

Social Culture of Mobile Phones: A Case Study of China and Japan

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(Abstract)

Human beings are social animals. It is instinctive to communicate with others. The mobile phone is essentially an interpersonal interaction tool used by people to transmit information, convey feelings and coordinate activities. Since its birth, the mobile phone has formed different dominant social functions, and each function embodies unique social meaning. In the early stage of the cellular phone, during which voice calls were the predominant function, there were few subscribers, and the phones were widely perceived as luxury items. In addition to one-to-one voice calls, with the development of mobile technology, the mobile phone has provided other functions, such as short message service and email, allowing users to make a choice between synchronous and asynchronous communication. After the introduction of smart phones, social applications and instant messages—representing a higher return to face-to-face communication—have characterized a variety of ways to express oneself. On one hand, under the construction of mobile phones, human senses get extension with pluralistic self existing in multiple social space and time; on the other hand, different social needs growing out of different relationships among people are met by appropriate mobile social functions. This paper outlines the changes of social relations caused by mobile phones and analyzes interpersonal relations in conjunction with mobile social applications. One trend in particular has emerged when it comes to making friends with strangers through mobile phones. That is, people are looking for a way to solve practical problems instead of chatting in virtual world. In the future, more and more media will appear in our daily life, and subsequently there are bound to be questions with excessive mediated communication. This paper proposes a new solution—“ubiquitous sociality”, joining in mobile groups online to solve specific problems in real life.

Keywords mobile phone, social relations, mediated sociality, ubiquitous sociality.

1. Introduction

To begin with, this paper will provide a brief background of the mobile phone's development. In 1973, Martin Cooper, the telephone engineer of Motorola, developed the first portable cellular phone. In the mid-and late 1980s, the cellular phone was gradually finding its way into American families. At that time, NTT started to introduce cellular phones in Japan. In 1987, the first analogue cellular mobile telephone system was built and came into service in Guangdong Province, China. The cellular phone, weighing over 500 grams, was thick and solid. Although it only made voice calls with poor signal, it was too expensive for ordinary people

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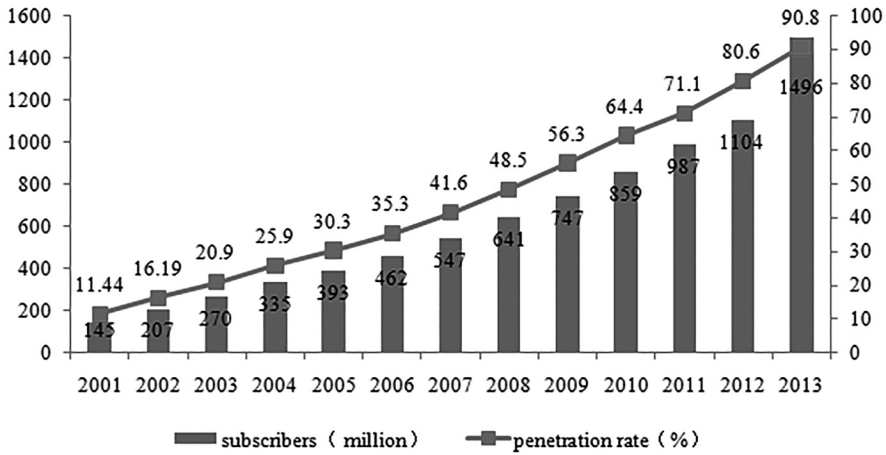
to purchase. In 1995, the penetration rate of mobile phones in China was just 0.3%¹. In 1992, China started a comprehensive market-oriented reform. Since then, the telecommunication industry has accelerated the pace of commercialization. China Unicom was founded in 1994 and introduced GSM digital mobile service one year later. In 2000, China Mobile was established. With the development of national economic levels and the improvement of living standards, people have paid more and more attention to mobile communication, and the penetration rate has reached 11.2%. However, the Chinese mobile phone market was monopolized by Motorola, Nokia and Ericsson, which were the three most popular foreign cellular phone companies. Under a series of policies supported by the government, Chinese manufacturers began to develop mobile phones. As a result, many new brands sprang up in a short period of time. Mobile phone shipments increased greatly while the price of the phones began to decrease. In March of 2001, China had more than 100 million subscribers—the highest number of users in the world—yet its penetration was just 11.44%. In contrast to Chinese mobile subscribers, mobile subscribers numbered about 69.1 million in Japan in the same year, which was less than in China. However, Japan was in a global leading position in penetration, with a rate of 54.3%². The mobile phone has transformed from a luxury into a utility. The year 2008 was a turning point in the mobile phone's history. The iPhone 3G was launched by Apple, leading us to the smart phone era. The Apple iPhone includes independent operation systems, fast network connections and humanized designs. From then on, the mobile phone has played an increasingly important part of our daily life. In fact, 84% of users report that they cannot live without a mobile phone for one day³. It has become necessary for people to obtain information, get in touch with others, and take part in social activities through the mobile phone.

¹ In this paper, all data about Chinese mobile phone subscribers and penetration come from the official website of the Ministry of Industry and Information Technology of the People's Republic of China. <http://www.miit.gov.cn/n11293472/index.html>.

² In this paper, all data about Japanese mobile subscribers and penetration rates come from the official website of the Ministry of Internal Affairs & Communications of Japan. <http://www.soumu.go.jp/johotsusintokei/field/tsuushin02.html>.

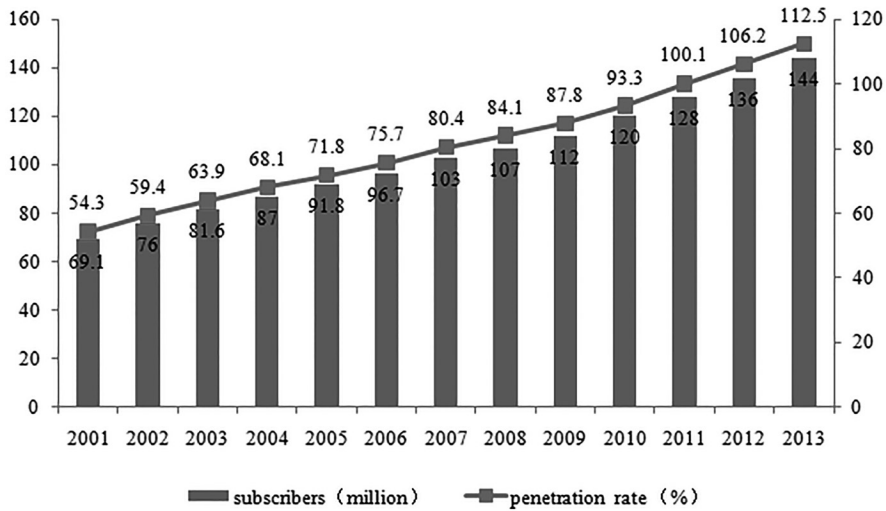
³ Tencent Technology: <http://tech.qq.com/zt2012/xxt/163.htm>.

