-Merino 2007; O'Hagan and Mangiron forthcoming 2013). Through localization games are not simply disseminated in a different language, as through translation, but digitally altered so that they fit within what the marketers perceive as the local market's distinct tastes. Despite the extensive alterations that occur through localization players in the North American and European regions 'know' Japan through localized games.

Using the specific example of Capcom's *Gyakuten Saiban* (2001), which was localized as *Phoenix Wright: Ace Attorney* (2005), this paper begins by showing the impossibility of (truth)fully knowing Japan through localized games. However, through interviews with both the producer and translator that localized the game, discussion of the localization process, and close textual analysis of the Japanese and English localizations this paper will then argue that understanding the localization process and learning to play the remainder, or trace, of the original that exists within any localization can lead to a better understanding of both the specificity of Japanese video games and a partial, fragmented, but productive understanding of Japan.

Phoenix Wright: Ace Attorney is typical in that the localization erased what was a visible Japanese locale; it is also typical in that this erasure was incomplete. Because of the monetary and temporal limitations of the localization process the original culture is never fully replaced: in *Phoenix Wright: Ace Attorney* cars drive on the 'wrong' side of the street, small Japanese temple-villages exist in California, and sick people wear masks, all of which are everyday things within Japan, but distinctly odd within California. Thus is born the trace, a remainder of the process of translation.

The concept of the trace was originally (and enigmatically) theorized by Jacques Derrida and translated/elaborated by Gayatri Spivak as the trace or track of the meaning that is always already absent under a play of signifieds (Derrida 1976, xvii). The concept of the trace has been more recently utilized in the introduction to the journal *Traces* that pushes for "a form of criticism based on the acknowledgment of the traces of the other in a specifically local text" (Sakai and Hanawa 2001, xi). I argue that the structurally necessary translational ruptures within video games like *Phoenix Wright* are not mistakes, but can helpfully push European and North American players into contact with the game's originary Japanese culture. Learning to play with the trace is not simply a necessary part of playing games under translation, but rather it can lead to a productive hybridity.

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Career Development Among Japanese Female Game Developers: From the Perspective of the Diversity of Creative Individuals

Masahito FUJIHARA
Senshu University
fujihara@isc.senshu-u.ac.jp

The number of female developers in the gaming industry is extremely low. The proportion of female developers out of the total number of developers stands at 12.8% in Japan (Fujihara 2010), 11.2% in the USA (Gourdin 2005), and 4% in the UK (Skillset 2009; Prescott and Bogg 2010). Similarly, this ratio has been low at 10%–15% in Canada (Dyer-Whitford and Sharman 2005), and less than 10% in Australia (Geneve et al. 2008). Game developing is a high-risk, high-return business. Therefore, game publishers have been releasing only hit titles of series and remakes in similar genres. Recently, the domestic consumer gaming market has been shrinking. In the gaming industry, diversity is one of the most important management issues, owing to the availability of a wide variety of entertainment. Gaming needs to constantly attract people of all ages around the world.

Therefore, this study's purpose is to clarify the nature of career development among female game developers. The study also aims to analyze the characteristics of behavioral attitude and career development of female developers in the Japanese gaming industry. The main topics of this study's interview survey included their working style, their perspectives on their current work, and career awareness.

This study followed a one-to-one semi-structured interview format and employed qualitative methodology. The survey was conducted on 21 female game developers who had more than five years work experience in the Japanese gaming industry. Interviews were conducted over three months, each one lasting from 42 to 108 minutes (75 minutes on average for each interviewee). After obtaining the consent of the interviewee, the interviews were recorded by an IC recorder and were then transcribed verbatim. The number of letters in the transcripts was about 400,000 in Japanese (21,000 on average per interviewee).

This study found that Japanese female game developers display the following ten characteristics in relation to their careers: (1) They continue to challenge the market by behaviorally adapting to their environment and role. (2) They enjoy work with a positive frame of mind. (3) They have the desire to lay more emphasis on the quality of work rather than the quantity. (4) They display their creativity in their organizations. (5) They reflect on their careers objectively. (6) They work on explaining themselves to others. (7) They manage various relationships with others. (8) They have the will to do anything for the future through trial and error while treasuring the present. (9) They do not conform to gender stereotypes. (10) They create new environments for career development.

In conclusion, female game developers do not have clear career goals; however, they are able to change their situation, and then evaluate and manage it. Therefore, it is important that female game developers have diverse role models.

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Session 7: Japanese Game Culture

Moderator: Rockwell, Geoffrey

Visual Novels Outside Japan

Domini GEE
University of Alberta
gee@ualberta.ca
Geoffrey ROCKWELL
University of Alberta
grockwel@ualberta.ca
Sean GOUGLAS
University of Alberta
sean.gouglas@ualberta.ca

According to the Anime News Network, in 2006 nearly seventy-percent of PC games in Japan were visual novels. However, Japan's visual novel market is oversaturated, leading developers to expand overseas. This paper will look at:

- the development of the visual novel market in North America,
- attitudes in North America towards visual novels, and
- localization obstacles in the introduction of visual novels to Western markets.

Despite overseas' players having an interest in Japanese culture it is difficult for visual novels to succeed commercially in the West. Though popular visual novel series such as Ryukishi07's *Higurashi: When they Cry* have met with relative success, pure-text visual novels typically do not sell well, so Western companies are hesitant to localize them unless they contain other gameplay elements. In this paper we will survey the commercial and fan localizers who are adapting visual novels. We will briefly demonstrate a localized version of *Higurashi* for those who don't have experience with such games.

