Possibilities of Non-Commercial Games: The Case of Amateur Role Playing Games Designers in Japan

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ABSTRACT

This paper examines amateur role-playing games designers in Japan and their games. By combining sociological studies of amateur game designers and content analysis of their games, it examines how non-commercial production of games by amateurs allows production of games of different kinds from commercial ones.

Keywords

non-commercial game, amateur game designer, RPG Tkool 2000, game culture in Japan

Recently, scholars of science & technology studies have been paying closer attention to the role of users in technology. In the market economy, users/consumers have been playing usually silent but often decisive roles in shaping many areas of technology. Sometimes users come up with creative uses of a technological product that its manufacturer never imagined (the most consequential unintended use would be the use of airplanes by Al Quaeda as mentioned by Nelly Oudshoorn and Trevor Pinch[]). Attention to users is expected to shed more light on neglected though highly relevant groups in society, like women at home, and to counterbalance hagiographic narratives that make heroes out of prominent engineers. In this post industrial age, the boundary between users and manufacturers need not remain the same. Advancement of information and communication technology might allow more participation of users. In particular, in the area of digital games, everyone used to be an amateur in the time of William Higinbotham or Steve Russell. Even today, when game industry has grown colossal, creative amateurs can find their roles. In content production, while technology continues to advance, and yesterday's technology becomes cheaper and cheaper, the one who has the most advanced and expensive technology does not always produce the best product.

Amateur game designers in the English speaking world have already attracted attention of some scholars. Especially, activities of "modders" have already been studied relatively well. Whereas digital game cultures in Japan have been generally underrepresented in game studies of the

English speaking academia, non-commercial games are recognized even less probably because amateurs generally do not bother to translate their work into English.

This paper focuses on Japanese amateur game designers and the role playing games that they produced by using a software called "RPG Tkool 2000." I examine how amateur game creators build a network to create games, how they circulate their games, how players interact with those games and their designers, and how those games differ from commercial games. In particular, in my analysis of amateur role playing games, I focus on narratives and "cosmologies" of the game that regulate game play and storyline, not because I value narratology more than ludology, but because amateur designers of role-playing games seem to place more emphasis on stories than game designs.

Methodologically, I attempt to synthesize two different approaches. As game studies grows into a burgeoning interdisciplinary field, we also see dissonance and incongruity in its methodologies and interests. Less mentioned than the alleged debate between ludologists and narratologists is an apparent rupture between socio-economical studies of games and studies of content of games, which is particularly visible and problematic in Japan. Some scholars study very closely economic effects of games, management of game companies, but pay very little attention to games themselves. Possibly, they do not even bother to play games at all. Others focus on narrative structures of games and their game mechanism and play experience by deeply engaging in actual games. They are, however, often oblivious of how marketing concerns and relevant business models shape the content of games. They treat digital games as if they were free creations of artists when so much depends on commercial concerns. Not many attempt to synthesize these two. How do socio-economic factors shape game content and player experience? Such a question should be important to understand why we see certain games around us. In order to answer such a question, it seems appropriate to study cases with different scio-economic conditions. This paper attempts to carry out such an investigation by examining how free amateur games are different from commercial ones.

RPG TKOOL 2000

"RPG Tkool 2000" is the most popular tool to create RPG's in Japan (The name came from the Japanese word "tukuru" or to make). It allows only low-resolution 2D graphics, but it is extremely versatile, stable, and easy to use. Although this RPG Tkool 2000 is a commercial software, since gamers can play gamers produced by RPG Tkool 2000 without buying the software itself, game designers can distribute their games as freeware.

Enterbrain, Inc. that produces RPG Tkool 2000 is a part of the currently largest publisher of books and magazines on digital games in Japan. The company was established in 2000 as a subsidiary of ASCII, Inc., which used to sell previous versions of RPG Tkool series (ASCII stands for Advanced Strategy for Computer Information Intelligence). The company was established in 1977 by Kazuhiko Nishi, principally as a publishing house of magazines and books related to computers and computer games but it also sold software, in particular, used to sell the Japanese versions of Microsoft products as well as some gametitles for PlayStaion 2.