Figure 1 Mobile Subscribers and Penetration Rate of China



Source: website of Ministry of Industry and Information Technology of the People's Republic of China

Figure 2 Mobile Subscribers and Penetration Rate of Japan



Source: website of Ministry of Internal Affairs & Communications of Japan

As a social tool, voice calls establish instant connections and speed up the rate of information diffusion. Calls also help people to coordinate activities while being in different locations and even different time zones. However, it is generally oral communication that necessitates immediate response. Unlike voice calls, short message services based on text can be a way of asynchronous communication. With the penetration of smart phones and the development of mobile Internet, more and more applications enriching social functions can be installed on to mobile phones. Freely choosing video, audio, text, and pictures that express emotions and convey information facilitates easy and smooth communication. Nowadays, the mobile phone has become completely embedded in society, as evidenced by people exchanging mobile phone

numbers and social network accounts in all kinds of formal and informal situations. That is to say, sociality based on mobile phones has become a significant part of life and has an impact on knowing ourselves, connecting with others, and understanding society.

There is a wide range of discussion on sociality of mobile phones in academic circles. In review of Erving Goffman's theories of face-to-face interaction, Ruth Rettie (2009) suggests that the mobile phone is both synchronous and asynchronous media and the distinction of two kinds of interactions is not technologically determined but shaped by interactional norms^[1]. From the point of double perspectives, Andrea C Nakaya (2015) points out that it is more convenient for us to contact each other by mobile phones^[2]. However, because people are engaging in more communication via phone and less communication in person, they are at a risk of forgetting or losing important interpersonal skills that are only maintained through face-to-face interaction. Worse still, it has also brought much dispensable meaningless information. Owing to the unique business ecosystem, the Japanese mobile phone industry has led the world from mobile handset production to services design. Therefore, much work on this topic has been done by Japanese scholars. For example, Okada Tomoyuki and Matsuda Misa look upon mobile phones as a specialist subject and put forward "mobile science" early in 2002, when mobile production and its popularity were still in the early stages in China. They argue that it is necessary to view mobile media as a specialized subject and topic of research within the perspective of culture and society^[3]. Daisuke Okabe, Mizuko Ito and other scholars (2005) explore mobile phones within Japanese life in depth from the viewpoints of cultures and imaginations, social networks and relationships^[4]. Different from observers in other countries and regions, Chinese scholars focus on the mobile phone's business model, and there is relatively little work with opinions on media and culture. However, Wang Ping (2008) discusses the co-construction of mobile media and social contact from the positive and negative points of view^[5]. Hu Chunyang (2012) also combines the topics of mobile media and interpersonal communication to investigate the shaping effects of mobile phones on daily and public life^[6].

Mobile phones facilitate human beings' social activities. However, it is undeniable that there are still some problems and negative effects. For example, users make excessive self-disclosure and self-presentation or establish improper relations with strangers under the protection of mobile phones' screens. Problems such as these will do harm to the health of interpersonal relations and stability of social orders. In light of these problems, this study aims at exploring the deep reasons of social activities based on mobile phones and finding methods to reduce or even eliminate these kinds of problems. In the future, social activities on mobile phones will infiltrate in all aspects of our daily life. Therefore, the ultimate goal of this study is trying to seek one way of helping people to enjoy healthy and reasonable social activities by mobile phones.

The structure of this paper is as follows. In the next section, three dominant social forms of mobile phones are investigated: first, voice calls in the early stages of mobile phone use are used for flaunting wealth; then, the short message services provide people more choices

between synchronous and asynchronous sociality; lastly, instant messages stands for a higher forms of face-to-face interaction. Section three of this paper discusses the social relations constructed by the mobile phone. Section four assesses two trends in mobile-mediated communication, mainly in mediated and ubiquitous communication. Finally, section five concludes with a discussion of future research consideration. As the world's leading player in the mobile industry, Japanese—especially in feature phone (the second stage of phone's development: cellular phone, feature phone and smart phone) times—is unmatched by any other country. That is to say, the past of Japanese mobile social culture is the present of Chinese mobile social culture, which is like the “Time Machine Theory”^[7] raised by Son MasaYoshi of Soft Bank. To elaborate, the same business that first started in the developed country is introduced into developing country when the time is right, then seeming to return to the developed country years ago. As close neighbors separated by only a strip of water, China and Japan have similar cultural traditions; hence, a comparison of Japan while discussing Chinese mobile social culture is necessary.

2. The evolution of dominant social forms

The mobile phone has experienced three main stages from its birth, and each stage has dominant social forms. In addition to phone technology and mobile Internet, the establishment and maintaining of social relationships is also determined by cultural traditions and social realities within a specific context.

2.1 Voice calls in the early stages of mobile phone use: flaunting wealth

The aim of research and development of the first generation of analog handsets was to make up for the shortcomings of landline telephones that could not be carried out of the house. Although it only provides a short call time, the analog handset still has important meanings in communication as follows. First of all, mobility is considered the essence of a mobile phone since it frees users from fixed spaces such as a house, an office, or a telephone booth. People can take the phone with themselves wherever they go and contact others on the move to deal with emergencies and arrange meetings, for example. Second, relative to landline telephones used by more than one person, mobile phones are individual media. The mobile phone instead establishes a direct one-on-one relationship—being a totally individual communication medium. Thirdly, effectiveness is an important meaning. There is little redundancy in voice calls because it is easy to identify and grasp the mental state and emotions condition of the speaker according to his or her tone of voice, the speed of the voice, and the speaker's response time to the content of the conversation. Lastly, as an individualized media, mobile communication based on caller ID system reduces and eliminates virtual feeling resulting from off-site. The mobile phone is a two-way communication medium. That is, the use value is proportionate

