

Around Sigeru Miyamoto:

Enactment of "Creator" on Computer Games

Akito Inoue

Center for Global Communications,
International University of Japan, Japan
inoue@glocom.ac.jp

Seido Ushijima

University of Tokyo
Japan
gq56105@iii.u-tokyo.ac.jp

ABSTRACT

This report argues the duality of creators in designing games through works of Sigeru Miyamoto. Computer game is created not just by developers, but also players. This duality forces game developers to be conscious of a balance between developers and players, and how players commit in the game. Our analysis reveal that his designing way such as level design and self-motivation, obviousness of Rules, operations on handling strongly focused on designing the duality and his such intention also fall into his specific bound trapping players to his miniature world.

Keywords

Shigeru Miyamoto, creativity, duality of creators, internalization, designing rules

Who's Shigeru Miyamoto?

Shigeru Miyamoto is the most famous and respected game developer in the world. And although his great works, there are few researches on himself as main theme.

Shigeru Miyamoto was born in Kyoto, 1952[1]. He graduated Kanazawa college of art in 1977, and joined Nintendo Co. His first career in Nintendo was started on making pamphlets for some years. And fortunately, he had faced on chance to join an arcade game project with Gunpei Yokoi in 1980. Then his amazing works was started:

-Donkey Kong(1981) and its series

-Super Mario Brothers(1985) and its series

-The Legend of Zelda(1986) and its series

Recently works were:

-Pikumin(2001) (Producer)

-Nintendogs(2005) (Producer)

These works prove his great career since the first era started up of Computer Game industry until now, as is

person who represents computer game history. Here are simple questions: Why could he achieve such a great works? What is his works and goals on computer games?

So this report will try to explain Shigeru Miyamoto's works through his intention on game design.

Creator of Computer game

Miyamoto is creator of computer games but what is "creator" on this contexts?

Creator of computer games is different from other "creators" as author of novel or movie producer. Its specific aspects of computer game creator may described in some point of views, especially, it cause duality of creators.[2]

What is "duality"? Computer games is created by two creators -- one is the game developers who developed program, data, scheme and other is players who enjoy or experience playing it. For example on "Super Mario Brothers", game-play will never enact just by developers who designed its code, without playing Mario by players. That is to say not just game developers but also its players play important roles as creators.

The duality is critical issue of developing games. For instance, imagine some games which strongly enforce players to follow some specific lines by strong policy for developers. What happens? Many players claimed that this game is just a "stick closely to a script" game and antipathy to it.

Other example: imagine some games which allow players to be totally free, on route, goals, and clear conditions. Many players would be confused what they should to do, and began to consider the game as electric toys, not computer game.

These instances show that duality of creators forces game developers to be conscious of a balance between developers and players, and how players

Situated Play, Proceedings of DiGRA 2007 Conference

© 2007 Authors & Digital Games Research Association (DiGRA). Personal and educational classroom use of this paper is allowed, commercial use requires specific permission from the author.

commit in the game. The duality is such a annoyance issue in this way.

"Game players" for Miyamoto

Now we have to refer to the words of Miyamoto: he has been at a often appearance in some media and showed various thoughts. Needless to say it's impossible to summarize his various works, even so in perspective of duality of creators, in next statements we try to analyze its symbolic representation meaning:

Game enables users to be creative. That's my theme [3].

But why this statement is so important?

Through we pointed out in precede paragraph, not just game developers but also its players play important roles as creators. This is, on first glance, there is a inevitability that this remark consisted in games make players "creative".

However, we have to pay attention to the word "enable" in that statement. Miyamoto thought that players might NOT BE creative. This means that to feel themselves creative, to design mechanism or widget for enabling players to exhibit their creativity by game developers. So meaning of the word "enable" relied on these perspective, once considering computer games as the implement which promote user's creativity, we can understand Miyamoto's statements and propositions about game design. With this viewpoint, let's see his other statements.

The method of Miyamoto(1):difficulty level design and self-motivation

Miyamoto talked about difficulty level design of games, in conversation with Toru Iwatani, in 2005[4]:

With easy thinking about level design, it tend that once doubling game speed game difficulty doubled but that causes just feeling of nervousness, not interest factor. What a important point is that level design with interest factor. The interest factor might be so strongly consequenced with self-motivation served replayability, that what a significant point in computer game is making game bringing out their motivation.

Also, this design method that focused on player's motivation and difficulty level design might be specifically talked on conversation in 2003[5]:

In case of "Mario", we begun first by designing a extent of stage map, and allocate some stage objects. Stage of "Mario" has four locations per one gimmick -- remembering, practicing, applying,

mastering, on gimmick -- so we can use one idea by four times.

Now we try to explain what his talking about. Next figures (figure A to D) are captured from "Super Mario Brothers" [6].

First, look figure A. There is a small valley between two side of mountains consisted in blocks. Players had a chance to jump it out, but if they failed there's no penalty.