In the late 70s and early 80s, the magazine ASCII played an important role in disseminating knowledge and techniques about personal computers among amateurs. It was a place where amateurs submitted what they programmed, many of which were games.[] Having hobbyist

programmers as major contributors to their magazines, it was natural that ASCII Corporation or its subsidiaries created various construction tools for amateur game designers. ASCII and the readers of its magazines formed a kind of symbiosis where ASCII provided tools and a place to publish games and readers took the role of providing content to ASCII's magazines by submitting their games.

The earlier game construction tools from ASCII appeared in the late 80s. The first of the RPG Tkool series appeared in 1992, when NEC's PC-9801 series dominated Japan's personal computer market. Since then, there have been several different versions of RPG Tkool. The most recently one, called "RPG Tkool XP" was released in 2004. In addition to RPG Tkool, Enterbrain has tools to create games of other genres, like "Simulation RPG Tkool," "Fighting Game Tkool," "Shooting Game Tkool," and so on. Here, I focus on "RPG Tkool 2000," the currently most popular version of the RPG Tkool series.

RPG Tkool uses simple, low resolution, two dimensional graphic, instead of 3D polygon model graphics (except for the Play Station 2 version of RPG Tkool, which is not very popular).. The games produced with this software are the ones in the age of Super Nintendo Entertainment System (SuperNES). Hence, the Tkool games appear old-fashioned to the eyes too familiar with recent games. For Japanese game players, however, the 2D graphic is not so much a disadvantage. Being immersed in the *otaku* culture of Japanese animation and comics, Japan's young game players can even find comic-like 2D graphics more appealing than photo-realistic 3D graphic.

Creating a game with RPG Tkool requires at least the following three. First, the designer needs to design maps (possibly many maps) using the map editor and place various non-player characters and objects on the maps. Second, the designer needs to assign behaviors to these characters and objects by attaching scripts to them. Third, the designer needs to set up the avatar (or a part of the avatar) and specify the initial position of the avatar. For a minimum RPG (for example, one in which a character just says "hello world") the production time would be less than 5 minutes, much of which would be used to launch the program.

For the game to be more interesting, of course, the designer needs to do far more work. Usually, there are many maps (or rooms) in a game connected with each other in a very complicated way. Behaviors of characters can be very complex if the designer chooses to use many variables and if-statements in the script. The designer can choose to design original graphics, instead of using the tiles of landscape and pictures of characters provided by the software package. The RPG Tkool package comes with many pieces of music for background and other sounds but the designer can also choose to use original music. The designer can even choose to recruit actors to give characters real human voices. Thus, RPG Tkool allows a very wide spectrum of games, from very simple to extremely complicated ones.

RPG Tkool is extremely versatile. Although it is a construction tool for role-playing games, ingenious users can create games of many different genres, in spite of , or rather because of its simple interface. This includes action RPGS, adventure games, puzzle games, strategy games, shooting games, and other action games   Some users even created tools to make role playing games or design pictures of characters. These various uses of this software itself indicate creativity of its users.

RPG Tkool makes the technical threshold very low. For example, scripting consists of choosing commands and appropriate variables from menus. This makes scripting very easy for beginners, who do not have to memorize commands of a computer language. For those who are skilled in computer programming, however, choosing commands from menus is more cumbersome than typing. Similarly, low resolution 2D graphics allows the designer to be unconcerned about specifications of the graphic board that players might be using although it also precludes the possibility of photorealistic graphics. This is important for both designers and game players. They do not have to purchase a state-of-art model of computer to design or play RPG Tkool games. This allows RPG Tkool games to be circulated among younger generations of game players who do not always have resources to play high-end computer games.

What is more important to distribution is the cost the game players have to pay for playing the games. The RPG Tkool 2000 is a commercial software, which costs about 100 dollars. In order to play the games created by it, however, game players only need the run-time package downloadable freely from Enterbrain. Whereas a copy of "Neverwinter Nights" is required to play any RPG created by it, amateur designers circulate RPG Tkool games entirely freely.

In sum, RPG Tkool 2000 has the following characteristics. It uses relatively old-fashioned graphics. Yet, it is very easy to handle and extremely versatile. Technically, it is not the tool to produce state-of-art games, but for the ease of using it, it can be considered an advantage. Moreover, game designers can make their Tkool games available for free.

