Cultural Differences on Visual Self-Presentation through Social Networking Site Profile Images

Chen Zhao
Microsoft Research Asia
No.49 Zhichun Road, Beijing, China
chzha@microsfot.com

Gonglue Jiang
Harvard University
24 Everett St, Rm 207, Cambridge, MA, USA
gjiang@gsd.harvard.edu

ABSTRACT

A profile image is one of the most important personal attributes on social networking sites (SNSs). The current study examines whether self-presentation on SNSs is related to national culture and how forms of self-presentation differ between American and Chinese users. We accomplish this by analyzing profile images on two social networking sites, Facebook in the US and Renren in China. Our findings indicate that self-presentation is sensitive to national culture: Chinese users are more likely to customize their profile images than Americans. Our study suggests that there is a need to design social networking website features that better support profile construction for international users.

Author Keywords

Cultural differences, self-presentation, social networking sites, profile images.

ACM Classification Keywords

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

General Terms

Human Factors.

INTRODUCTION

One of the values provided by Social Networking Sites (SNSs) is the opportunity for self-presentation, which is usually conveyed in the form of online profiles. SNS profiles often consist of a profile image, a self-description, (e.g., demographics) and lists of various interests. These profiles play a significant role in "users' ability to initiate, develop and maintain personal relationships" [1].

There are a variety of ways that online self-presentation can be characterized. Most previous studies have looked at profile pages with a focus on textual elements. We focus on a common element to all SNS profile pages: The profile

image. The profile image usually appears in a noticeable part of the profile page and is a primary piece of identification in a user's profile. Why is it interesting to study profile images? The profile image, which shows physical appearance, is "the most remarkable feature for self-presentation" according to Leary [2].

In this paper, we examine the cultural differences in the forms of self-presentation of the SNS profile image. Our results identified different profile image styles between Chinese and American users. Chinese, compared with American users, are more likely to customize their profile images by using, for example, digital effect photos. American users are more likely to show group photos in their profiles, contradicting our original hypothesis. We discuss how these findings provide implications for designing specific features on SNSs for users who are not from Western cultures and have particular preferences for their self-presentation on SNSs.

Self-presentation and Photos as Visual Profiles in SNS

Self-presentation is "the process by which people convey to others that they are a certain kind of person or possess certain characteristics" [2]. Tufekci pointed out that self-presentation is regarded as "a minimum" requirement for participation on SNSs by users and one of the most important pieces of SNSs [3]. Much of the previous research concerning SNSs' user profiles has examined different perspectives. Stecher and Counts explored aspects of online impression formation and discussed the crucial role of user profiles in this process [4]. A study conducted by Pempek et al. found that participants find self-presentation one of the most interesting things about Facebook and 62.64% of Facebook users consider posting photos as a way to express who they are to other users [5]. Strano studied what kind of photos people choose for their profile images on Facebook and found that gender and age affect what photos people choose for their profiles [6]. Here we consider only how national culture affects the form of self-presentation on SNSs.

Cultural Differences on Self-Presentation

Culture is one of the major influences on self-presentation [6]. In general, the terms "individualism" and "collectivism" are used to understand how cross-cultural differences shape self-presentation. Collectivists, such as

the Chinese, tend to emphasize the results of their actions on members of their in-groups. They also tend to be interdependent with in-group members. Individualism in western nations, such as the United States, reflects a tendency to respect individual entities, rather than group entities [7]. Chinese and Americans, for example, have different self concepts in relation to others. Marcus and Kitayama described the Chinese as having *interdependent* self-construals and Americans as having *independent* self-construals [8]. A person with an interdependent self-construal sees him/herself as defined by the relationships and contexts s/he inhabits. A person with an independent self-construal, in contrast, sees him/herself as unique, with dispositional attributes that are independent of the relationships and contexts in which s/he is embedded.

This cultural difference has implications for the ways in which people from different cultures might choose to present themselves to others, in part because the concept of "self" varies by culture. Since an interdependent self-conception is desirable in collectivism cultures, we hypothesize that users from this culture might choose to present their social group memberships when presenting themselves online, because relating to others is part of their self concept. Therefore, we form the following hypothesis:

H1. Chinese SNS users, as compared with Americans, will be more likely to use group photos in their profile images.

Here we define a group photo as an image showing a user with one or more other people.

In recent cultural psychology research, researchers have proposed a bicultural self theory for contemporary Chinese individuals, encompassing two main components: The individual-oriented self and the social-oriented self. The social-oriented self is rooted in a traditional Chinese conceptualization, whereas the individual-oriented self has, in recent years, emerged and developed under Western influences, along with modernization. Prior research has found that the individual self of the Chinese gets developed and grows in some situations, such as the workplace [9]. Some research has examined how self-presentation has changed online and found that more flexibility is provided for users in how they construct their self-presentation [10]. Users are provided with a totally new channel and have more freedom when presenting themselves on SNSs when compared with a face to face condition. We believe that the bicultural self in contemporary Chinese individuals can also be reflected in their self-presentation on SNSs. We propose that Chinese SNS users would be more likely to customize their photos in a profile image in a variety of ways, which infers Chinese bi-self concepts when compared to Americans.

