Ethnography at Play: An Exploratory Case Study of Chinese Users' Experience in and around Online Games

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ABSTRACT
We draw on our experiences in an exploratory ethnographic study of Chinese users' experience of and in online games to reflect on the value of the ethnographic approach in understanding online games as complex socio-technical systems embedded in real-world places, cultures, economies, and politics. We argue that in order to fully evaluate any particular online game in terms how well it satisfies users' desires and in what ways it could be improved, one needs to look beyond the confines of the game itself, its technical characteristics and logical structure. Evaluation of the user experience needs to go beyond these internal factors to situate the game within larger contexts which can serve both to constrain and facilitate it. We suggest that the ethnographic methodology is highly valuable in this regard because of its holistic, contextual, qualitative, and analytical approach.

Author Keywords
User experience, online games, ethnography.

ACM Classification Keywords
H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION
Ethnographic methods have been adopted in evaluating user experience in the field of HCI [5]. In the case of studying user experience in online games like World of Warcraft (WoW) or virtual worlds like Second Life (SL), a number of ethnographic studies [1, 2, 13, 14] have been conducted. Most of these studies followed a so-called "virtual" ethnographic approach [11], where essentially traditional ethnographic techniques such as observation and interviews were carried out by the researchers inside the online game or virtual world being studied. To easily differentiate with "virtual" ethnography, we denote ethnography that takes place in real world as "real-world" ethnography.

In this paper, we reflect our experience in using both "real-world" and "virtual" ethnographic techniques to explore Chinese users' experience in online games. In particular, we present some findings of the study to highlight the value of ethnographic approach in understanding online games as complex socio-technical systems embedded in real-world places, cultures, economies, and politics. In addition, our case study sheds some light on the following questions that are relevant to this workshop:

- What kind of evaluation concepts and methods are used in the Chinese online game industry, and what are their limitations?
- What factors of game experience should be measured?

STUDY BACKGROUND AND METHODOLOGY
Our study of Chinese users' experience in online games emerged from a research project [16] that aimed to study virtual currency use in China. We define virtual currency as private currency intended for online use [16]. This definition of virutal currency excludes real currencies such as RMB or USD that are used online (e.g., via credit card). The majority of virtual currencies used in China are for online games, e.g., WoW gold. Therefore, in practice, a significant component of our research focused on understanding users' experience with virtual currencies in online games and their experience with online games in general. As we showed in [16], the money aspect of user experience in online games closely interrelates with other important aspects such as fun and fairness.

In the summer of 2007, we conducted our ("real-world" ethnographic) fieldwork in and around Beijing, Chengdu, Hangzhou, and Shanghai, selected for their reputation as "game hub" cities and for geographical diversity. Part of the study was also conducted purely online (i.e., "virtual" ethnography), in which we observed, participated, and interviewed informants in QQ (China's most popular IM service with 273.2 mil. total [28.9 mil. peak simultaneous] active accounts [15]).

Our data was collected from quiet observation, informal conversations, semi-structured interviews and focus groups. Sometimes while our informants were playing games, we asked them to think aloud and interviewed them. Interviews took place in *wong ba* (Internet cafe), in other public places such as cafes and restaurants, and in workplaces and homes of some informants. It is important to note that many of these places including *wong ba*, their workplaces and homes were where informants played online games.

Interviews were conducted by a bilingual Chinese researcher, alone or with a non-Chinese, non-Mandarin-speaking partner. Our experience was that the presence of a foreign partner has several practical benefits: approaching strangers in public spaces, getting potential informants interested and legitimizing the asking of "obvious" (but important) questions.

Most of our informants were acquired through serendipitous encounters in *wong ba* or other places selling game currencies or game magazines as well as subsequent "snowball" recruiting, though some were pre-arranged through our own social networks.

We interviewed a total of 50 informants with diverse backgrounds including a young factory worker, a group of 11-12 year-old school children, a teacher and a gamer in their 50's, high school and college students, young professionals, a marketing supervisor for a Chinese online game company, a VP of design for another Chinese online game company, and owners of software store, news kiosk and Internet cafe. Most informants had played online games before. Through our informants we encountered a wide range of games and virtual environments such as QQ Games, World of Warcraft (WoW), the Legend of Miracle 2 (Mir 2), With Your Destiny (WYD), Fantasy Westward Journey, Miracle Island, Audition, Maplestory, ZT and Second Life.

THE CHINESE CONTEXT

The Chinese online game scene attracted our interest not only because of its vast scale and rapid growth, but because the ways its development is eliciting reactions, sometimes strong reactions, from users, observers, and authorities. These reactions help make visible how games are part of changing social, cultural, economic, and regulatory contexts, contexts that profoundly influence the gaming experience.