TKOOLERS

There is an active community of users of RPG Tkool 2000 (or other versions of this series) who produce and circulate games for free. It is difficult to estimate the size of this community, but probably a few hundreds people are actively involved in creating amateur games, because the official website of Enterbrain has four hundred links to the websites of RPG Tkool users.[] A few hundred might not appear particularly large, but if each of them produces one game per year, the total will be more than anyone could play.

Producing a game is an extremely time consuming endeavor. Why are so many people willing to spend so much of their time to create games to please others without demanding compensation from game players? Who are users of RPG Tkool, or as they call them in Japan, Tkoolers?

In order to study the amateur game designers who use Tkool 2000, I used the following approach. In the Japanese Internet community, there is a practice of posting "100 questions" on the web. It is a kind of virtual interview or survey. Usually a set of one hundred questions is for a specific kind of people. Owners of a website often post their answers to a set of one hundred questions on their website in a way of making a self-introduction. There happens to be a set of one hundred questions for Tkoolers on the web, and I was able to find over one hundred Tkoolers who post their answers to the questionnaire on their website. I use these answers to study demography of Tkoolers and their motivation to become a Tkooler. This is methodologically not without problems. One problem is that respondents are not always accurate in their answers. More often, they try to be amusing than informative. For example, although one of the one hundred questions asks age, gender and blood-type, many of Tkoolers refuse to divulge their personal information, especially their age. One writes that he is from out

of the solar system and 150 years old. One woman claims she is 15 while she writes that her occupation is housewife. Many respondents answer their occupation even when they do not tell their age. Hence, I have to process the data accordingly (See Table 1). The analysis of this data involves much speculation and the result is not very accurate. In addition, the data is biased because the group is a subgroup of the Tkoolers who are willing to answer 100 questions and post them on a website. In spite of these limitations, however, these web pages provide us with invaluable information about what Tkoolers are like.

First, Tkoolers, are not necessarily computer enthusiasts. Since RPG Tkool does not require much CPU power, this software and the games created by it runs on a relatively old model of PC. Hence, Tkoolers do not have to own a high-end machines, and younger users can make games with this. Many of them confess their lack of knowledge about computers.

As for demography of Tkoolers, as one might expect, they are generally young male. I expected more Tkoolers in their 30s but as it turned out they are exceptionally few. Only a couple of them are in their 30s in both male and female groups. On the other hand, it is surprising that there are so many low teens, even primary school pupils. Overall, since designing a game is a time-consming hobby after all, Tkoolers are in the age groups who have relatively less occupational and familial duty. It is also noticeable that very young Tkoolers are mostly male, and female Tkoolers are older than male Tkoolers on average.

	Male	Female	Unknown
22-	20	7	
18-22 CollegeStudent	23	6	
16-18 High school	17	2	
12-16	15	1	
-12	5		
Unkonwn	5		1
Total	85	16	1

Table 1: Demography of 102 respondents of "100 Questions for Tkoolers."

One of the hundred questions asks what made the respondent start making games with Tkool. Tkoolers have various motivations for becoming one. Apparently, very few have utilitarian motivations. Some earn substantial amount of money by winning prizes, others make the experience of designing games with RPG Tkool a stepping-stone to be a professional game designer. Very few, however, seems to have these considerations as their motivation to create games with RPG Tkool. Many of them express that an urge to produce games has been driving them. They have fantasies, and it is a very pleasing experience to give forms to their fantasies.

This psychological process seems to be closely related to the experience of playing role playing games. Gamers are attracted to role playing games at least partly because they can experience what they fantasize. That experience of playing a role in a game world is more realistic than just imagining a fantasy world. To such people, creating a game world in the way they imagined should be an even better experience than playing a role in someone else's dream world.

Other amateur designers say that they began creating games because they wanted to tell stories. For people who have more technical skills than literary talent, creating a role playing game can be easier than to tell a story in the form of a novel. Games are obviously easier to circulate and attract audience. Just as amateur writers post their novels on their websites, these amateur designers use RPG Tkool to tell and distribute their stories.