to the number of subscribers. Take the fax machine for example. It is useless if there is only one fax machine in the world. In other words, tools like phones and fax machines having more use value when they are used by more people. From the late 1980s to the mid-1990s, because of the low penetration of cellular phones into China's population, the mobile phone was a less convenient medium than it should be. A customer had to pay a total of 28,000 RMB for one handset, subscription fees, and stored charges⁴. What is more, it was necessary to obtain proof of workplaces and a special purchase index when China switched from a planned economy to a market economy. When they finally got their mobile phones, it always half a year passed. In 1992, China started to establish a socialist economic system. The economic transformation led to an accelerated period of urbanization. Many farmers lived in the countryside because of familial ties, but when the state eliminated the regional limit on citizens moving to the city, many of these farmers moved to the cities in order to gain a livelihood more rewarding than that of agriculture. The government's relaxation on the household registration policy also sped up this movement of the population to the cities. Some people seized the opportunity in the early stages of reform and openness and made a huge fortune, becoming the main subscribers of mobile phones. This was, a standard scene in a typical movie from the 1990s, a businessman holds a big cellular phone and calls out loudly "Hello? Hello? I cannot hear you! Speak again! ". What these people liked most was doing this in public places, such as buses, trains and restaurants. The more people, the better. However, this scene was not unique to China. In the early 1990s in Japan, the mobile phone was a status symbol identified with wealthy business people. The special meanings associated with the mobile phone at that stage included the sense of "the successful man" with an image of the "proud and overweening" displaying his fortune. This was the same kind of perception connected with Chinese businessmen; they were fond of calling in public. An article that appeared in a women's magazine satirized these businessmen by depicting them calling themselves by mobile phone ask if there was any calls for them^[8]. Veblen (2007) proposed a view called "conspicuous consumption" to explain the above phenomenon. He argues that the only practicable means of impressing one's pecuniary ability on these unsympathetic observers of one's everyday life is an unremitting demonstration of ability to pay^[9]. Featherstone (2007) holds a similar opinion. He contests that within consumer culture there still persist "prestige economies" with scarce goods demanding considerable investment in time, money, and knowledge to attain and handle appropriately^[10]. To sum up, the social value of mobile phones in the early stages of use was displaying wealth.

2.2 Short message services (SMS): asynchronous sociality

In 1992, the first short message was sent from a computer to a mobile phone by GSM net of Vodafone. In China, 2000 saw the rapid adoption of SMS as this service was launched

⁴ Guo Xiaofeng: Reviewing Chinese Mobile Communication in Last 60 Years.

Tencent Technology: http://tech.qq.com/a/20090924/000312_4.htm

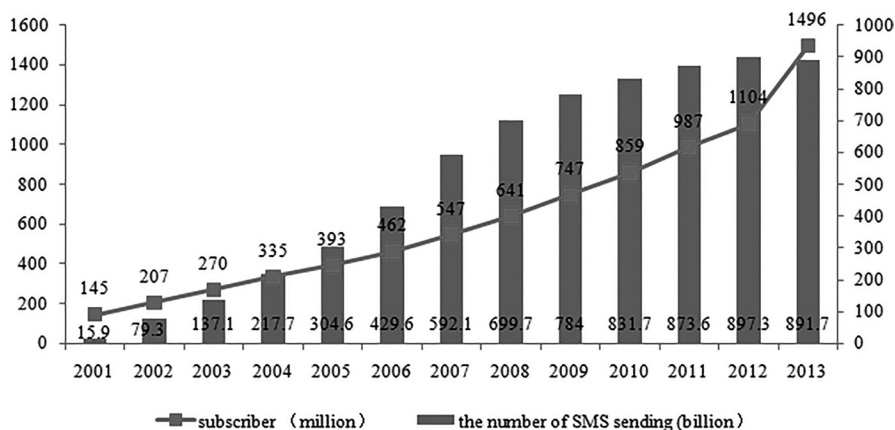
in quick succession by China Mobile and China Unicom. In less than 30 years, short message services have experienced a tremendous change. It initially received and sent messages based on literal text and then progressed to enhanced message service (EMS) which increased picture, sound and animation capability. Supported by wireless application protocol (WAP), mobile phones easily accessed Internet so multimedia message service (MMS) with the functions of browsing the Web and checking e-mails took the place of EMS. In contrast to SMS in China, Japanese mobile text is mainly mobile emails. It was hard to send messages between users who subscribed to different carriers because these carriers set up some barriers to lock their subscribers. In 1999, NTTDoCoMo started to launch the mobile network service called “i-mode”. Based on mobile Internet services, subscribers were able to send emails and each i-mode subscriber had one exclusive email address^[11]. While the third generation mobile phone system spread across Japan, China was still in the beginning of the second generation mobile system. Mobile email has several strengths in comparison with SMS. Besides literal text, it also allows addition of some emoticons and attachments—like on a computer—with no limitation to the number of words. However, the Chinese SMS was limited to a maximum of 70 characters.

Both SMS and email, as mobile literal text, have some similar features in communication. Text message is a technological revolution from ears to eyes. In other words, text plays a role of “hidden vision” during the entire interaction between two people because both sides are in a communication pattern during which they are not physically present with each other. It is easy for the two to create an image of one another according to the other side’s imagination. Owing to asynchronous communication, there is no need to reply immediately, and each person has more time to consider and revise his or her message in order to make it seem perfect to the other person. However, there is another common case. As soon as some users receive messages, they reply at once, especially for the youth in adolescence. They are eager to communicate with others and ensure themselves as a member of a group. Some of them are addicted to receiving and replying to messages. Mobile literal text is neither completely spoken language nor written language. Rather, it falls somewhere in between colloquialism and entertainment. Meanwhile, paralinguistic clues in language such as eye contact have been involved in the processes of both human cognition and communication. Text messages with the combination of punctuation, operational symbols, and letters simulate a person’s face and posture to make up for the absence of physical body language. More importantly, text messages are cheaper than voice calls, which charge 0.2-0.4 RMB per minute—sometimes also charging roaming fees—whereas one text message only costs 0.1 RMB and has no limits on being sent from different regions. However, based on i-mode, Japanese mobile email users pay much lower than Chinese SMS users because they are charged for data size, rather than time. With so many advantages, both mobile short messages and e-mails have a great progress in China and Japan.

First, let us consider SMS in China. From 2001 to 2012, there was an upward trend in the number of text messages. However, there has been a modest decrease in this number in 2013.

In 2004, Chinese sent 217.7 billion messages and accounted for one third of the total 510 billion messages all over the world. In fact, the amount of messages sent by 150 million American users is less than the total amount of one week's by Chinese users⁵. According to Mobile Content Forum, in 2009, 20.8% Japanese users exchanged approximately four to five mobile email messages a day. 61% users reported that they used mobile email at home and 37.9% users from public transportation. Moreover, 47.9% users would check mobile e-mail once they had free time⁶.

