

Designing female-oriented computer games: Emotional expression*

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- ABSTRACT

초 록

최근 여성 게이머의 수가 급속히 증가하면서, 전자 게임 산업계에서는 아직 상당 부분 미 개척된 여성 시장을 공략할 방법을 모색하기 시작했다. 중국 인터넷 네트워크 정보 센터(CNNIC)에서 최근 발표한 게임시장 조사 보고서에 따르면, 중국 내 전체 게이머의 수는 2009년에 24.8%가 증가한 69,130,000명에 이르며, 이 중 거의 40%에 이르는 38.9%가 여성 게이머이다. 중국 상하이의 I리서치 회사에서 작성한 일련의 연구 보고서는 2003년에서 2009년 사이에 여성 게이머가 8%에서 49% 이상으로 급격히 증가하였다는 것을 보여주고 있다. 이는 과거에 게임 제작 회사들이 남성 게이머에게 얼마나 신경을 쏟았는지 그리고 여성 게이머를 얼마나 간과해왔는가와 상관없이, 게임회사들은 이제 이러한 현실에 직면해야하고, 이에 맞춰 마케팅 정책을 바꿔나가야 한다는 것을 의미한다.

본 연구에서는 첫째 비디오 게임에서의 성별에 따른 선호 요소를 분석하여, 남성 게이머들은 전자 게임을 하면서 공격, 폭력, 경쟁, 빠른 동작의 요소에 더욱 끌리는 반면, 여성 게이머들은 인물의 관계를 이해하는 게임의 정서적, 사회적 측면에 관심을 가진다는 점을 보인다. 관련문헌에서도 여성 게이머들은 익숙한 환경을 지닌 게임, 게이머들이 함께 할 수 있는 게임, 한 가지 방식 이상으로 승리할 수 있는 게임 그리고 캐릭터가 죽지 않는 게임을 선호한다는 점을 지적하고 있다.

둘째, 정서적 측면에서 본 여성 친화적 게임의 특성을 논하면서, 펫 게임(육성 게임), 드레싱 게임(옷 입히기 게임), 사회적 시뮬레이션과 같은 시뮬레이션 범주가 여성 게이머가 가장 선호하는 타입이라는 것을 제시한다. 왜냐하면 이러한 게임들은 여성 게이머에게 절대적으로 매력적인 사랑, 공유, 질투, 우월, 신비와 같은 정서를 가득 채우기 가장 적합한 게임 타입이기 때문이다.

마지막으로, 앞서 논의한 내용과 연관해서, 여성 지향적인 게임 디자인과 관련한 몇 가지 원리를 제안한다. 이는 호감 가는 외모의 주 캐릭터의 소개, '생동감 있는' NPC와 함께할 재미있는 이야기 만들기 그리고 타인 돌보기와 분류, 선별하는 여성적 특성과 관심을 만족시킬 수 있는 방법들을 포함한다.

주제어 : 여성게이머, 여성지향적 게임, 정서 표현, 게임 디자인

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I. Introduction

In recent years, not only tiny start-up companies but also big corporations have made serious efforts to design games that will attract and inspire female players. According to the latest game market investigative report by M2 Company (an USA network consulting company) in 2009, the total number of game players worldwide is 270 million and 130 million of them are female players. This result immediately caught the attention from many research centers and the commercial companies.

For in the past years, female players were not a big group, investigation used to show that the proportion between male player and female players usually stayed around 8:2. But in recent years, there's a rapid growth of female players. The Times newspaper in England also said women began to spend more time on games than men, took up to 54.6% of the total gaming time. A report from Microsoft Research Center showed in 2010 that as to the online games, the proportion of female players had already overtook the male players; the figure is 64% in USA and 66% in Japan.