Yet other amateur designers drew inspiration from other games. After having played a commercial or non-commercial game, some gamers liked it so much that they wanted to prolong the experience of playing it. Therefore, they create a sequel, a clone, or a similar game as to extend the time of playing that game.

Thus, motivations can vary, but as long as creating a game is not technically too challenging, gamers can have ample reasons to devote their times and enjoying doing it without asking material compensations.

PRODUCTION, CIRCULATION, AND CONSUMPTION OF TKOOL GAMES

In production, circulation, and evaluation of Tkool games, the Internet plays a vital role. While commercial game companies could have their own network, individual amateur game designers would be isolated and quite powerless without the Internet.

As mentioned above, with the package of RPG Tkool 2000, an individual, who has a good game idea, a good story, and sufficient passion and patience, can produce a role playing game. In many cases, however, good Tkool games involve some sorts of collaborations with others. The graphic and music included in the RPG Tkool 2000 package do not always suit to the purpose of game designers. Some amateur game designers try to avoid using graphic and music in the package because they do not want their games look or sound like other Tkool games. In such a case, the game designer goes to the Internet for suitable graphic and music. On the net, there are websites of the people who provide graphic and music to be used for games and websites. Some of them are specifically for RPG Tkool 2000. For example, a group called "Refmap" provides graphics for RPG Tkool and even posts sample games to show how to use their graphics.[] Similarly, there are websites for background music. The website of Hyoseki Saia (pseudo.), which provides more than one hundred pieaces of music for free, is probably one of the most important sources of background music for Tkool games.[11]

Some amateur game designers who use RPG Tkool 2000 and other game construction software choose to form a collaborative network so that they could combine different skills of different individuals. Even when a designer decides to work alone, it is usually essential to enlist dedicated testers at some point. They obviously use the Internet to form a group and maintain collaboration. Most amateur designers have a website, which plays a pivotal role in the game production. On the website, they announce a game project and call for volunteering graphic

designers, composers, voice actors, and testers. They post their games on the website or links to the portal sites. Most importantly, those websites have a discussion board for games, which enable interaction between the designer and game players. If game designing is easy enough to be fun, the process of producing a game itself resembles a multi-player online RPG, in which, instead of slaying dragons, players cooperate in the task of producing a game.

Time required to complete a Tkool game varies, depending on the size and complexity of the game and the amount of original graphics and sounds to be used in the game. It seems that for a medium length game to be completed it takes at least a few months. A large game requires a year or more. One amateur game designer writes that he spent a hundred hours on his medium size game.

The principal means of circulation of free RPG Tkool games is, of course, the internet. There are a few portal sites for this purpose. For example, Vector (www.vector.co.jp) is the most important portal site for freeware and shareware in Japan, which has a very large selection of games. Some amateur designers make their games downloadable directly from their website or provide on their website links to portal sites. In addition to on-line circulation, some games are still distributed through a CD-ROM of magazines. For example, *TechWin* is Enterbrain's magazine for amateur games in Microsoft Windows, and the games submitted to the prize competition held on this magazine are initially distributed through this magazine. For distribution, Enterbrain's website is also important because it has a webpage for ASCII/Enterbrain's prize competition.[]

More important for players of Tkool games (or freeware games in general) are review websites dedicated for freeware games. Japan's infamous gigantic electronic bulletin board system, "Channel 2" (www.2ch.net) has a thread for reviews of freeware games, and there is a website that classifies postings of this thread[] This is an invaluable resource that provides various viewpoints from very harsh and cynical players/reviewers. In addition, there are review websites for freeware games run by individuals.[][]

Since amateur designers are generally content with inner satisfaction, reward and evaluation are not essential for the production of games. Yet, evaluation obviously plays an important role in enhancing quality of freeware games. Most important of evaluative functions is Enterbrain's "Internet Contest Park," or "Kompaku." This is a competition of freeware games on the *TechWin* magazine, and prize winning games are published and circulated through the magazine's CD-ROM, as mentioned above. This   Other than this, there are online competitions and popularity votes. The result of competition used to be published on the web until June 2002.[] ASCII and Enterbrain used to host another series of amateur game competition, "ASCII Game Contest" (Later, "Enterbrain Game Contest). Prizes in both competition come with prize money, the highest of which was ten million yen (approximately one hundred thousand dollars).