H2. Chinese SNS users, when compared with American users, will be more likely to customize their profile images.

We categorized the methods of customization into several classifications: (1) Self photos with digital effects, edited by

programs such as Photoshop; (2) Photos of celebrities: Sports stars, movie stars, successful businessmen etc.; (3) Photos of a Baby, Animal, Landscape and Fine arts. (4) Photos of Objects: Phone, computer, car, etc. Figure 1 shows several examples of customized profile images.
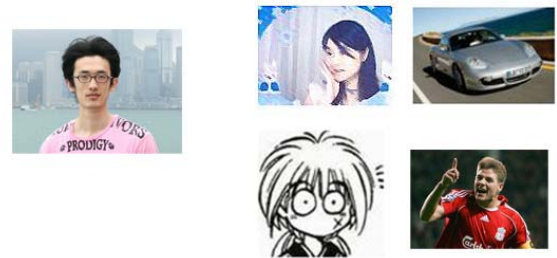

Figure 1. Examples of Customized Profile Images.

METHOD

Participants
This study is based on data collected from Renren[1] and Facebook. The participants of the study came from a list of students at eight top universities (four each in China and the US) who were referred by members of the researchers' social networks in China and the US. We restricted our sample using two filter questions: Where the student was born and raised, and what language(s) they spoke fluently before the age of 10, to make sure the cultural identity of each participant in this study was strictly either Chinese or American. There were 114 subjects sampled from China and the US in total (57 participants from each country; among the 57 participants, 31 male and 26 female from each country). The average number of friends for each participant was 398 for the Chinese (ranging from 31 to 1608) and 377 for the Americans (ranging from 56 to 2276). All of our participants opened their profile photos for public viewing.

Data Analysis
The profile photos were independently coded by two researchers for group photo (coding interliability: 0.98) and customized photo, including customization type (coding intereliability: 0.89).

RESULTS
An independent sample T-test was conducted to examine the number of SNS friends and showed no significant difference between the Chinese and American participants (t(101)=.30, sig.=.77). We examined the gender effect with

Category	Customization	American		Chinese	
		Count	Percent	Count	Percent
Group photo	N/A	20	35.09%	0	0%
Customized photo	1. Self with digital effect	6	10.53%	11	19.30%
	2. Celebrities	0	0%	2	3.51%
	3. Baby	0	0%	1	1.75%
	4. Animal	1	1.75%	3	5.26%
	5. Landscape	1	1.75%	1	1.75%
	6. Fine Arts	0	0%	4	7.02%
	7. Objects	1	1.75%	2	3.51%
	In total	9	15.79%	24	42.11%

Table 1. Photo choices for Profile image.

a binary logistic regression and found no significant difference on group photo (β = -.09, p=.87) and customized photo (β = -.72, p=.10).

We used the 2-Independent Sample Mann-Whitney Test to test our first hypothesis. For H1, we predicted that Chinese, compared with American participants, will be more likely to use group photos in their profile images. Interestingly, our data showed that 35% of the Americans (20 out of 57 participants) used group photos and none of the Chinese participants had group photos in their profile images; the opposite of our H1 is supported (z=-4.9, p<.001, two-tailed). We used binary logistic regression to test our second hypothesis. Our H2 predicted that Chinese participants, when compared with American participants, will be more likely to customize their profile images. A significant effect of national culture was detected here (β= 1.14, p<.05), suggesting significantly more Chinese (42.1%) customized their profile photos compared to American participants (15.8%). See Table 1 for the customization details.

DISCUSSION
This study examined self-presentation differences across Chinese and US users of social networking sites. Results suggest that in the SNS scenario, more Chinese users tend to customize their profile photos than American users do. Nevertheless, American users tend to present profile photos that contain more people, contradicting the "western-individualism, eastern-collectivism" theory.

First we would like to compare the designs of Facebook and Renren in order to verify if our findings are caused by cultural differences, as we hypothesized, or by the different designs of Facebook and Renren. We found both similar and different features. Both Facebook and Renren provide Friend's news feeds, profile, friend suggestion, status attachment, and privacy settings. There are also interesting different features when comparing Facebook and Renren.

With regards to sharing features, Renren provides a set of emotion facial icons alongside Videos, Links and Photos; Facebook provides Status updates, Questions, Photos, Links and Video. Asian users' preference on emotion icons was identified by previous cross culture research. Kayan et al's Instant Message survey found that emotion icons were significantly used more in Asia than in North America [12]. Another different feature is that Renren provides a set of rich features for users to decorate their profile pages and photos, including skin templates, photo frame templates and animations. To the best of our knowledge, neither Facebook nor Renren provides features for users to customize their profile images or encourages this behavior. In fact, Renren actually ranks the users who do not use real personal photos for profile images lower, which actually discourages Chinese users' customization behaviors. Therefore, there is a reason to believe our findings would be more strongly supported if we take into consideration the design differences of Facebook and Renren.

