

From Preservation to Actions: The Best Cases of digital game exhibitions in Japan

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ABSTRACT

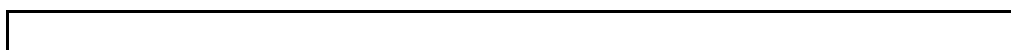
The present study looks at three cases of utilizing cultural assets related to digital games in various forms: the one which are organized by Joyo-city government, the other by Ritsumeikan Center for Game Research and finally by in collaboration with Bandai Namco Entertainment. These cases exhibited the importance of involving various players surrounding digital games in order to fully realizing a full potential of what these cultural assets can offer. The exhibit further shed the lights on the general interests that are drawn from the public regarding the digital games.

Keywords

Digital Game Preservation, Interactive Exhibition, Fans

INTRODUCTION

The present article describes three special exhibitions in which Ritsumeikan Center for Game Studies (Hereafter, RCGS) was heavily involved. The one is organized by a local government, the other by RCGS itself and finally the one supported by the corporations (Bandai Namco Entertainment). The involvement of different party in the exhibition depicted the traits of specific differences, depending on the type of insinuations which are involved in creating the exhibition. Despite the differences, the exhibitions are considered as vitals from their own perspectives.



CASE ONE: EXHIBITION OF TOY AND VIDEO GAME MACHINES AT THE JOYO HISTORICAL AND FOLKLORE MUSEUM -"CONTINUE-90-YEAR HISTORICAL OF" GAMES "-

This exhibition was held at Joyo City Historical and Folklore Museum, which located at Joyo City Culture Center in the south of Kyoto Prefecture from July 7 2018 to September 2. By exhibiting mainly video game machines at this exhibition, it is shown that play has shifted from analog toys to digital video game machines since the emergence of video games. The exhibit also depicted that the toys and video game machines can be a medium for communications among players.

Anticipating that the visitors for the exhibit ranges various generations, there were 937 types of toy and video game machines from the late Showa period (1975-1988) to the end of the Heisei period (1989-2019), totaling 1,079 items.



Background of the Project

In the summer of 2008, an exhibition called "Showa Toys and Children's Play" was held at this museum. The exhibition was designed to commemorate the donation of toys and video game consoles when a toy store in Joyo closed the year before. The donated materials included several video games machines such as "Family Computer" and "Super Nintendo", but were not exhibited at that time. "CONTINUE-90-YEAR HISTORY OF" GAMES " was considered to be continuation to that exhibition.

In the past, several public museums defined under the Museum Law in Japan had held exhibitions of toys; however, exhibitions centered on video game machines are rare. On the other hand, national and prefectural museums and private museums occasionally hold large-scale video game machine exhibitions. This museum is an administrative agency belonging to the Board of Education and an educational institution. By holding an exhibition of toys and video



game machines by a public museum like Joyo City History and Folklore Museum, it was intended to demonstrate that playthings such as toys and video game machines could be treated as a material of the museum, hoping that such an attempt would

further stimulate the movement to pass on the game culture before it is too late. In addition, there are no exhibitions dealing with video game machines in public museums owned by municipalities, and this museum was the first attempt.



The Feature of the Exhibit

It is aimed at young people in their teens and twenties who are thought to be highly likely consider toys and videogames as the subject of research in the future when they enter the college. In addition, it was assumed that people in their 30s and 40s who had been living their lives with the transition and development from toys to video game machines will visit. The concept of the exhibition is to “play with everyone”. This concept was born as a result of thinking and consulting with Masayuki Uemura, the inventor of Famicom and chair of RCGS. With this concept, the exhibited materials are set to be as unbiased as possible in order to meet the needs of all generations. Thus, every generation of console game machines, and desktop computers were displayed along with clones of Atari’s TV pong and Nintendo Family Computer. Besides this, Arcade games Table-Top Space Invaders machines were also displayed. In total 937 kinds of toys and video game machines from the early Showa period (around 1930) to the end of the Heisei period (2018) reached a total of 1,079 items.