As the Nintendo official statistics shows, 46% of game players on NDS were female in 2007, 48% in 2008, and 52% in 2009. "Generally speaking, the female-oriented games are the computer games which are specially designed for female and suitable for female operation. The beautiful interface, pretty character image and uncomplicated operation are the characteristics of this kind of games." Sheri Graner Ray, a leading expert on the subject of gender and video games, wrote in her book. When it comes to game production for female players, the interaction design for female-oriented games should consider more on the features of female instinct, just as Ray continued "female is not a type, but a huge and variety market, the symbol to differentiate this kind of market is not what she like, but what she dislike"¹⁾

II. Analysis of female-oriented games: Emotional expression

1. Game preferences by gender

Researches conducted in the last decade showed the distinctly different preference for computer game. Gendered preference are supposedly manifested in common gender stereotypical

1) Ray, Sheri Graner, 2004.

behaviour and social role. Chodrow explained gender differences that develop in early infant as responses to prevalent parenting practices.²⁾ As 'gender' denotes women and men depending on social rather than biological factors, it should be noted that gender preference is through gender socialization that acquire feminine traits. Kafai(1996) considered gender in making computer games and casted a question; "Considering male-oriented gender-stereotyping found many video games, what kind of games would girls choose to design?" Kafai focused on gender differences in the types of games and the types of game feedback in computer games.

When analyzing children's games in regard to the game genre, the game worlds, the interaction modes and the game characters, Kafai found that the results were arranged by gender groups. According to Kafai, almost all of the boys created adventure hunts and explorations whereas the girls games were more evenly-divided among adventure, skill/sport or teaching games. Male players usually focus on confrontation, competition, war, and strategy. They do not attach importance to emotional communication but to the success and victory. Even when playing "casual games", male players are more likely to be attracted by those games which distinguish a winner. Male gamers believe that the purpose of playing games is to enjoy the sense of success and conquest.

Different from male players, most female players focus on the entertainment and emotional communication. Their purpose of playing games is to kill time and get an emotional satisfaction. For example, a female joins in MMORPG(Massively Multiplayer Online Role Playing Game) just because her boyfriend plays the same game. She can enjoy protection and support from her boyfriend and improve their relationship. This sweet feeling is a special gift that games give to female players. But at the same time, female players are not as loyal to games as male, who would easily give up playing game when their boyfriends do not play.

The SINA Company released the top 10 games in China during the second season of 2010 (shown in <Table 1>). From this table, it is not difficult to find out that MMORPG is the most popular game style, 7 games in the list belonged to this category. Statistics also showed that games with the ranking number 1, 2 and 4 tended to be more attractive to male players because of fast movement, blood, intense violence and sexual content. Others with the ranking number 3, 5, 7 and 9 received more attention from female players for they had such characters as simple control, elaborated visual effect and shared experience of playing with other people.

Ranking	Name	Type	Company	Platform
1	Warcraft WLK	RPG	NetEase	Online game

2) Chodorow, N., 1978.

2	DNF	RPG	Tencent	Online game
3	Fantasy Westward Journey	RPG	NetEase	Online game
4	Dragon Nest	RPG	SNDA	Online game
5	QQ Hyun Dance	ACT	Tencent	Online game
6	Tian Long Ba Bu 2	RPG	SOHU	Online game
7	Seer	SIM	Taomee	Web game
8	Three Kingdom Killing	RPG	Yoka	Table game
9	Dan Dan Tang	PUZ	7 Boulevard	Web game
10	Wen Dao	RPG	Guang Yu	Online game

Table 1. Top 10 games by Sina's "Game ranking in China"

2. Favorite types of female-oriented games

Although there are huge differences between male and female players, both gender said they played computer games for the following reasons: fun, challenge, competition, excitement, killing time, visual appeal, education, or because their friends did.³⁾ But when it comes specifically to female players, the types of their favorite games mainly focus on the simulation category, such as pet games, dressing-up games, and social simulation games. Because these are the most suitable kinds to express emotion, female can enjoy expressing emotions -love, share, jealousy, superiority and mystery while playing⁴⁾.

A leading news media of games named Duowan in China recommended 5 computer games especially for female players in 2010 (shown in <Table 2>). One belonged to the pet game, two belonged to the social simulation game, and the other two belonged to the dressing game and the puzzle game.

The top 25 Facebook games in August 2010 by another news media called Inside Social Game in USA have corroborated the above conclusion of female game types. According to this media, among the 25 games, 6 were pet games, 4 were dressing games, and 9 were social simulation games.