After publishing and circulating games, even after being reviewed or awarded a prize, a Tkooler's job is not completed yet. Since amateur game designers cannot have many testers, they continue receiving bug reports from players of their games. Thus, players participate in the final process of game production as de facto testers. Even without a bug, they continue interacting with players for fine tuning the difficulty level of their games. In particular, relatively less experienced Tkoolers can make games unreasonably difficult, and in such a case, user support (like answering questions and providing hints and even spoilers) will be necessary.

These interactions usually take place in the discussion board of the website of the designer. In this way, production of Tkool games is open-ended (at least for a certain period) and players of Tkool games participate in the process.

RPG TKOOL GAMES

Different mode of production, different economical and social dynamism leads to different products. Games of RPG Tkool, I claim, are not always crude imitations of commercial games. Being non-commercial allows freeware games to have more personal and artistic expressions of game designers. Although one might consider commercial and freeware video/computer games as the same digital medium, the messages that they convey often differ considerably.

Certainly, there are many that imitates popular titles of commercial games. There are many clones of "Dragon Quest" series, for example. Many RPG Tkool games were inspired by earlier titles of "Final Fantasy" series as well. There are action RPG's just like "the Legend of Zelda." There are even "Wizardry"-like games. Many games are, however, quite original and different from commercial games. Since the RPG Tkool does not allow its users to produce technically impressive state-of-art graphic, users have to exploit other aspects of computer games in order to produce high-quality games. Narrative is one. Game design is another.

Since amateur game designers do not intend to make money, they do not have to conform to the taste of the mass. They can do whatever they want. Hence, they could include in their story, things many people might find unpleasant. For example, an RPG called "Seraphic Blue" by Tempura (pseudo.) is a recent masterpiece, which indicates the highest standard that an amateur game can achieve. Tempura is the author of two very long Tkool RPG's, "Sacred Blue," and "Stardust Blue," both of which compete well with commercial role playing games in their play time, extremely complex story lines, and quality of game play. "Seraphic Blue" even excels these two in its innovative game design and masterful use of music and images. One of its most distinctive features is, however, the very pessimistic undertone of its narrative. The main character, Vene Ansbach, is a female seraph, and as the main character of an RPG always does, she is destined to save the world. In her case, however, she remains ambivalent about her mission throughout the story. When she was a human, she was psychologically abused by her father. After she was reborn as a seraph, she was treated like a lab animal again by her seraphic father. The latter attempted to train her to be devoid of any human feeling in order to best fulfill her role as the savior of the world. Resisting her determined role, she committed suicide by cutting her wrist, but she was forced to live. Throughout the game, a doubt lingers about the justice of saving the world at all. The game repeatedly asks its player whether the life is worth all the trouble it causes and whether we might actually be better off had we never been born at all. To average players, it is more depressing than fun to play this game. To some, however, this game conveys a very powerful message.[]

While "Seraphic Blue" is a combination of medieval fantasy and scientific fiction like Final Fantasy series, "Another Moon Whistle" by Kannazuki Sasuke (pseudo.) released in 2002 is more like Shigesato Itoi's "Mother." Instead of the United States, however, the story takes place in contemporary Japan (or its recent and nostalgic past). Against the background of the nostalgic ambience, the theme of the game is extremely serious. As the author admits, this is not for everyone. The protagonist, Kazuto, is a kindergartner whose parents are separated. He lives with his father, and his elder brother lives with the mother in an Island. The story of the game

takes place when Kazuto and his father comes to the Island to spend his summer vacation. During his days in the island, Kazuto is involved in various personal conflicts between those who are around him. He was asked to make judgment to resolve these conflicts. For example, when two of his friends or his parents quarrel with each other, Kazuto has to listened to what the both parties have to say and decide which side he thinks is right. These quarrels are, however, the kinds in which both sides are right in some ways. Players of the game are faced with very serious moral conundrums and asked to make ethical judgment.[]