Category	Types	Items
Videogame Machines	275	275
Software cartridges	412	414
Books and Magazines	18	43
Videogame Peripherals	64	92
Toys	168	255
Total	937	1079

One of the highlights is that it exhibited books and printed materials such as video game magazines and promotional leaflets. For interactive exhibitions, PC Engine and PlayStation 2 were displayed, which visitors are allowed to play. Besides this, the special interactive exhibit that demonstrates the core of game designs, difficulty adjustment called “Difficulty Synthesizer” was developed for the special exhibition by students and Professors at College of Image Arts and Sciences, Ritsumeikan University.

Furthermore, a special survey on video games was conducted for this exhibition, and a corner was set up near the entrance of the exhibition hall where visitors can write their memories of play on a wall with the unnecessary display panel facing down. Visitors, then can write their own memory about video games and played it on the wall. As a result, 285 video games questionnaires, and 512 memory memos were collected.

Participants

Thus far, the museum has held a total of 56 exhibitions including this one (including sponsorship and co-sponsorship). Among them, the maximum number of visitors is 6,240, and the average number of visitors is 1,799. The number of visitors to this exhibition was 4,064, ranking third in the history. The reason for this is that toys and video game machines are more familiar, familiar, and interested compared to so-called general historical heritage such as tumuli, ancient temples, and ancient documents. The age range distribution being 43.7% being 30 to 49 years old, followed by 20 to 29 years old at 23.0%. The gender distribution being 66.7% males and 33.3% females. 48.1 % came out side of Kyoto, which is unusual for the exhibition held in this museum.

Funding and Budget

The operating expenses are determined based on the annual revenues of Joyo City, and the appropriate amount will be allocated as a budget after an annual assessment. The museum holds four exhibitions a year. The budget that can be used for exhibitions in Fiscal Year 2018 is about 4,015,000 yen. Thus, for each exhibition, approximately 1,030,000 yen was allocated. The actual expenses for the exhibition are shown in the table below, excluding miscellaneous expenses such as consumables. Table 3 summarizes the breakdown of printing and bookbinding costs. In addition, the special lecture about videogames and toys were held, in which some video materials were used.

Communication transportation costs Communications and transportation Expense:

For this type of the exhibition, the material displayed tend to be fragile. Thus, the materials may be damaged during the transportation from the owners to the museum. In order to avoid such circumstance, the budget is allocated to outsourcing the process to specialized art carrier. Usually, the contract of the museum includes the transport of exhibition materials and the display work, and the same contractor is responsible for transport, exhibition work, withdrawal work, and return.



Exhibit lump sum Insurance

Expenses incurred when the exhibition materials are damaged during transportation or exhibiting the materials due to accidents or disaster. At this exhibition, 35,000 yen, which is 0.07% of 50 million yen, was paid as an expense, and 50 million yen, an insurance amount, was allocated to each exhibition material. The allocated insurance amount will not be notified to the owner. In addition, the exchange with the insurance company will be charged along with the communication transportation fee, because the exhibit material carrier will act on behalf of the company.

Subcontracting Expense

Expenses are incurred for subcontracting the production and displaying as well as removable of the related materials such as exhibition stand, signboards and commentary panels. Additionally, adjustment of lighting equipment in the exhibition room is outsourced to a specialist. These materials were created based on the design provided by the director of the exhibit.

Printing Expense

This is an expense incurred by designing and writing posters, pamphlets and exhibition catalogs for exhibitions. In this exhibition, posters (300 copies of single-sided printing, full-color B2 size, 150 copies of B3 size), pamphlets (4000 copies of double-sided printing, full-color A3 size of 4000 copies) and exhibition catalogues (400 copies of double-sided offset printing, full-color A4 size of 400 copies) were created. The first edition of the exhibition catalog was sold out in the middle of the exhibition period (Sunday, August 5, 2018). By the end of the exhibition, there were several exhibition-related projects, and the number of visitors was on a rising trend with each passing day. Therefore, the catalogue went reprint after about 20 years. There were 700 copies of the exhibition catalogs, including reprints, at this exhibition. Of these, 266 copies will be presented free of charge to related and cooperating institutions and cooperators. In addition, 8 copies for staff, 10 copies for permanent preservation, and 4 copies for business / sample will not be sold. As a result, 412 copies were sold in total.