Figure 3 Tendencies of Mobile Subscribers and the Number of SMS Sending in China



Source: website of Ministry of Industry and Information Technology of the People's Republic of China

The popularity of mobile text messages in China and Japan is a reasonable choice for many cellular phone users, which is in keeping with the national personality of East Asians. For example, Chinese people are not accustomed to revealing their true, deep emotions and thus belong to an introverted temperament. Thus, Chinese people must tread a fine line when expressing opinions or talking with others. In Japan, containing emotions is considered a virtue, and the Japanese are taught to prohibit showing feelings openly. Their implicit style of speaking is not seen as hypocrisy but as a code of conduct. In fact, they place so much emphasis on maintaining a harmonious atmosphere that they take notice of others' feelings and attitudes. Moreover, it is bad form to speak loudly in public, especially in close spaces. For example, if a man makes a voice call while on public transportation, people nearby will glance at him. This kind of silent pressure, along with pervasive signage that states, "Please set up mobile phone to manner mode," calls passengers' attention to the importance of minimizing their phone's sound. "Manner mode" means no voice calls and no beeping sounds. Under this mode, the only way to actively communicate is through email.

⁵ Hu Chunyang: *Mobile Communication and Interpersonal Relationship*, Sdxjoint Publishing Company, 2012, P.131.

⁶ Mobile Content Forum: *White Book of Mobile Phone in 2011*, Impress Group Company, 2010, PP.46-47.

2.3 Instant messages (IM): a higher form of face-to-face interaction

Unlike traditional feature phones, smart phones have independent operating systems and storage space. They also enable users to install applications provided by third parties. More importantly, smart phones connect to the Internet by mobile communication networks, so the data traffic fulfills further reduction on charges. With smart phones, the previously dominant status of voice calls and SMS that rely on telecommunication carriers are replaced by instant messages. Smart phones possess all social functions of earlier mobile phones. All kinds of information such as audio, video, picture and text messages can be transmitted fast by mobile phones. Also, there are mobile applications for chatting that can support many people in one group at the same time. As for cost, 1,000 messages sent by IM will cost 1 RMB and there is no limit to the number of characters. It will cost 30MB to send 1000 voice messages, but people just pay 5 RMB per month to use instant message application with the mobile Internet service⁷. IM provides not only an inexpensive but also fast information transmission. IM—specifically on smart phones—emerged around 2009 in the United States. Some notable IM applications include WhatsApp, KIK Messenger, and Ping Chat. Subsequently, IM applications have become extremely popular around the world—especially with youth—because they are free, fashionable, simple, and fast. Some popular Chinese IM applications are Wechat, Talkbox, and MiTalk. There were approximately 588 million IM users in China until December, 2014⁸ and this number has been growing. The most popular IM application in Japan, called LINE, was developed by NHK Japan in 2011. As shown in the following table, it has over 300 million registered users all over the world in 2013.

Table 1 Popular Mobile IM Applications around the World

Name	Origin	Users (million)	Active Amount	Coverage Countries
Wechat	China	600	100 million daily active users	200
Whats app	United States	590	Over 10 billion messages in one day	100
Facebook	U.S.	300-550	68 thousand updates every minute	——
LINE	Japan	300	7 billion messages and 1 billion emoticons in one day	193
Viber	Israel	200	——	——
Snapchat	United States	100	400 million pictures in one day	——
KakaoTalk	Korea	100	——	——

Source: Tencent Technology, <http://tech.qq.com/zt2012/xxt/218.htm>

⁷ The website of Information Industry of China: http://www.cnii.com.cn/index/content/2011-06/29/content_889577_2.htm.

⁸ China Internet Network Information Centre: The 35th Statistical Report on Internet Development in China, <http://www1.cnnic.cn/IDR/ReportDownloads/201507/P020150720486421654597.pdf>

Looking at things dialectically, new things are bound to breed in old things, following the law of negation. That is to say, there is a spiral progress in the scheme of all things. The original intention of IM was to fully tap into the potential of social links in mobile phone's address lists and social networks in real life. IM breaks through the barriers of carriers, hardware, software, and social networks, and finally realizes seamless connection between real and virtual relations. Although it is used for the absence of physical body communication, the location-based services (LBS) in IM afford a more refined position. In addition, when the video chat feature is used, people can see each other clearly in real-time conversation, even while being thousands of miles apart. All of these features enhance the sense of immediacy and reality that IM has the capability to bring, just like face-to-face communication.

Compared to singular emotional expression and emphasizing strong ties connection in voice calls and SMS, IM has all kinds of expressions that meet multilevel interpersonal relations. The media expert McLuhan (1994) holds the theory that media is the extension of man^[12]. Specifically, our bodies extend in space by mechanical technology, but our central nerves extend by electronic technology, eliminating the differences of time and space with almost all senses getting extended and producing a brand new sense of vision, hearing, and touch reception. In this way, people can exchange visual symbols like motion and facial expression in addition to exchanging spoken and written language. With the help of location-based services, mediated communication can achieve a higher form of face-to-face communication.

Next, IM satisfies the users' requirements of maintaining strong ties with others, bettering weak ties, and establishing new connections at random. However, the course of urbanization has been expanding the scale of cities with an increasing population and more convenient public transportation, resulting in social alienation. In sociology, the better way to solve emotional hunger is turning to the affective social capital—namely, strong ties like immediate families, relatives, and close friends. Besides the emotional comfort, people should establish instrumental social capital selectively of their own accord. Bourdieu (1986) examines social relationships in detail. He believes that the network of these relationships is the product of investment strategies—individual or collective—consciously or unconsciously aimed at establishing or reproducing social relationships that are directly useable in the short or long term. This means transforming contingent relations, such as those of one's neighborhood, the workplace, or even kinship, into relationships that are at once necessary and elective, implying durable obligations subjectively felt or institutionally guaranteed^[13]. Instrumental social capital plays a much more important role in information access, the interchange of resources, and increasing popularity. The youth are inclined to establish weak ties—for example, sending a friend request to a mere acquaintance on Facebook—to expand social network resources through mobile social applications. In this way, with the interaction of IM, there is a possibility to transform weak ties into useful, strong ties.

3. Social relationships constructed by mobile phones

Generally speaking, the core of social ties is interpersonal relationship, but navigating the relationship between a man and himself has a direct influence on interpersonal links. As the limits on space and time are being broken through, mobile media expand human senses comprehensively with many ways of expressions. People transform physical body into multiple social spaces. The extension of human beings created by mobile phones brings about a new cognitive style, making an impact on self-awareness and interpersonal relationships.