Since those amateur designers do not have to please everyone, they can compose a story according to their interest, expressing their own concerns. Some deal with social issues in contemporary Japan. Since amateurs are occupational diverse (at least more diverse than professionals designers), they incorporate various perspectives and tastes. For example, presence of female amateur designers is conspicuous because they often produce very original games. One example is an RPG called "Pureia-chan no yūki (The Courage of Preia)," which takes the form of an orthodox fantasy RPG, but it actually deals with the issue of sexism. In this story, the protagonist helps a young girl Preia who wants to become an adventurer resisting the sexist prejudice of her native village. She left the village to become an adventurer and find a city where people live free of prejudice and convention.[8] Another example is "Rīfu mura sonchō monogatari" (The Story of the Rief Village Chief) by Hiro (pseudo.), the housewife who claims to be 15 years old. Instead of wandering adventure, the protagonist of this RPG is a girl who has become a village chief. Rather than exploring unknown dungeons, her role is to protect the village from intruders and help it prosper.[] This makes a nice comparison because exploration is an important gendered aspect of many RPG's for boys.[]

Like "The Courage of Preia," many games deal with contemporary social issues. Very many are about discrimination and bullying among children reflecting Japan's school life. As often the case with Japan's popular culture, the issues about war and peace, environment, danger of science and technology are favored themes of amateur games. Unlike comics or amine, however, non-commercial games do not have to please their audience and do not have to pretend to be good. One designer, for example, uses his games to satirize anti-smoking campaign.

Such a characteristic is, if not impossible, very difficult for a commercial computer game. As the production of a game becomes increasingly expensive, game designers for commercial games have stricter limitation on the kind of games they can produce. Commercial games need to be popular, rather than expressive of artistic sensibilities of the game designer. "Grand Theft Auto" can afford to be immoral only when its immorality helps to sell it more. A commercial game, thus, cannot be always a medium of expression for a game designer. Being non-commercial allows freeware games to have more personal and artistic expressions of game designers. Although one might consider commercial and freeware video/computer games as the same digital medium, the messages that they convey often differ considerably. Since amateur designers do not need to conform to the taste of the mass, they can afford to choose topics of their personal concern and design their games according to their own aesthetics.

In addition, unlike videogames for game consoles, these amateur games are open-ended and self-reflective in some ways. Those who have a copy of "RPG Tkool 2000," it is easy to modify games created by it. Designers can easily produce updated versions of their games according to user feedback. Some games take game designing by "RPG Tkool" as their theme. While many games are parodies of commercial games, a few games satirize clichés of RPG Tkool games.

Symbolic of this aspect of Tkool games is a game entitled "Tsukurā no yabō (The Ambition of a Tkooler)" by Tomonori Sato or Li (pseudo.). The title is an allusion to a famous series of historic simulation game "Nobunaga no yabō (Nobunaga's ambition)" by Koei, Inc., but it is an RPG of a Tkooler. The player plays the role of a Tkooler who are going to design an RPG with RPG Tkool. His ambition is to win a gold prize of Enterbrain's Contest Park. In order to design a good game, the protagonist has to walk around the town and find inspirations and good ideas for the game. What is fascinating is that the player also plays the game (itself an excellent action RPG) that the protagonist designs since the protagonist needs to run test plays of his own game. If the player is successful, the protagonist finds all the good ideas for his game and wins a gold prize. To complicate the boundary between reality and fiction, the author of this game did win a gold prize at the competition. Apparently, the relation and dynamism between designers and gamers are different in the Tkool games because many of players are themselves amateur designers and even if they are not, they are at least familiar with the production and competition of Tkool games. In Tkool games, individual names (even if they are pseudonyms) are more closely tied to Tkool games, and the author is often explicitly in the game.

CONCLUSION

At the Game Developers Conference in 2005, Will Wright, the famed designer of SimCity, expressed his concern that data of recent games had become too large. Presenting his game under development "The Spore," he proposed procedural programming and utilizing user creativity in games. Seeing the market already saturated, it is imperative for the manufacturers of hardware to keep developing new and faster machines. Advanced machines require more development efforts for game developers, because more advanced machines comes up more realistic graphics and more data capacity. New games need to implement these new features, otherwise consumers will not buy new and usually more expensive machines. As a result, developing new game software becomes increasingly more expensive. Games become more striking in photorealistic graphics and sound, but that does not mean the experience of playing them become accordingly better. As it becomes more expensive to develop a game, it becomes riskier. Game companies try to manage a large investment by increasing their scale by mergers. Others try to avoid the risk by producing less risky games, such as sequels or games in conventional formats, which leads to less innovation and certain stagnation. Either way, as hardware continues to become increasingly more sophisticated, it is less likely that major titles of mainstream game companies will accommodate diversity of expectations from each individual player.