Challenges

As a fundamental problem, there was no information available in regard to various video game materials owned by the hobbyists. Generally, materials that are recognized as cultural properties are listed and managed by local governments and museums, and books that list what materials are held are often issued in Japan. However, as for toys and video game machines, only a few are designated as cultural properties, making it difficult to find the owners. Thus, we decided to approach those people and organizations that seem to host video game event frequently through SNS, and ask them to introduce owners of the desired materials. Since then, the words were gradually spread and the proprietor has gradually propagated, such as introducing another proprietor. All owners thought that video game consoles would be recognized as historical materials if their materials were to be exhibited at museum exhibitions, and had good responses. In addition, Osaka Institute of Technology Amusement Industry Research Center, a research institute that mainly researches toys, RCGS, which mainly researches video games, and Takai Shokai that collects, repairs, stores, and rents arcade game machines contributed for the exhibition. Additionally, information on institutions such as *Game Tanteidan*, which are second-hand shops for video game machines and cartridges, can be found easily because the information is disclosed on the website, and there was no notable issue upon loaning products.

Loaning Materials to External Exhibitors

The museum internally has toys and video game machines donated by a toy store in Joyo city that closed in 2007. But internal properties were insufficient for holding the exhibit dedicated to videogames, which necessitated the museum to request the cooperation of an external institution / individual collectors. As a result, 11 cooperating institutions and 42 cooperators loaned the materials to the museum.

Loaning Process

The museum issued a request, consent letter, and borrowed letter to the owner of the materials necessary for borrowing the exhibition materials, as well as signed a written contract. In the outsourcing business, after the outsourcing company was determined by competitive bidding, a contract was signed and contracted. As another procedure, the exhibitors went to Nintendo Co., Ltd. to ask how to handle the copyright etc. related to display of video game machines and exhibition catalogs, but they did not

exchange any written contracts or procedures, only verbal consent was obtained.

Document Needed to Be Obtained from the Loaners

The contents of the exhibition are to be loaned the materials for the exhibition. The consent was obtained for the items might be taken with photos and posted on the internet by visitors. Three documents were obtained from the contributors: Request Form, a Letter of Acceptance of the term and Promissory note. Request Form indicate that the exhibitor intent to loan the material with the items being insured during the term. For this exhibit, all of materials were loaned for free. Only the insurance and transportation expense were the cost incurred. In principle, loaning materials requires aforementioned three documents, regardless of the organization or individual, but for those who have fully understood the plan of the museum, this process was omitted as only verbal agreement was made.

Feed-back from Participants

Visitors gave the exhibition high praise such as "It was fun to see almost all video game machines on display" and "It was a good exhibition showing the connection between analog and digital." While some complained about too many objects in small space, 90% of the visitors answered "very good" or "good" in the questionnaire survey. Regularly, taking photography is not permitted at this museum, except for materials at the museum. However, this exhibition allowed photography of all exhibited materials and actively promoted posting to the Internet such as SNS. For this reason, it became a hot topic on the Internet such as Twitter, Facebook, personal blogs, and video distribution. From the results of the questionnaire survey, it can be seen that SNS is effective. Approximately 50% of respondents replied to the Internet, such as SNS, as a clue to knowing the exhibition.

CASE TWO: SPECIAL EXHIBITION: THE LIFE AND TIMES OF TV GAME PART ONE:

This exhibition was held at Soshikan, Kinugasa campus, Ritsumeikan University in Kyoto, coincide with the international conference, DiGRA 2019, the 7th International Conference on Serious Games and Applications for Health,(IEEE SeGAH 2019), and Replaying Japan 2019 or it was altogether called Ritsumeikan Game Week from August 6th to August 10th 2019.

Background of the Project

Since three international game-related academic conferences were to be held within one week at Ritsumeikan University Kinugasa campus, hundreds of scholars around the globe were anticipated to gather. Thus, the exhibitor decided to avoid the recent trend of focused simply on nostalgia about video games, but extending the exhibition to depict the relevance of other fields such as animation and toys, in order to reexamine what Terebi Geemu (TV games or videogames) to Japanese people at the time it became social phenomena.

The Feature of the Exhibit

Exhibit feature three sections: one section is dedicated to creating a typical child room during 1986- three years after Nintendo's Family Computer was released, the other is a series of panels expounding on the relationship of video games and surrounding media and finally, interactive display of console games available at a time.