3.1 Self-awareness

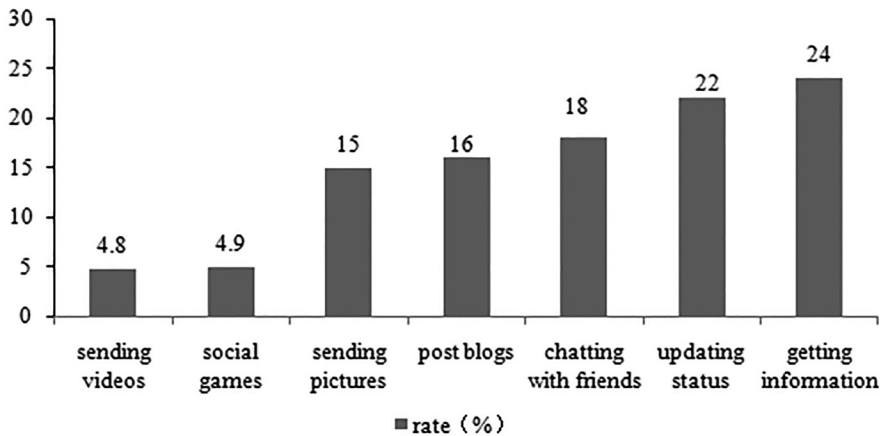
Self-awareness is constructed by knowing one's own needs, interests, abilities, personality, actions and mental state during interaction with others. Therefore, the self is decided by free self and external relations. That is to say, interpersonal relations are under the influence of the self's cognition to a degree. There are two ways that self-awareness is constructed by mobile phones. One is self-determination, which is set up through mobile media use, and the other is self-disclosure, which is built on user-generated content.

As the individual media of interpersonal communication, the mobile phone has become a symbol of the user's individual personality. The outside influences of advertising campaigns, carriers' services, and advertisement influence people into intensifying sense of subject-self. For example, the letter "I" in i-mode stands for interactive, Internet and individuality. China Unicom, the second biggest telecom carrier in China, its band *WO*, is a character that has the same pronunciation as the word "I" in Chinese, which also encourages to consider the idea of self-awareness. Another Company, China Mobile, used advertising tactics aimed at the youth. For example, the company has introduced the motto "My Zone, My Way" to manifest youth personality. Such advertising campaigns from the mobile phone industry have hammered at self-awareness of customers. With the instilling of the advertisements and shaping of service models, users walk into the "ego age". As an information system, the mobile phone exhibits the interactive relations between media and symbolism, linking such symbols with the understanding of its users. For example, an obvious consistency—regardless of appearance or application—can be seen in the same model of smart phones when people buy them first. However, after a period of using them, there are many differences among users, such as the decoration of the outer case, screen background preference, and the amount of applications on the device. The relative dominance of mobile phones meets the psychological needs of "self-determination", an idea which was put forward by Edward L. Deci and Richard M. Ryan (2000). Basing their idea, on fully realizing the self's needs and environmental information, they take the view that the right to freedom to choose such factors as screen background and which applications to install, for example, can inspire ongoing interests to the action which people go in for^[14]. The subject status will be further consolidated under the sense of achievement and satisfaction resulting

from choosing and deciding about object. The influence the mobile phone has on self-determination leaves an impression on humans, which they maybe have the ability to control the interact course to some extent.

Together with self-awareness, self-disclosure and self-presentation cannot be ignored within the context of social effects. Self-disclosure refers to the action in which someone has a mind to disclose his or her real condition and ability to others. Michael E Roloff (1982) supports the idea that moderate or full self-disclosure is in favor of cultivating others and encouraging them to disclose themselves^[15]. As shown in the figure below, the most participated-in activities that core users do on Sina Micro-blog are updating status and sending photos. While people are keeping updating about what they hear, see, and think, they hope to get updates from friends', as well. Self- presentation is different from self-disclosure. It is a process during which a person presents his or her ideal self through their style of conversation, expressions, and gestures. Before the use of smart phones, social relations based on mobile phones derived from a close and strong social circle. On the premise of each other's familiarity, people always adopt self-presentation to maintain existing relationships. As the mobile Internet developed, social relations were not confined to realistic society but expanded to a virtual reality. Consequently, due to the need to protect privacy or shape one's public image, people have had a tendency to adopt the combination of self-disclosure and self-presentation.

Figure 4 Core Users' Main Social Behaviors in Sina Micro-blog



Source: Sina Technology, <http://it.sohu.com/20110519/n280623821.shtml>

Most users of Mixi in Japan register with fictitious names for the purpose of writing diaries and sending photos because they are reluctant to reveal accurate information about themselves on the Internet. Self-concealment in social networks represents the entire Japanese society in a microcosm. Things have changed as time goes by. The youth who use mobile phone social applications, especially teens and twenties, log on different social networks by real-name and nickname respectively. Chinese are apt to make their names known to the public so as to

be searched for and found by old friends. To make it easier to be familiar to others, Chinese users like to send embellished photos through photo software and share everything from their lives with friends. "Sharing" has become the important part in interpersonal communication, which has both positive and negative effects. Asynchronous communication generates more time for people to consider, choose, and edit the information they want to send. Communicators are especially in control of leaving a better impression on others to show off their optimal self. With the self-disclosure and self-presentation effects from mobile media, the process of self-awareness is being transformed from labeling oneself in a real social circle to becoming a pluralistic self in a virtual world. The essence of disclosure and presentation necessitates "sharing" in social networks. However, everything has its limits. It might also be noted that infrequent sharing may distance a person from his or her friends, but too much sharing may bore those friends, and one may even be blocked.