Right after A, they would face on map B. Main difference between map A to B is that in map B they might lost Mario by failing jump action, because of dead ends of valley. To clear this situation, they had to learn jumping action through Map A.

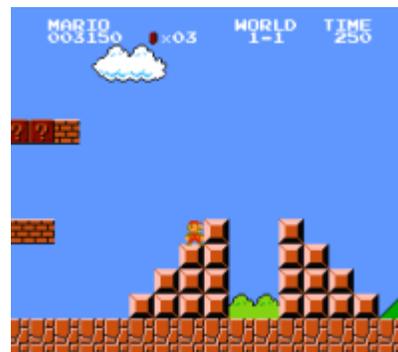


Figure B (©1985 Nintendo)



Figure A (©1985 Nintendo)



Figure C (©1985 Nintendo)



Figure D (©1985 Nintendo)

Next is Map C and D. Map C shows the flag of stage clear bonus and map D requires them to jump over some moving lifts at good timing. These gimmicks in C and D are based on A and B, and allocated in appropriately order to practice applying or mastering its action.

These elegant allocations of gimmicks enable players to learn unconsciously game rules and playing skills only to controlling Mario. Maybe players lost Mario in first step, but after trying for second or third steps, they will get a skill to clear such gimmicks and can realized their substantial improvement. These realizations of improvement produce feeling of pleasure on controlling Mario. In summary, these method implements players' "realization of improvement" or "appropriate amount of feedback" which promote their commitment toward games.

The method of Miyamoto(2):obviousness of Rules

There is any other methods of Miyamoto which focused on committing players to games. Next statement is talked about making rules[7]:

Not just players, but also galleries on the sidelines who do not play could enjoy and made sense what is the rules of game.

I think one of the most important points of rule making is keeping of plain and simple, anyway. This is big manner what I learned from developing arcade game.

"Why did I fall into Game over?" "Why did I mistake?" "How can I beat that enemy?" To reply these questions, designing game for some expecting players can easily understand or satisfy its rules. So I still emphasize on basics as simple, plain, easy-learn-able.

Then what is plain rule making in practice? We back again to the conversation between Miyamoto and Iwatani in 2005. These statements are about rule making of "Pikumin":

Play has two representative types; first is golf, in which everyone can easily satisfy rules as cupping ball into goal. Second is baseball, in which everyone have to learn and understand its rules consciously because its complexity of rules, artificiallyB

So that it is easy to develop and design golf type game because of its clearly rules. In other way, it is very difficult to design baseball type game. "Pikumin" is this golf-type game and so complex of game rules that it grapple with the thorny issues of creating its rules rationality.

In beginning of development, rules are simple: "Clear condition: gather some given account of pikumins". But "given" of this rules raise unnecessary questions: who does give some account? so we conceived of next plain rules that "Collect some baggage which requires some number of pikumins to carry." From opening of stage A its baggage is bigger by little and little. These system remind players to understand shared awareness: "the bigger baggage is more heavy". And to carry the more bigger baggage to gather more number of pikumins therefore "Pikumin" is game gathering some given account of pikumins at last.

In case of baseball type game such as "Pikumin", we have to create its plain rules carefully which satisfy players naturally.

According to this statements, Miyamoto aim to prepare rules of games as unconscious one, without particular distinction. These shows that His goal of designing rules is to accept it naturally

The method of Miyamoto(3):soperation, controller

Third, we have to pick up the viewpoints about designing game character's handling and controller.

"What do you start thinking about on creating games?"
Replied on this question, Miyamoto answered[8]:

In my case, hand touch feeling. I often imagined how Handling or hand feeling of characters makes game fun.

Then, how did he think about hand touch feeling?
What does it connects to game design?[9]

The idea of handling and touch feeling is very deep issues. There are three designing viewpoints: first is The laws of physics, second is the idea for my sense as professional game designers, and third is my personal demands as game player. We designers have to balance these three viewpoints.

In case of "Donkey Kong, once Mario as player character have jumped, he could not move left or right in aerial regions. When Mario had jumped, its landing points in stage was predetermined. After that, in "Mario Brothers", that interval by jumping action is changed to rely on Mario's running speed. And finally, in "Super Mario Brothers", Mario could move freely in aerial regions by a large degree.

These changes of character's handling might be reflection of demand from "the physical laws of real world" to "Wishes of players for interactive, usable play".

Kazunari Yonemitu, who is creator of "Puyo-Puyo" had explained about "Mario could move freely in aerial regions in Super Mario Brothers" issue.[10]

He said that It is hard for usual person in physical laws to control his landing points after jump because of the law of inertia. but Mario should be totally different from us. Right after jumping, he could control his landing point in aerial regions just by operations of game pad. This amazing behavior proves that he is not behind the physical laws.

However, this does not just mean he have no reality. Game players often cry out: "Oops! Bad timing! Come back to safety zone, Mario!". Mario's behavior would seem to be reflection of needs from straight-out emotions of players, and it might works. Now the straight wishes of players make an "reality" in computer game peculiarly. Miyamoto have actualized its special reality as an feelings as if game and players are inextricably linked in his works.