Living Room Recreation



Room recreates an ordinary living room in the summer of 1986, when the family computer was at its peak after the release of 1983. In addition, by utilizing a tatami-mat room with a closet and displaying character toys, related magazines and books in addition to the video game console machine. Thus, overseas visitors can visually image the place where Japanese played games. Originally, it was a room with a Western-style living room and an 8-tatami Japanese-style room for conducting experiments on nursing care lifestyles.

Panel Sections

Seven panels are the following, (1) 1950s to 1970s: Spread of TV in Japan (Main exhibits: photos of the scenery of people living in the 1950s) (2) 1970s Close ties between anime and toys (3) Boys and Chogokin (Super Alloy) series (Main exhibits: boys' anime books, etc.) (4) Girls and transformation toys (main exhibits: girls' anime books, etc.) (5) Around 1980 LSI games (6) 1975-1983 The appearance of video games (main exhibits: photos of game counters at the time quoted from magazines) , and (7) 1986 Considerations related to animation, toys and games (main exhibits: doll toys for boys, transformation toys for girls, game & watch multi-screen "Donkey Kong", family computer, etc.) In addition, chronology panel (Annual broadcasts of anime and major events of games, animation, and toys Simple things) was displayed at the end of the section.

Interactive Exhibition

Video game machine (namely, family computer, SG-1000, Cassette Vision and MSX), or those platforms which were released from the days when video games began to spread, and display dynamic playable games. The game machines were arranged side by side so that they could be compared. The play screen was captured for later analysis of the play.

Participants

The total participates for all of the exhibitions during Ritsumeikan Game Week (the percipients for all of exhibitions, including The Life and Times of TV Game Part One (Case TWO of this paper), the Life and Times of TV Game Part TWO, and "GALAXIAN" → "GALAGA" → "GAPLUS: POSSIBILITY OF GAME DEVELOPMENT RELATED MATERIALS"(Case Three of this paper) are the following,

Date	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug	Total
Number	23	33	23	59	234	372

*August 10th was public day, August 8th only includes participants for "GALAXIAN" → "GALAGA" → "GAPLUS exhibition.

The exhibition also received comments from the participants which are as follows.

Age	Number	Country	Number	Country	Number
10-19	5	Japan	49	France	1

20-29	9	Finland	5	Chile	1
30-39	15	UK	5	China	1
40-49	16	USA	4	Spain	1
50-59	5	Germany	3	Italy	1
NA	28	Australia	2	NA	4
Total	78			Total	78

Funding and Budget

Since it was done within school, the exhibitor applied and granted special funding named under the program for the Promotion of International Research. Total expend was 187,823 yen. Among which, municipal comprehensive insurance premium for exhibition costed 5,560 yen. Compensation to contributors was 30,000 yen in total. Shipping fee documents costed 1,000 yen. Display panel printing fee was 30,715 yen in total. Explanatory pamphlet printing fee was 10,757 yen Equipment for exhibitions (stationery, self-made display panels, etc.) costed 46,507 yen in total. Finally, labor cost for this project amounted to 63,284 yen in total.

Challenges

Since this exhibition was held in collaboration with Joyo City, there was less issues than the Joyo History and Folklore museum's case. But in each process, there were a few issues associating with it. Thus, in subsequent sessions, issues associating with each step are indicated.

Loaning Materials to External Exhibitors

The exhibitors loaned materials from individual collectors and the Joyo History and Folklore museum. Individual collectors loaned video game console machines and its compatible software for Family Computer, SG-1000, MSX, and Cassette Vision.

For the recreating Japanese living room during the summer of 1984, various home appliances and other items such as photos from 1950s were loaned from the museum.

Getting Approval Process

The exhibitor obtained the approval from Nintendo Co., Ltd. for exhibiting play capture images for Super Mario Bros., a family computer software.

Loaning Process

Since it was a playable exhibition and could be damaged or broken down, the comprehensive property insurance needed to be placed on the subjected materials. While loaning, a complete list of documents and loaned goods, expected return dates, and time were provided through email. Finally, Request Form, Promissory note and Loaned good list were prepared and sent. As all of collectors had experience loaning materials to the museum, there was no issues in this process. The game consoles and software used in the playable exhibition were covered by MRE's comprehensive personal property insurance. The ARC secretariat asked that some insurance was provided to the exhibitors during the entire exhibition days.