According to the latest report (in Chinese) [4] from China Internet Network Information Center, there are 162 million Internet users with a 12.3% Internet penetration rate in China. 37.2% of the Internet users frequent a total of 110,000 *wong ba* for Internet usage, which makes *wong ba* the second most popular place (only after workplace) for Internet usage. Online gaming has become a nationwide phenomenon - there are 76 million online gamers in China.

iResearch's 2006 Online Game Research Report (in Chinese) [12] describes a number of interesting characteristics of Chinese online gamers:

- their average age is 23.6;
- the ratio of male and female gamers is roughly 5:5;
- their major reasons for playing online games are: making friends (59.6%), developing IQs (9.7%), and just having fun (7.5%);
- game factors that they care most about are: ease of operation (33%), and graphic and audio quality (16%);
- they play online games on average 4.1 hours/days;

- they play an online game for 7.9 month on average;
- the most favorite game server is the one that is geographically closest to where a gamer lives;
- they spend an average of 205 RMB (about 27 USD) in online games per month, notwithstanding their (claimed) average accepted expenditure for online games is 87 RMB (about 12 USD);
- 83.7% of them have done transactions in games.

These results helped us design our study. For instance, knowing the different places for playing online games, we deliberately recruited informants so that each type of place for playing online games was covered in the study.

Several Chinese government's regulations and policies around Internet usage also play a big role in shaping users' game behavior and experience:

- *wong ba* cannot have customers under age 18 (issued on 29 Dec. 2006) with the exception of "green" *wong ba* that are funded by the government and specifically designed for underage Internet users
- prohibition of online gambling (issued on 25 Jan., 2007)
- prohibition of exchanging game scores or virtual currencies for cash (issued on 25 Jan., 2007)
- prohibition of buying in and selling virtual currencies at a profit (issued on 15 Feb., 2007)[1]
- implementation and deployment of anti-addiction mechanism in online games (enforced from 16 July 2007)

Let us take the last regulation as an example to illustrate how regulations can considerably affect user experience in online games. The online game anti-addiction regulation mandates all online games operated in China to implement the following rewarding mechanism: an underage player (under age 18) can earn 100%, 50% and 0% of game rewards (such as experience scores and virtual equipments) respectively during the first three hours, during the 4th and 5th hours, and after 5 hours of "online time" in a game. The underage player has to go offline for 5 hours before the system zeros his or her online time counter. When we interviewed a VP of design for a Chinese online game company, he pointed out that after implementation of the anti-addiction mechanism in online games, virtual economies within games changed dramatically. For example, the prices of game equipments went up because it will take underage players longer to acquire the same equipment than before. In turn, these economic changes will lead to various changes in players' game behavior and game experience. For instance, student players may no longer afford to buy premium equipments, and they would mostly likely experience differently if they had those premium equipments on their game characters.

A user's experience with an online game could begin before he or she actually starts playing the game. The anti-

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[1] Note that it does not ban selling of virtual currencies.

addiction regulation relies on a gamer registration policy that requires a user to register with the game company using his or her true identity information (such as real name, national ID number, and contact information) before the user can play the game. The game company, alone or with the help of police departments, will verify the authenticity of the identity information against the user. All but authenticated adult players will be subject to the anti-addiction regulation. The system allows parents or guardians to check whether their children are playing a particular game, and more generally allows anyone to check whether his or her identity information is being used by others for the registration purpose. However, in practice, players have different tactics to work around the limitations and requirements. For example, they will switch to play another game after playing a game for 5 hours. Some underage gamers borrow or even buy other adults' national IDs for registration.

During our observation in a "green" *wong ba*, we witnessed an instance of the registration requirements directly affecting one or more users' gaming experience. An underage gamer A (the one who wore a sleeveless shirt in Figure 1) was eager to play Mir 2. Since he did not seem to have a game account or the credentials to apply for an account, he pleaded with his older company B (not shown in Figure 1) to use B's game account to play Mir 2. At the beginning, B did not do A the favor. But, after A's persistent begging/pestering, B logged in the game on A's machine. In less than a minute, A's character got killed by another character in the game and the game was over for him. He begged B again, but B was tired of him and rejected to help. A felt upset and then turned to the girl, another company of him (on A's right hand side in Figure 1), "voluntarily" watching her shoulder and giving orders while she was playing another game.

Figure 1. Underage gamers in a "green" *wong ba*

SOME RELEVANT FINDINGS

In [16], we discussed trust and distrust, and fairness and unfairness experienced by players in online games. On one hand, partly because of distrust of strangers online, many transactions around virtual objects (even among highly online-savvy individuals) in China require physical travel for a face-to-face cash transaction (FCT). On the other hand, trust cultivated in a game or migrated from real world or other games made players share their game accounts. We also found that the same action of buying virtual equipments directly from the game was regarded indignantly unfair by some players but reasonably fair by others.

Another interesting finding is that many of our informants prefer to play with other gamers in an Internet café than to play alone in home or workplace. Some players chose to sit beside other unknown gamers who played the same game, or even asked the people who sat beside them to switch seats so that they can sit together. In our visits of various Internet cafes, we observed the "clustering pattern" from time to time. This implies that Internet café is adapted as a place for socializing for some players.