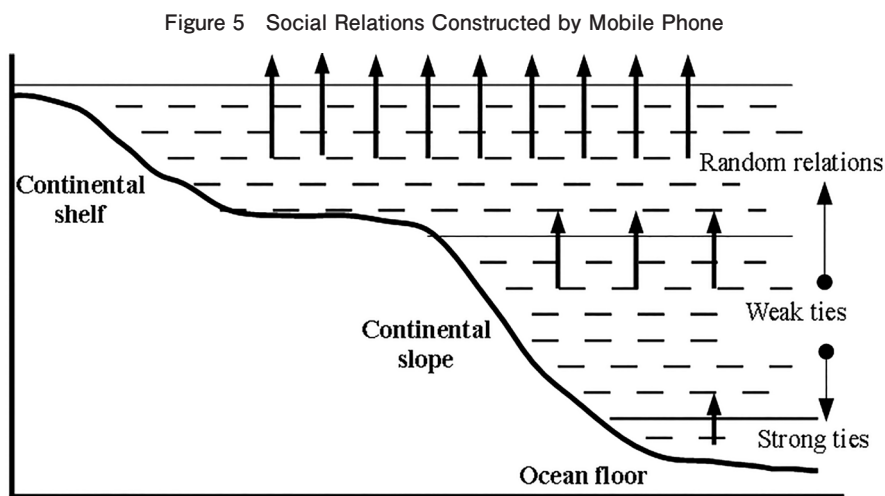
3.2 Three relationships

Mark Granovetter (1973) proposes that the "strength" of an interpersonal relationship is satisfied by four elements: the amount of time invested, the emotional intensity, the intimacy and the reciprocity of the relationship^[16]. The more time spent on the relationship the stronger the emotions are, the more intimate the moments are, and the more mutual benefits there are indicates strong ties. Otherwise, the relationship is rather weak. In his view, those four dimensions have no particular orders, but there are distinct impacts on strong-weak effects of interpersonal relations. For example, relations among relatives, couples and friends are strong and close but do not necessarily involve high interaction frequency and more mutual benefits; classmates and colleagues may frequently interact and exchange resources for an indeterminate period, but relations need not be stronger than relatives and friends. Therefore, according to the impacts on interpersonal interaction, the sequence of the four dimensions should be emotional strength, intimacy level, interactional frequency, and benefit degree. Mobile phones have so many functions to meet different social needs. According to this order, people can choose proper application to interact.

In a traditional agricultural society, social relations are formed on account of face-to-face communication with the restrictions of territorial environment, traffic conditions, and communication technology. Entering industrial society, urban expansion has provided an impetus for the movement of people to city. While modern telecommunication technologies are convenient for contacting people across large distances, the possibility of making friends with strangers expands. Under the effects of Internet usage on the computer, this possibility has risen immeasurably. People tend to establish immediate-connection and immediate-disconnection relations to relieve social pressure from reality. Thus, a virtual social circle that contends against reality has emerged. The arrival of mobile Internet has changed social relations again. The Internet integrates these four facets into a whole: multiple responses to different social relations, voice

calls and messages maintaining strong ties in reality, social networks expanding social capital and location-based services establishing random relations. In this way, the mobile phone is transformed from a simple telecommunications tool to social core.

The scope and stability of three mobile-mediated relations are different. Like ocean water, it also has different layers and each layer has different stability. Therefore, the three mobile-mediated relations can be compared to the stability of water in three parts of the ocean. Seen in the image below, water in the continental shelf nearby the coastal region flows fast under tides, waves and currents. It is just like random connections in mobile relations, which are prone to change among strangers as a kind of “speed dating”. There is a continental slope between the continental shelf and the ocean floor, which bridges continent and ocean. The rates of flow tend to decrease as ocean depth increases. This can be seen as the weak ties of mobile relations. They are formed under contractual relationships and link up to the outside world. The ocean floor is in the depths of the ocean, where the floor is basically unaffected by tides and currents and quite flat when without geological movement, like strong ties in mobile relations.



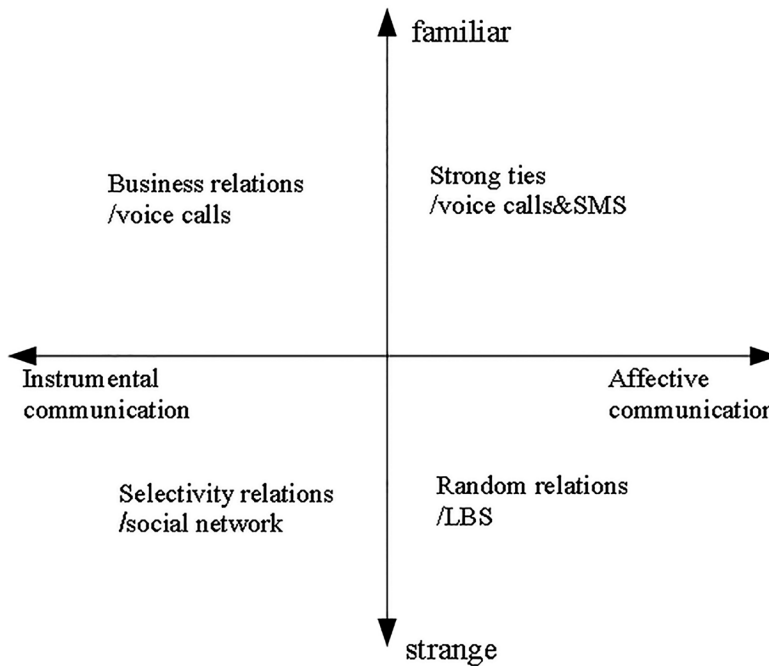
Source: Writer

There are plenty of resources in all parts of the ocean and they are developed by different instruments—so it goes with maintaining social relations. As shown in Figure 6, there are correspondences between social relations and mobile social applications. Firstly, voice calls and messages comply with strong relations. Relations with relatives and close friends are fundamental in maintaining emotional sustenance and long time stability. Consequently, closest to face-to-face communications are voice calls (89.58%), which are a top means to contact with relatives, followed by SMS (83.71%)⁹. Secondly, social networks comply with weak ties. If strong

⁹ Liu Dehuan, Liu Xiangqing: *Now IS Future*, China Machine Press, 2012, P.52.

relations between people are tiny amounts of “blocks” with stable and crisp texture, then weak relations are plenty of “ties” with incoherent and unconsolidated texture. Weak ties are the necessary supplement to the strong ties. Social networks give people the ability to establish relations with others who have useful resources. What is more, people can use social networks to increase social heterogeneity. Finally, location-based services (LBS) relate to random relations. LBS are used for making friends with strangers. Take Wechat for example. It has a “shake” function that allows strangers to connect meaning if people shake their mobile handset, the LBS system will automatically match other users who trigger the same function at the same period of time. They can start conversation immediately and will be withdrawn from the application when they turn off the function. This style of connection refreshes the concept of “friend”, which also weakens the emotional strength and intimacy level of a relationship. “Friend” descends to the synonym of connection.

Figure 6 Correspondences between Social Relations and Mobile Social Applications



Source: writer

4. Two trends: mediated sociality and ubiquitous sociality

The mobile phone is considered as the nearest media to human body, which has undoubtedly changed the traditional social contact with so many functions according to above discussion. Meanwhile, it helps to bring about new developmental directions.