The comprehensive property insurance was unable to the damage to the LCD screen, but this time no LCD was thus no issue but when the project involves LCD screens, this is something to be addressed.

Transfer and Withdrawal of Goods

Since the exhibition was done at the school, the exhibitor did not ask the art transport specialists to transport the exhibits but transported them by private cars. Display cases and display boards were borrowed from the university and transported by contractors. The transportation of exhibited materials was loaned mainly from three facilities and individuals, but it was managed based on the loaned goods list created in advance, so the process went smoothly and were able to return all of the items in timely manner.

Feed-back from Participants

According to comments received from British researchers, in the UK, Japanese games prevailed before animation, so the relationship between animation and toys exhibited during this era was previously unheard of. A game researcher from Chile told that Mazinger Z(animation) was broadcasted approximately 10 years later from originally broadcasted in Japan. Even Japanese visitors in their forties mentioned that they all had their own experiences in anime, toys, and games as a child, but never thought about these relationships. Regarding the exhibition of a classic living room in Japan, a visitor in the 40s, who came with a teenager, commented that he was happy to share the atmosphere of his childhood with his own child. Others commented that the room layout or other items may varied depending on regions and other factors so this could be addressed for the future exhibition.

CASE THREE: SPECIAL EXHIBITION: “GALAXIAN” →“GALAGA” →“GAPLUS: POSSIBILITY OF GAME DEVELOPMENT RELATED MATERIALS”

This exhibition was also held at Soshikan, Kinugasa campus, Ritsumeikan University in Kyoto, coincide with the international conference, DiGRA 2019, the 7th International Conference on Serious Games and Applications for Health,(IEEE SeGAH 2019), and Replaying Japan 2019 or it was altogether called Ritsumeikan Game Week from August 6th to August 10th 2019.

Background of the Project

During the process of conducting interview to Mr. Takefumi Hyodo of BANDAI NAMCO Research Institute and Yoshihiro Kishimoto of Play and Learn Institute for their archive process of the materials related to game development, they inquire the exhibitors about the possibilities of using BANDAI NAMCO’s archived materials for general viewings. Thus, the exhibition was proposed to examine the effective ways to utilize these



materials.



The Feature of the Exhibit

The exhibition feature game titles three shooting games developed at NAMCO which are closely related each other, specifically *Galaxian* (1979), *Galaga* (1981) and *Gaplus* (1984) the sequel to *Galga* . The development materials related to these titles were exhibited, namely initial planning sheet, materials related to specification changes, the document showing the results of location testing and the game contents and changes considered by the developers at that time, as well as the results of actual location tests, along with interview videos of the developers contributed to each of aforementioned titles.

The concept for the display of development materials for *Galaxian*, *Galaga*, and *Gaplus* were to depict the gradual changes in technology that can be seen from the development materials and the continuity of game design. In addition, for parts that cannot be confirmed with the original materials alone, the captions were added in the panel so that it would make it easy for the visitors to understand. In addition, layout of the exhibit was cautiously designed for the interview video displays which emitting sound.

Besides these exhibitions, special talk sessions were held by Mr. Takefumi Hyodo and Mr. Yoshihiro Kishimoto. Thus, this exhibition was conceived and fully supported by BANDAI NAMCO throughout the entire process of the exhibition.