In pet games, players can adopt something -maybe a little cat and raise it. Players should let the adopted to learn and work in the virtual game world and at last to be self-dependended. If it dies, the player fails.

In dressing-up games, players dress up themselves or decorate the environment with the materials supplied in the game. Players can choose a character similar to them, and make up the character in their own way. They can also get feedback from the game scoring, and take it as a reference in real life.

3) Mubireek, Khalid Al, 2003.

4) Jin, Huieong, 2009.

Ranking	Name	Type	Feature
1	Pet forest	Pet game	There are abundant cute pets available for players to select.
2	Farmerama	Social network game	A farming web game, in which players can grow crops, raise animals and trade them with neighbors
3	Free Realms	Social simulation game	It allows all of family members to play altogether
4	Dressing room mirror	Dressing game	It allows players to check new outfits from different angles with three mirrors: front, back and side.
5	Transformice	Puzzle game	As a flash game. player control a mouse to move cheese and ship it home quickly.

Table 2. Five recommended games for female players 2010
(From <http://web.duowan.com>)

Social simulation games are a mirror of the real world. Players make friends and communicate with them in the game and keep the game going with help of Non-playing Players. This kind of simulation games is the first and most welcomed category by female players, which achieved great honor for its realistic background and easy control.

For most games nowadays are designed for male and most designers are male, it is difficult for them to predict what kind of games will be popular with female players. A female student complained that the Barbie computer game was stereotypically girlish so that it must have been created by a man. "If you want to make a Nintendo game for girls," the student continued, "I suggest that you get a GIRL to think up ideas".⁵⁾

3. Features of female-oriented games

Generally speaking, female players are more sensitive than male, and they usually pay more attention on communication and interaction. Once a female player asked a question on BBS: "how can I wave my hand to others in the game?" It had a great amount of answers in the discussion area.⁶⁾ A simple gesture like waving a hand is needed by players, not to say other complicated ways of emotional expression. Coincidentally, the delicate answers are mostly from female rather than male players. Because waving a hand does not lead to a win or lose outcome in the end, male players always take this as a decoration of the game. But for females, it's part of the reason why they are playing for hours sitting in front of the computer.

5) Gorriz, Cecilia M., & Claudia Medina, 2000.

6) Schott, Gareth R. & Kirsty R. Horrell, Dec. 2000.

For female players, the goal of gaming is not just killing time, but having fun. Statistics from CNNIC(China Internet Network Information Center, 2009) shown in <Fig. 1> demonstrated the motives of female players. In this chart, more than 40% of them played games just for killing time, over 30% of them for finding old or new friends, about 28% for educational reasons, and 4% for other reasons.

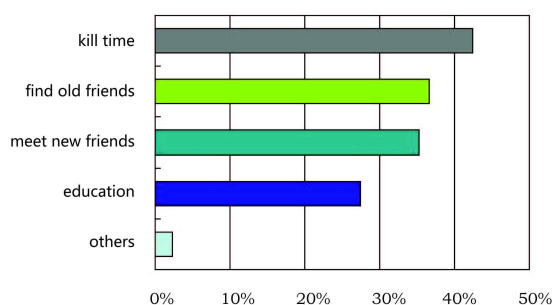


Fig. 1. The motives of game playing
(from <http://www.cnnic.cn>)

<Fig. 2> as below listed some key factors related to female games. This figure is based on 1209 female respondents, varied from university students to office workers in 2009. The statistics indicated that female players prefer games with familiar environments, games with elaborated visual effect, games that allow them to work together, and games which have more than one way to win.