4.1 Multi-focus mediated sociality

Communication is divided into face-to-face communication and mediated communication depending on whether communicators are physically present. Once the two communicators are not in the same place together, they should use media like letters, phones, and telegrams to share feelings and thoughts.

According to “Remedial Medium Theory”^[17] by Paul Levinson (2004), any succeeding media remedies for the deficiencies of previous media; the common characteristic of all individual communication media is a remedial measure to the limits on time and space in face-to-face communication. Looking back at the progress of individual media, the postal system and letters initially broke through the space constraints, but people must tolerate the hysteresis quality of the mail. Then telegrams made up for the time hysteresis, but it had strict limits on the length of information, thus becoming difficult to exchanging emotion in so few words. The telephone not only enabled the instant dispensation of information but also had no limitations on call time, which remedied shortcomings of previous media. However, being fixed in a one particular place, telephones could not be carried freely. In addition, privacy protection was a concern with telephones. The mobile phone, just as its name implies, is something carried on a person. They can readily be brought anywhere and have many ways to convey information to fully protect users’ privacy. In short, the mobile phone fulfills a comprehensive remedy to deficiencies of letters, telegrams, and telephones. It includes audio, text message, video, and pictures—many kinds of expressions—that allow for people to choose between synchronous instant communication and asynchronous delayed communication. Besides the advantages resulting from mobile Internet and modern communication technology, mobile-mediated communication also has advantages as follows.

Mediated communication is conducive to “impression management”. Erving Goffman (1986) adopts theatrical analysis to reveal the characteristics of social interaction^[18]. The theory concentrates on the skills that people use to create images and leave impression on others; it is also known as “impression management theory”. Communicators always want to lead and control the impressions of the other party in order to get the kind of reactions that they planned for. There are two kinds of symbolic activities in impression management: gives expressions and gives-off expressions. The former refers to linguistic symbolism or its substitute. The implicated information is universally known and is purposely conveyed. The latter is non-situational, non-verbal, and unintentional. To avoid having one’s gives-off expressions being noticed by others, one must understand these two expressions and pay attention to his or her behavior constantly. From a cultural point of view, China and Japan are both countries of high context culture, in contrast to United States and Germany, which are seen as low context cultures. Relying on context, semantics in high context cultures are derived from the presupposed non-verbal context; the language in interaction contains only part of the information that needs to be delivered. Consequently, people growing up in high context cultures are usually implicit

during face-to-face interaction. Media is a good protective screen for them to repeatedly revise so as to make communication smoother. However, it is not beneficial for people to test and verify gives-off expression that is based on context. Unconsciously, they accept the image that people on the other side of the media design and shape intentionally and elaborately.

Unlike traditional one-to-one individual communication media, the mobile phone makes one-to-many interactions possible. People can start conversations in multiple social applications, chatting with more than one person at a time. Multi-focus communication is similar to multitasking. Sherry Turkle (2011) analyzes multitasking in her book, *Alone Together: Why We Expect More from Technology and Less from Each Other*. Although multitasking has poor outcomes in psychological research, it makes us feel good^[19]. When we handle several tasks at the same time, our body would reward multitasking with neurochemicals that induce a multitasking “high”, which misleads us into believing we are effective and creative. Multi-focus mediated communication produces physical pleasure. In pursuit of this kind of sensational pleasure, humans try to deal with more things at the same time. As a result, it is not uncommon phenomenon for people to use mobile phones when they are eating, walking, or even while using the toilet. People who multitask believe that they get more things at one time. For multitaskers, the mobile phone fills the gap of “dead time” while waiting and commuting. In this way, it seems that multi-taskers gain more leisure time and do not need to keep their attention on one communicator. In a relaxing atmosphere, people can connect more easily to friends and choose synchronous and asynchronous communication. Gradually, humans have not been accustomed to face-to-face communication with a single person, which requires us to spend more time and energy on coming up with conversation topics and deciding on a meeting place and time. Under the collusion of physical pleasure and technology, people cannot live without mobile phones. They use mobile phones regardless of time and occasions, which does great damage to traditional etiquette. But this also forms new social rules. In Meytowitz’s (1985) view, the introduction and widespread use of new media may reconstruct wide-ranging contacting scene and need new action to fit social scene^[20]. During face-to-face communication, the action of one person using a mobile phone is accepted by the other, although the other is being neglected for some time. People have a high tolerance for being interrupted by mobile phones in meetings. However, Erving Goffman insists that one’s attention away from the conversation will threaten the essence of communication, causing the situation to “collapse, disintegrate, go up in smoke”^[21]. People in multi-focus communication always turn on the “pause key” and suppose the other is withdrawing from the social scene temporarily. One-sided exchange leads to an asymmetrical interaction, which decreases the communication value and interaction quality.

Despite having multiple choices on how to use mobile phones, we are shaping ourselves in a world where success is measured by quick replies to e-mails, calls, and messages. The mobile phone creates a culture of multi-forms, high-capacity, and high-rate interactivity, which cuts down the rate of interference in our thought processes. We are the responders of questions and

meanwhile the proposers of questions. We are dealing with others' questions while also proposing questions to others and wishing they can respond quickly. People are shaped by technology when they are choosing to use it. Our constant connecting to the mobile phone brings to light the fact that we have become a part of the mobile phone. In electronic media times, McLuhan puts forward the judgment that "media is the extension of human body", clearly elaborating that humans are in the leading position in their relationship with media. Carrying on McLuhan's thoughts, Levinson (2004) proposes the "humanization trend of media evolution", which gives prominence to subjective initiative in media evolution. In his opinion, technologies imitate or even copy sense models and cognitive models of humans' during their development and evolution. In the times of digital media, as an incidental media, the constant state of being connected turned the relation of humans and media on its head. That is, humans have become the extension of media. This humanization of media reverses to the mechanization of humans. When we objectify other people and see them as tasks that need to be completed and thus disposed of, we are becoming the machine that specialize in responding. If the humanization of media raises the status of media, then the materialization of humans reduces the status of humans. As Pascal's (Blaise Pascal, 1623-1662) well known saying goes: "A human being is only a reed, the weakest in nature, but he is a thinking reed"^[22]. Nevertheless, in the time of mobile-mediated interaction, we are busy connecting but missing out on the attention of other humans; we are swamped with responding but have no time to think. Formerly, people met to work off loneliness; now, people choose to be alone in order to get together. In some sense, a mediated togetherness is the premise of physically being alone. Thus, with mobile-mediated communication, people have become reduced to merely an isolated reed shaking in the wind.