Exhibition Material List		
NAM CO Development Related Materials		
GALAXIAN	1	Video 2 Meeting Memo (Dec 16, 1978)
	2	Theme Video II (A) (April 18, 1979)
	3	Video II (Idea A) 1st Specification (Revised) (Jan 25, 1983-Feb 14, 1979)
	4	Video II (Idea B) 1st Specification Document (March 20, 1979)
	5	Galaxian V-II) Specification Document (Final Draft) (Aug 4 1979)
	6	Instruction Card
GALAGA	1	V-II-C (Galaxian Revised) G Specification Document
	2	V-7 G Specification Document (Sep 30, 1980)
	3	V-7 Specification Change Item Part 1 (Dec 27, 1980)
	4	V-7 Specification Change Item Part 2 (Dec 30, 1980)
	5	V-7 Specification Change Part 3 (Jan 17, 1981)
	6	V-7 Specification Change Items Part 4 (Feb 4, 1981)
	7	V-7 (GALAGA) P-2 Specification Document (March 2, 1981)
	8	Instruction Card
GAPLUS	1	V17 Proposal Document Examination (May 29, 1982)
	2	V17 Minutes of Meeting V17 P1 Specification
	3	V17 P-2 Specification Abstract (March 30, 1983)
	4	V17 Character Policy (April 26, 1983)
	5	V17 Regarding the naming (May 30, 1983)
	6	V17 GAPLUS PS Specification Change Document (Aug 9, 1983)
	7	GAPLUS Survey Results after sales presentation (Dec 24, 1983)
	8	GAPLUS Second P2 Location Test Interim Report (Jan 17, 1984)
	9	GAPLUS Follow Up Research Report (May 28, 1984)
	10	New Version Location Test Report (March 13, 1984)
	11	Instruction Card

*Interviews to developers are also displayed on the monitor

Participants

In total, 318 participants. During academic days (6th-9th), there were 134 visitors: male 90%, female 10%. During open public day (10th), there were 184 visitors (of which 40 attended special talk session). Age distribution is mostly 40-50s. 10% of the visitors were female.

	8/6	8/7	8/8	8/9	8/10	Total
Participants	30	26	29	49	184(Talk Attendees40) Event	318

Funding and Budget

Since it was done within school, the portion of the program for the Promotion of International Research was used along with the funding from the school research budget of exhibitors.

Challenges

Since, main exhibitors includes IP holder, there was no issue regarding loaning of various materials. However, the intent of exhibit include the possibilities of actual exhibiting the products themselves, extra efforts need to be done for displaying various materials. In order to solve this issue, the panels that expound about the materials are added to the original development-related materials. Furthermore, interviews to developers are also compiled and exhibited on video display monitor. Finally, talk sessions by Hyodo and Kishimoto were held: this event made it possible to not only know the production process of the arcade game but also to show the importance of Namco development related materials to the visitors.

Loaning Materials to External Exhibitors

Display cases and display boards were borrowed from the university and transported by contractors. The most of the exhibited materials was loaned from BANDAI NAMCO Entertainment.

Getting Approval Process

The exhibitor obtained IP approval from BANDAI NAMCO Entertainment as well as determining specifically which object to be exhibited.

Other Loaning Process

The exhibitors discussed about the terms and conditions for loaning display cases with Art Research Center at Ritsumeikan University.

Insurance

The comprehensive property insurance was applied for both materials loaned from BANDAI NAMCO Entertainment and Art Research Center at Ritsumeikan University.

Extra Cautions for Protecting Old Development Related Materials

Since the exhibition room designated for this occasion was not a suitable place for exhibitions, it was necessary to devise ways to prevent the exhibited materials (mostly consist of ball pointed pen ink written rough paper in the 80s) from deteriorating. The solution was to prevent the sunlight from hitting the exhibit with a partition. In addition, the materials were placed in display cases, and measures were taken against corruption and theft.

Feed-back from Participants

It was highly evaluated by people from academic societies who were interested in archiving, and visitors from overseas who proposed text mining using development materials. The catalog was most highly evaluated. The publication of the contents of the development materials and the interviews with the developers were well received by those who were not able to stay at the venue for a long time. The visitors also noted that the text on panels should be larger to make them easier to read. Also, because the venue was located in a slightly confusing place.

NEXT ACTION

All of the exhibitions received generally positive feedback from visitors. This shows the importance of continuing this type of exhibit in Japan. Case Three also

demonstrated the general interests of the people for viewing materials related to game development. Considering the fact that many visitors in the 30s and 40s bring children, the playable display of the products along with game development materials maybe most effective as the adults who were familiar with both products and industrial product development process would appreciate game development materials, while children would familiar themselves with the games that his/her parents enjoyed when they were children. The recreation of living quarters may also consider to be valued by visitors. Since similar rooms are also appreciated in such places as the National Videogame Museum in the UK and Computerspielemuseum in Germany, exhibitions on cultural comparison on gaming culture during this era could be considered.