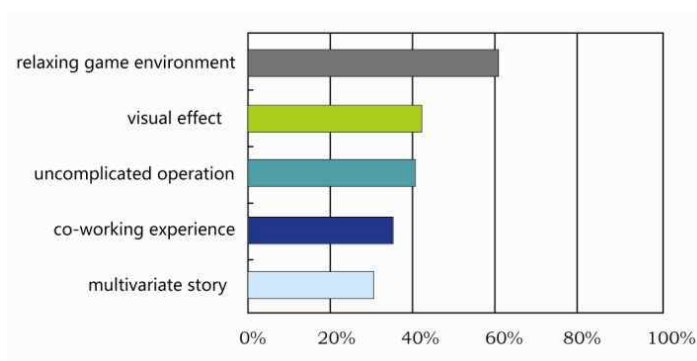


Fig. 2. The top 5 factors what female players concerns
(from <http://www.cnnic.cn>)

There are also some differences between young women and older women(over 35 years old) in choosing games. Young women usually tend to be more sentimental and emotional,

preferring cartoon-style and bright-color of role-playing games. When researcher asked players if video games with cartoon style would appeal equally to male and female players, 60.8% of female said yes, while only 32.9% male players agreed. Studies also showed that, 65.7% of male players preferred real-life style, while 37% female players did. When it comes to older women, they usually tend to seek for a rest from the busy daily work and household duty with table games and puzzle games.

4. Emotion in female-oriented games

According to the features of female players, the subtle emotion as an important element must be taken into consideration in designing female games. This paper prompts several ways to invoke emotional response of players as followings:

First, the main character should be a good-looking and outstanding. For the main character is the first and longest character interacting with player, it is supposed to be pleasant looking, complex in nature, easy control and have abundant expressions. Female players don't like eccentric or ugly characters which male players like, instead, they prefer those with big charming eyes, hot figure, gorgeous and changeable dresses.⁷⁾

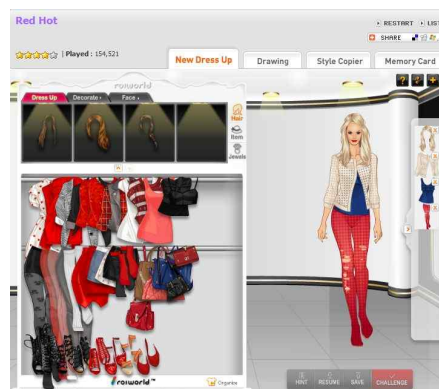


Fig. 3. The interface of Designer Closet

(From Roiworld.com <http://www.roiworld.com/fashion/dress-up-games/play.rwp?gcode=1869>)

"The Designer Closet" promoted by the website Roiworld.com <Fig. 3> is a good example of this. This website is a virtual dress-up website which has more than 3 million users. It has introduced a fashion designer, Norma Kamali, and her virtual designs. Players are able to choose an avatar in the game, and dress it up with Kamali's 2010 Spring and Summer Series. After that, the dressed-up avatar is supposed to be uploading to a forum,

7) Thomas, A., & Walkerdine, V., 2000.

where other players can have a look and give remarks. And if the player wants, the avatar can also be sent to Kamali. Kamali said, "Gaming is useful to designers, for the interactivity brings the brand closer to our customers."

Experts also found that female players are easier to be pleased by well designed emoticons. Psychological emotions - happy, sad, angry, jealous - are usually expressed by facial expressions or words in real life, but it's hard in virtual world to display and depict these feelings within the limited pixels of small face of the game character. In virtual world, emotional icons can help players a lot to understand each other quickly and directly, and at the same time, make the character narrative without a word. For example, a smiling face means happy, and a heart icon carries the underlying meaning of love. The key to designing good emotional icons is that these icons should be simple graphics, easy understanding and consistent with the visual style of the game.

Second, make the non-playing character (NPC) live in emotion. The traditional mode of emotional interaction is bringing players into the game with story. Puzzle games and role-playing games have more story-telling than the other kind of games, with NPC conversation or default action, making the players immerse into the game. When a player's character enters a disordered dormitory with NPCs, the character and NPCs should have the same reaction like they are in the real world. They may pinch the nose in order to resist the smell of garbage, or step back to see if they stepped on dirty things and so on. Actions like this will help introduce new surroundings and ambiances in the game, and make the game characters fully emotional and interesting as well. The only thing that needs to be noticed is that all these actions or conversations should be put inside the game and triggered automatically, without players' any operation. If characters just stand still and have no movement, or have movement only when players control, the emotional immersion will be destroyed.