Facebook profile images can be seen as a form of "implicit" identity construction in which users display personal characteristics through images [13]. Zhao et al. found through a content analysis of 63 college student Facebook accounts that users rely heavily on implicit modes of self-presentation. Our results echo these findings but we also found that Chinese and American users have different "implicit" presentations: Chinese users tend to choose customized images that show "polished" images of the self and Americans tend to choose group photos. We articulated possible reasons why Chinese users prefer to customize their profile image in our hypothesis. Collectivism oriented Chinese culture tends to value looking proper in front of social groups; external objects (such as a nice car, a mobile phone, etc.) implicitly shows the status of an individual. It might also be attributed to a concern of identity disclosure as research shows that Chinese disclose themselves less than Americans [14]. It is surprising to find that more

American participants (35%) compared with Chinese participants (0%) choose a group photo, as it is contrary to previous culture difference theories. We can speculate about two possible interpretations for this finding. All of our participants are undergraduate and graduate university students. Is there a possibility that the new Chinese generation is more individualistic than the new American generation? This would form interesting exploration in future work. Another reason could be that social activity plays more important roles for Americans when compared to Chinese. Additional research, with additional and more focused measures, can help provide a firm conclusion.

There are also limitations in our study. First, our participants were identified via our own social network and could have led to a limited demographic. Second, Strano found that age affects users' profile image choices [6]. We do not know if our results can be generalized for other age groups. In future research, we plan to examine a larger range of online behaviors and user backgrounds by taking into account the role of age in self-presentation and examining multiple forms of online self-disclosure.

CONCLUSION
We are interested in how people use their profile photos to constitute the self image in different cultures. These findings will help the community to get a more holistic view on how SNSs are used in different cultures given that the majority of current SNS research has been performed on Facebook or MySpace in the US. Moreover, the findings could also have implications for SNS design in achieving cultural sensitivity. Are customization features necessary for the success of SNSs? Currently, Renren does not have any special features for users to better customize their profile images. However, it does have special features to support users in decorating and personalizing their homepage. The homepages on Renren are diverse in terms of background and visual design, suggesting customization or personalization needs of Chinese users. Additionally, another excellent example is Tencent (www.tencent.com), which is currently the third largest internet company in the world and known for localized design features for Chinese users. Tencent provides a number of features to support users in customizing their avatars and homepages, such as virtual clothes, profile image patterns, and many templates for personal pages. Cultural differences in self-presentation have implications for the design and use of social networking sites. Graphical applications and tools can be incorporated into existing sites such as Facebook to provide more ways for users to visually present themselves in particular for non-Western users.

REFERENCE
1. Toma, C.L. Affirming the self through online profiles: Beneficial effects of social networking sites. In Proc. CHI 2010, ACM Press (2010), 1749-1752.

2. Leary, M.R., Tchividijian, L.R. and Kraxberger, B.E. Self-presentation can be hazardous to your health: Impression management and health risk. Health Psychology, 13, 6 (1994), 461-470.

3. Tufekci, Z. Can You See Me Now? Audience and Disclosure Regulation in Online Social Network Sites. Bulletin of Science, Technology & Society, 28, 1, (2008), 20-36.

4. Stecher, K., Counts, S. Thin Slices of Online Profile Attributes. In proc. ICWSM'08, American Association for Artificial Intelligence, (2008).

5. Pempek, T.A., Yermolayeva, Y.A. and Calvert, S.L. College students' social networking experiences on Facebook. Journal of Applied Developmental Psychology, 30, 3 (2009), 227-238.

6. Strano, M.M. User Descriptions and Interpretations of Self-Presentation through Facebook Profile Images. Journal of Psychosocial Research on Cyberspace, 2 (2008).

7. Triandis, H.C. The self and social behavior in differing cultural contexts. Psychological Review, Vol. 96, No. 3, (1989), 506-520.

8. Markus, H.R., Kitayama, S. Culture and the self: Implications for cognition, emotion, and motivation. Psychological Review 98, 2 (1991), 224-253.

9. Lu, L. The Individual-Oriented and Social-Oriented Chinese Bicultural Self: Testing the Theory. J. Soc. Psychol., 148, 3 (2008), 347-374.

10. Huffaker, D.A. and Calvert, S.L. Gender, identity, and language use in teenage blogs. Journal of Computer--Mediated Communication, 10, 2 (2005), 1.

11. Scott, C., and Stecher, K. Self-presentation of personality during online profile creation. In Proc. ICWSM '09, American Association for Artificial Intelligence, (2009).

12. Kayan, S., Fussell, S. R., and Setlock, L.D. Cultural Differences in the Use of Instant messaging in Asia and North America. In Proc. CSCW 2006, ACM Press (2006), 525-528.

13. Zhao, S.Y., Grasmuck, S., and Martin, J. Identity construction on Facebook: Digital empowerment in anchored relationships. Journal of Computers in Human Behavior. 24 (2008). 1816-1836.

14. Chen, G.M. Differences in self-disclosure patterns among Americans versus Chinese: A comparative study. Journal of Cross-Cultural Psychology 26, 1 (1995), 84-91.