These amateur designers are capable of creating games that commercial game companies cannot. Since amateurs do not have to sell games, they can produce the kind of games that please them. Whereas commercial computer games are likely to remain a form of entertainment, non-commercial games can potentially become a form of artistic expression. Personal tastes are diverse. What is fun about playing computer games varies. Because of their high cost, commercial computer games that rely too much on the use of new technology than new ideas are unlikely to accommodate diversity of game players' tastes.

No doubt, amateur production of computer games has certain limits. Those non-commercial games do not have cutting-edge AI, state-of-art 3D graphic or original music. Yet, these technical aspects of the games do not determine the quality of gaming experience.

The success of amateur designers hinges on several factors. First, the key is the existence of software like RPG Tkool 2000. For amateurs to participate, game designing needs to be easy enough. The community of amateur designers and their supporters plays an important role. The networks of those who provide digital contents to be used in games alleviate the burden of amateur designers a great deal. Third, the genre is important. Computer games do not have to meet the rigorous standard of some other kinds of software. A bug in a computer game does not result in a life-threatening situation or a loss of multi-million dollars. Moreover, a game is something amateurs can enjoy designing. This makes games ideal for the participation of amateurs.

Thus, non-commercial amateur role playing games seem to present some possibilities. Because amateur designers do not intend to make money, they can do what professional designers cannot. Amateur game designers can experiment with their non-commercial games, and make their games vehicles of artistic expressions and social or philosophical issues. .

REFERENCES

1. "Furīsofuto chō gekikara gēmu rebyū," uehashi.s2.xrea.com/ (Last accessed April 15, 2005).
2. "Furīsofuto de omoshiroi gēmu matome pēji," www.frgm.org (Last accessed April 15, 2005).
3. Hyōseki Saia, "Freedom House, 2nd," fhouse.s17.xrea.com/ (Last accessed April 15, 2005).
4. Hiro, "Rīfu mura sonchō monogatari," park2.wakwak.com/~hiros_room/soft/mura/mura1.html (Last accessed April 15, 2005).
5. "Intānetto kontesuto pāku," www.enterbrain.co.jp/digifami/conpark/index.html (Last accessed April 15, 2005).
6. Jenkins, Henry, "'Complete freedom of movement': Video games as gendered play spaces," Justine Cassell and Henry Jenkins, eds., *From Barbie to Mortal Kombat: Gender and Computer Game,* Cambridge, MIT Press, 1999, pp. 262-297.
7. Kannnazuki Sasuke(pseudo.), "Sasuke no mōsō gekijō Ver. 3," www9.ocn.ne.jp/~ktataki/mousou/ (Last accessed April 15, 2005). As for "Another Moon Whistle," see in particular the following page: "Another Moon Whistle shōkai pēji," www9.ocn.ne.jp/~ktataki/mywork/another_moonw.html.
8. "Kuriētāzu rinku shū (Links of creators)" www.enterbrain.co.jp/digifami/conpark/link/ (Last accessed April 15, 2005).
9. Mayn, "Pureia-chan no yūki," homepage3.nifty.com/mayn/index2.html (Last accessed April 15, 2005).
10. Noda Masaaki, *Konpyūta shinjinrui no kenkyū,* Bungei Shunjū, Tokyo, 1987.
11. Oudshoorn, Nelly and Trevor Pinch (eds.), *How Users Matter: The Co-construction of Users and Technology*, MIT Press, Cambridge, 2003.
12. Refmap, "First Seed Material," www.mogunet.net/~fsm/ (Last accessed April 15, 2005).
13. "Sanī gāru," sunny-girl.net (Last accessed April 15, 2005).
14. Tempura (pseudo.), "Blue Field," www2.odn.ne.jp/~caq12510/ (Last accessed April 15, 2005).