We observed several groups played in Internet cafes. They were shouting, yelling, joking and even cursing as if they were the only ones there. While in general public places in China are expected to avoid loud talking, people in Internet cafes seem to implicitly accept this type of feverish play. One informant told us she just loved playing in groups in Internet cafés because the synergistic pleasure with other players and the strong feeling of "forgetting the world and other people and just immersing in the game world".

Two key observations can be made from these findings. First, these findings reaffirmed that users' experience in online games are influenced by "outside" social, cultural, economical factors. Therefore, in order to gain a comprehensive evaluation of user experience in online games, we need a holistic approach that looks beyond online games themselves. Secondly, factor such as trust, fairness and pleasure are integral aspects of users' holistic experience in online games and thus should be systematically evaluated.

WHY USE ETHNOGRPAHY TO STUDY ONLINE GAMES

Online games, especially Massively Multi-player Online Games (MMOGs), are usually more akin to real world than traditional desktop games because they are designed to be sophisticated worlds which encourage interactions among players. Besides, as Castronova [3] commented that "the membrane between the synthetic world and the real world is quite porous". Designers and gamers would inevitably bring in the mundane, psychological, social and cultural nuiances into the game worlds. Therefore, it is natural to use methodologies (such as ethnography) that are used to study human cultures and practices in real world to study users' experience in and around online games.

As we argued in the previous section, comprehensive evaluations of user experience in online games calls for a holistic approach, and ethnography is such a holistic approach that can take into account the contexts within which the user experiences are socially and culturally constructed.

Ethnography also stresses the particular attention to the site of experience production. This would be suitable for studying online game play at different types of places (both online and offline).

Last but not least, ethnography is much more than just a set of data collection techniques. As Paul Dourish has argued extensively, a crucial value of ethnography lies in its interpretative and analytical power [7, 8]. Nevertheless, how to make use of its analytical power to inform design is challenging. There is a real tension between the ethnographic mindset and the design mindset: one is trying for a deep understanding, while the other is trying to affect change or bring into new experiences. One needs to go outside of ethnography to apply its insights to design.

Despite its merits, it is imperative to be aware of the nautre and constraints of ethonography in studying user experience in online games. One of the biggest concerns is that ethonographic study is ususually a lengthy and resource intensive process which may impose considerable overhead, if not impossible, to fit in a game product cycle. There have been efforts (e.g., contextual inquiry) to adapt ethnographic studies for regular product development contexts. The core of these adaptations is to shorten the length of the study and/or reduce the resource investment.

Our experience is that even a little ethnography can uncover important themes and issues and thus may be worth doing in terms of expected return on investment. "Virtual" ethnography or a combination of "virtual" and light-weight "real-world" ethnography (with considerable less investment) deserves serious consideration in a product development context. The cost and length of an ethnographic study can potentially be further reduced by leveraging the fieldwork of numerous marketing staff, if that's available. Even if it is insurmountable to use ethnography in a particularly stringent product cycle, there are other cases where ethonography would be useful. For example, many informants we met in China told us the online games in the market are monotone and much alike, and they want something *different*. We posit that a full-fledge ethonographic study of user experience in current games is likely to yield insights that would be difficult to uncover otherwise and would significantly contribute to an innovative game idea/design.

HOW CHINESE ONLINE GAME COMPANIES SEEM TO EVALUATE THEIR USERS' EXPERIENCE

We became aware of several ways in which Chinese online game companies collect gamers' experience data and feedbacks. First, such data can be retrieved directly from the games and further inferred. In-game data such as

number of online characters, time duration of online play can imply users' overall satisfaction. This is particularly the case when the game is in public tests and normal operation. Secondly, online game forums usually contain a wealth of user experience data and feedbacks. Thirdly, customer service representatives collect such data in handling questions and complaints directly from the players. Fourthly, as our game company marketing supervisor informant revealed, marketing staff are responsible for collecting user experience data and feedbacks as well as latest online game market status (e.g., which game is most popular in the market). They frequent about 10-20 Internet cafes daily to watch gamers play games (not limit to their games), and to chat with players as well as Internet café owners and staff. They also visit software shops that sell game cards weekly to collect the latest market information (e.g., number of game point card sale) and promote their games. They also write market reports regularly. Although marketing staff can collect useful information by conducting the "fieldwork", they may have ignored important aspects or simply taken things for granted. We suggest that game designers can benefit from having "outsiders" (e.g., people who are foreign to games or local culture) to study gamers and their experiences.

CONCLUSION

In this paper, we report our experience in using ethnography to study Chinese users' experience in online games. We selectively use some findings of the case study to highlight the values of ethnography and discuss its relevance to understanding user experience in online games. Although ethnographic studies tend to be lengthy and resource-intensive, our experience suggests that a little ethonography can uncover important themes and issues and thus may justify its considerable effort and expense. It's possible that by customizing ethonographic methods to address more directly key issues within game development, particularly as they relate to ties (wanted and unwanted) to external forces and contexts, future game-related ethnographic research may provide more "bang for the buck".

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