Third, give female players multiple chances to meet their inborn instinct. For most female players, the most typical inborn instinct is motherhood⁸). A woman obtains this skill by taking care of a rag doll in her childhood, and this is the reason why female players prefer to raise pets in games. Another instinct of female is their netted thinking mode. If we trace back to primitive society, the duty for woman was seeking and picking fruits, which bestow them the talent of operating several cases at the same time.

Therefore, female-oriented games should emphasize more on the multiformity of selection: different characters, long enough story, multiple ending, rich details and so on. As an essay in 'New mode of women life in the 21st century' noted "With the netted thinking

8) New mode of women life in the 21st century[EB/OL]. <http://www.gmw.cn/01shsb/2000-07/22GB/07%5E1412%5E0%5ESH8-2224.htm>

mode, a female can operate 5 cases at the same time, have a better team work than male and have the mentality of seeking conformity”⁹⁾ When she uses these skills in the game, she can obtain enough achievability and gratification, and wallow in it.

III. Conclusions

Nowadays, female players have more chances to confront and fall in love with games than ever. The body-sense interactive solution like Nintendo Wii platform and the SNS gaming model like Facebook have greatly changed the way of how to play a game and at the same time affected the market of video games.

Obviously, Nintendo Wii platform and the SNS gaming model have changed players from “core players” to “light players” The Nintendo Wii platform made good use of body-sense mote control which is easier for female players, while playing APP games provided in Facebook only takes 5 minutes a day, thus the female players now have more freedom to choose the time when she wants to play.

But this is not the panoramic, if this analysis goes further, another key factor behind will pop up; emotion desire of female players. The Nintendo Wii platform gave female players a good chance to work together, to communicate, and to share feelings. The SNS games fairly keep the relationship with old friends and provide some opportunities to make new friends. This kind of internal emotional demand is different from the traditional puzzle games, in female player game market.

Female players typically focus on simulation games, the most suitable media for emotion invoking, and they are keen on different genres in different ages. Most young women like to play role-playing games while older women would select table games and puzzle games, but whatever type they choose, the female are seeking for emotional satisfaction when playing games.

Hence, in female-oriented games, the main character should be in fantasy persona to meet the needs of being beautiful, and the NPCs are supposed to have reaction according to different situations. There also should be some chances for the female players to release their emotional instinct, such as motherhood or selection preference.

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⁹⁾ New mode of women life in the 21st century[EB/OL], 위의 사이트.

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ABSTRACT

Designing female-oriented computer games: Emotional expression

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Recently, as the number of female players has increased rapidly, the electronic gaming industry has begun to look at ways to appeal to the largely untapped female market. According to the latest game market investigative report by China Internet Network Information Center (CNNIC), the total number of game players in China increased by 24.8% in 2009, reached 69,130,000 people, and 38.9% of them are female players. This growth in the number of female player is corroborated by a series of investigative reports from IResearch Company in Shanghai, China: from 2003 to 2009, the number of female players grew from 8% to more than 49%. Therefore, no matter how much attention the game production companies have given to male players or how they have ignored the female players before, the companies would be sensible to face up this reality and adjust their marketing policy a bit more.

This article analyzes gender preferences in video games which shows that male players are more likely to be attracted to elements of aggression, violence, competition and fast action in electronic game-playing, while female players are drawn to emotional and social aspects of the games such as an understanding of character relationships. The literatures cited indicates that female players also show apparent preference for games with familiar environments, games that allow players to work together, games that have more than one way to win, and games in which characters do not die.

It also discusses the characteristics of female-friendly games from the aspect of emotion, pointing out that the simulation games involving pet, dressing-up, and social simulation games are very popular with female players. Because these are the most suitable game types to fill with emotions of love, share, jealousy, superiority, mystery, these are absolutely attractive to female players.

Finally, in accord with the above, I propose some principles of designing female-oriented games, including presenting a good-looking leading character, making the story interesting with "live" NPCs(Non-Playing Characters), and finding ways to satisfy female nature instincts such as taking care of others and the inborn interest of classifying and selecting.

Keyword: female player, female-oriented games, emotional expression, game design

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