What are challenges facing visual novel development in North America? We hypothesize that gamers in NA expect quick, interactive payoffs in games and are not accustomed to the long winding narratives of visual novels. There are also differences in attitudes towards reading. As Pickett observes, one of the biggest hurdles visual novel localizers face is demanding gamers to read (2012). Japanese and North Americans approach the concept of reading differently. To lure Western gamers into even trying visual novels there usually has to be interactive elements to break up the reading as one finds in the *Ace Attorney* series. Otherwise, a common response from gamers is "If I want to read, I'll read a book".

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Game audio revolution theory: Early research on the history of video game audio in Japan

Takashi OBANA
Chubu University
mc@banabana.org

The recent years have witnessed a growing number of attempts at narrating the history of video games in Japan. However, this is still a developing process, and there are grave concerns over the particular lack of historical perspective necessary for discussing game audio. If we look outside of Japan, we see that there was an attempt to discuss game audio history from a technical perspective by Karen Collins of the University of Waterloo in Canada. Despite such research efforts, many of the studies on early video games conducted overseas focus mainly on North American video games, particularly those by Atari, while those focusing on the dawn of video games in Japan remains extremely few (this being the result of the differences in the establishment process of video games between Japan and North America).

For that reason, the current study aims to look at the relationship between game audio and other music genres to investigate the technological evolution of early game audio as well as the textual changes. Music from major games will be analyzed, focusing on the following two issues:

1. How was game audio positioned within early video game development?
2. What were the musical characteristics of early video game audio?

The scope of this study ranges from arcade and computer games to family video games from the latter half of the 1970s to the first half of the 1980s. Game audio in Japan went through a major transformation between the latter half of the 1980s — when music was starting to be written by “composers” who had won reputation in other music genres (such as Koichi Sugiyama, Ryuichi Sakamoto and Jo Hisaishi) — and the 1990s. The purpose of this study is to clarify the positioning of early video game audio in that period in terms of music history. To that end, games produced by Namco (now Namco Bandai Games) and Nihon Falcom Corporation of that period will be looked at, with a focus on their context.

Where is the indie game of Japan?:
Conventions and creativities formed by technology, distribution, culture

Shin IMAI
University of Tokyo
aka.shinimai@gmail.com

Recently in the video game industry, indie games, which are created by independent developers, have become too large to ignore in respect to both their creativity and industrial scale. However “Japanese indie games” have hardly become a popular topic in Japan, and there is no consensus on what indie games are in Japan.

This presentation aims at defining “Japanese indie games.” It explores which parts of the Japanese game industry are “indie,” and why these parts get overlooked. Furthermore, I argue about the particularity and creativity of “Japanese indie games” from the perspective of technology, distribution, and culture.

Video games are greatly influenced by the evolution of technology, including improvements in hardware and the development environment. This is especially true in Japan, and as the result of the popularity of game consoles, most independent developers have engaged in relatively niche markets including the PC platform.

In time, alternative distribution routes developed such as dojinshi conventions, the internet, and online services, with each one nurturing its own unique cultures. They are called “doujin games” and “free games” respectively, each have different conventions and aesthetics. While doujin games are mainly distributed at dojinshi conventions or by doujin shops as packaged software, free games are distributed as downloads online.

The former features genres such as visual novels, shoot’em up, and fighting games, while the latter more frequently uses Japanese RPG styles. However, both tend to be oriented towards existing game genres rather than trying to create something new. Furthermore, both cultures have some particularities such as fan fiction, parody, and anti-commercialism which take different forms in Japan than in West. As a result of these distinctive traits, doujin and free games as “Japanese indie games” get overlooked by the press and mass media.

However, this presentation reveals how creative they are and concludes they definitely are Japanese indie games. Indeed, by referring to previous cultural studies on art and music, I explain how they can be creative despite these particularities.

An analysis of a suppression factor in game self-production in Japan
-from the view of “non-economic” rewards in game creation activities

Nobushige HICHIBE

Foundation for MultiMedia Communications
natsunokumo2008@gmail.com

Yuhsuke KOYAMA
Shibaura Institute of Technology
yuhsukek@gmail.com

Making a game title for a console game machine has a considerable cost, so game makers tend to imitate past popular titles because they can expect certain sales beforehand. This behavior, however, could inhibit game creators from coming up with new and innovative ideas. Nevertheless, the game industry always needs fresh titles that can attract users who are fed up with the flood of similar games. Therefore, it is important to cast an eye on the role of game self-production, which brings new talent, work and expression to the game industry. This is especially true when considering the situation in America and in European countries, where independent game production exerts a positive influence on the gaming industry.

This paper, focusing on game self-production in Japan, examines its characteristics and the factors in further expansion from the view of creation, circulation and consumption of game titles. In particular, this paper considers the motivation behind game creation. Creators of self-produced games gain mainly non-economic rewards such as the enjoyment of game creation itself, interaction with others, and recognition from their peers. It is more difficult, however, to obtain these rewards compared to other creative activities such as drawing Manga or composing songs. As this is one of the suppressive factors, this paper suggests that increasing non-economic rewards will be a valid measure for the expansion of game self-production in Japan.