Design of the duality of creators

Now we will return to discuss the issues about duality of creators.

These quotations from his statements tells us that he always sensitivity dealt with the duality of creators on his game designing and made an attempt to design the duality itself, linkage between games and players.

Three "The methods of Miyamoto" which we have pointed out is also as to the methods what provide players to internalize in "How to play and enjoy" prepared by game developers. These methods and thought is self-consistency in his works such as "Super Mario Brothers" series, "Legend of Zelda" series, and so on. Since 90s, he has compared his works and its interest factor to "miniature garden". He said "eating up some locations or landscapes might will cause interest in game."[11]

In this sense, the word "miniature garden" does not just mean wilderness where everything players can want to do but the place where are prepared in great detail by Shigeru Miyamoto. Players can easily get how to operate character, beat their enemy, enjoy just by running around there. After running through the garden, players change themselves to be positive gamers. At last they became CREATIVE.

When Miyamoto's idea of "enable users to be creative" was implemented, shadows of developers might become invisible, and while they forget to take notice of its designers, they internalize in its style.

Then, does the shadows of developers are really invisible?

Free, joy in game

Ito Gabin, who is one of the creators of "Parappa-Lapper" series and well recognized by Miyamoto, was just only person who gave an assessment "Bored" towards "The Legend of Zelda: Ocarina of Time"[12]. This title was selected greatest game through computer game history in Japan .

What did he dissatisfy on "Ocarina of Time"? Ito claimed that its "miniature garden world" is NOT free and the garden should be more free world without pre-aid answers. "Ocarina of Time" has only one goal In spite of its freely process or steps therefore he could not call it in the name of miniature garden. he faced in "Ocarina of Time" with so strong expectations for free that he fall into disappointment.

From our viewpoints, we will try to translate what he said to more clear statements:

Miyamoto have attempted consistently to design open space which enable players to be creative and internalize in their way to play unconsciously, and attempts of Miyamoto was artfully hidden into some allocations of objects. However, these internalization machines also enforce players neatly to training of

internalization and the way of play. So there is an administration of play although almost most of players might never feel its forces.

Ito seems to be repealed on these forces. He said that maybe some players who played Ocarina of Time as implicit premise as RPG would not be able to share his complain. the RPG is one of the game genre to enforce players to its game scheme: there is only one goal. This scheme is not unnaturally and wide spread in used for many players.

Miyamoto have always designed rules of game what is simple, plain and naturally receptable for players. Ocarina of Time was designed same idea, so it has accepted used rules of RPG which provide just one goal.

On the other hand, a discipline that "miniature garden world" should be free reminded Ito to artful existence of Miyamoto, who were not visible from any usual players. And he rejected Miyamoto's internalization machine although Miyamoto aimed in particular players to internalize interest of games.

This confrontation between Miyamoto and Ito show clearly the difference of approach towards the duality of creators.

Miyamoto's way of managing players is exactly smart more than anybody, so players could feel themselves creative. Compared with him, Ito required on games to be more free and creative by taking out its administration or implements from games.

The way of Miyamoto had no effect on demands for more strict free as Ito. This does mean bound of Miyamoto, unless his methods many players can never act constantly as if they were creator of game world.

In conclusion, we can find out both greatness and bound of Shigeru Miyamoto.

REFERENCES

1. According to *Game over: How Nintendo Zapped an American Industry, Captured Your Dollars, and Enslaved Your Children* (Sheff, D, Random House Inc,1993), He born in 1970 but this is incollect.
2. Murray, Janet H. *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. Free Pr 1997. et al.
3. Sigeru Miyamoto: Philosophy of Game. *Dengeki Online*.
Available at
<http://www.gegekionline.com/mario/miyamoto.htm> .
4. Iwamoto, Toru. *Game Studies of Packman*. Enterbrain, 2005. p.154.
5. *Weekly Famitu*, Enterbrain, vol. 2003, 02/21. p.130.
6. Mario Studies. Available at
<http://www.geocities.co.jp/SiliconValley-Sunnyvale/6160/newtech/smb111.htm> .
7. Tokyo Metropolitan Museum of Photography, *Family Computer 1983-1994*. Ota Publications, 2003. p.52.
8. Tokyo Metropolitan Museum of Photography, *Family Computer 1983-1994*. Ota Publications, 2003. p.55.
9. Tokyo Metropolitan Museum of Photography, *Family Computer 1983-1994*. Ota Publications, 2003. p.53.
10. *RBB Today*. Available at
<http://rbtoday.com/column/gamelab/20060403/> .
11. Hideaki, S., Naoko, Y. and SHiiti, T. *Game Maestro* vol.1. Mainich Communications, 2000. p.118.
12. Gabin Ito, ITOUGABINNOASHITANOGE. Available at
<http://hotwired.goo.jp/bitliteracy/ito.990126/> .