4.2 From pan-sociality to ubiquitous sociality

Pan-sociality refers to the extensive and frequent formation of relationships with strangers. From voice calls and short messages to instant messages, mobile sociality has experienced changes from strong ties to random relations. Mobile social applications make sociality into something that can be obtained like time confetti after getting up, during commuting, while eating lunch, and before sleeping. It rewrites the traditional sociality that used to demand lots of time and energy into something superficial and piecemeal. Positively speaking, the scope of man's sociality has been broadened. However, the depth of sociality is far from enough. There now appears to be a utilitarian tendency involved in what seems like fast-food style social communication. According to the degree of strangeness, pan-sociality is classified into two forms as follows.

4.2.1 Partly strange relationship: the cast net approach

A partly-strange relationship involves making friends on social networks by following celebrities or those who have special skills or abilities. In real life, a successful social connection

is the process of two parties providing and exchanging resources to each other. Therefore, it is necessary for both sides to have resources that satisfy the other. If their resources differ greatly in usefulness, they cannot always establish an effective relationship because one party fails to receive reward to their expectations. For example, in social networks, the number of people that celebrities follow is far less than their own number of followers; by contrast, ordinary people always follow more people than they have followers. There is an asymmetrical relation of following and followed between a celebrity and an ordinary person. Consequently, the hopes of an ordinary person truly making friends with a celebrity via social network are futile. The depressing result leads ordinary people to follow more celebrities to improve their chances of getting useful social capital. This cast net approach is incapable of accomplishing timely and efficient feedback, further dampening the appeal of social contact with strangers in real life.

4.2.2 Fully-strange relationship: random sociality being stung with desire

The fully-strange relationship involves two parties do not know each other and have no special connections, establishing a relationship through the location-based services of social applications whose mission is to connect strangers. Becoming friends with strangers in an anonymous style atmosphere originated firstly with the landline telephone, and then flourished to PC networks, and finally spread to mobile social networks. Under the umbrella of media, there is no need to worry about being directly exposed to strangers, which helps steer people clear of danger, and there is also no need to worry about being judged based on external factors, such as appearance and status, which can be concealed in the virtual space of mobile social networks. Therefore, it is easy for communicators to show their “true self” and establish intimate association with strangers; hence, Internet has become the new dating platform. In April of 1998, Fuji television broadcasted a drama, “*With Love*”, depicting a man and a woman starting an online romance because of an email sent to a wrong address. Owing to the characteristics of landline and computer, it was hard to obtain the other’s exact address, unless one had the appropriate technology, thus two parties could maintain a relationship along the lines of familiarity but not true contact or knowledge of the other person, whereas, LBS in mobile social applications provide the location of other user’s within 100 meters. Thus, communicating on media in this way became reality. If an idea such as this can be easily realized, people will be more willing to participate. For example, a popular making-friend –with-strangers’ application on mobile phones in China, called *Momo* is used to become acquainted with people nearby through sending text and voice messages, pictures, and exact geographical location. This social model is meant to search for and position strangers near each other by GPS, making connections quickly to save on costs of distance. However, although it shortens the time it takes to communication online and then meets offline, it fails to cut the costs of knowing each other. The relationship that is informed then becomes one of physical contact and knowledge of the other person but not one of true familiarity. Due to a lack of trust, people repeatedly forge and break links with

strangers, losing the social warmth of normal interaction, which accelerates the trend of indifference affection between two people. Fully-strange relationships cause a series of social dilemmas. In recent years, for example, Chinese media have frequently reported ethical issues like extramarital affairs, sex trafficking and quite a few robberies instigated by the use of mobile dating applications.

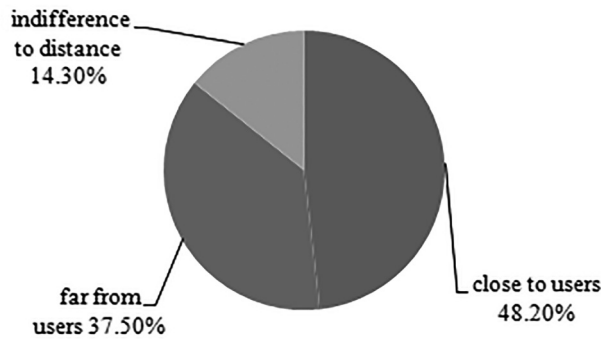
Pan-sociality caused by mobile phones results in harmful effects to interpersonal relationships, family life, and even social stability. One of the solutions to these problems is ubiquitous sociality. Ubiquity means that something is omnipresent and widespread. Ubiquitous sociality points to mobile sociality existing in every aspect of people's lives. Mobile sociality is not only an activity for maintaining relationships and conveying emotions but is also a life style that we have become quite used to. Social elements are permeating shopping, dining together, traveling, and work, making life much easier. Personal life fits into groups, transforming what used to be an online relationship with a stranger to an offline, familiar relationship through cooperating to finish special tasks or solving difficulties in real life. Ubiquitous sociality helps a user to compromise strong relations, weak relations and random relations. Specifically speaking, if the user needs someone to accompany or cooperate to do something in daily life, he or she can find the right people easily. Since ubiquitous sociality pulls together almost users' all social relationships, including existing relations and potential relations, the design of this kind of mobile applications can refer to the acquaintances' social applications or strangers' social applications. The former is not good for weak relations and random relations because of strong closure and exclusiveness. Instead, the latter is totally open. Therefore, it is easier to build ubiquitous sociality by improving strangers' social applications.

According to the survey of iiMedia Research "Chinese Strangers' Social Applications on the First Half Year of 2015"¹⁰, this study will make three suggestions for the design of ubiquitous social applications. The first suggestion is to strengthen the technical innovation and improve matching accuracy. The application should take consideration into all aspects of users' life to design matching algorithm and data model, such as users' location, living habits, hobbies, recordings posted on social application, and so on. Based on these data, the application could recommend many friends congenial to users. Then they can get deeper understanding about each other though chatting or creative games. The survey shows that 48.2% respondents are apt to get to know people who are nearby. Therefore, searching based on location is the most efficient entry of ubiquitous social application. If users are in the same place, such as students in the same university or office workers in one company, their virtual online relations are more likely transformed into real offline relations.

¹⁰ iiMedia Research, a platform of releasing global data of mobile Internet, was founded in 2007.

iiMedia Research: Chinese Strangers' Social Applications on the First Half Year of 2015, 2015-08-15, <http://www.iimedia.cn/39428.html>

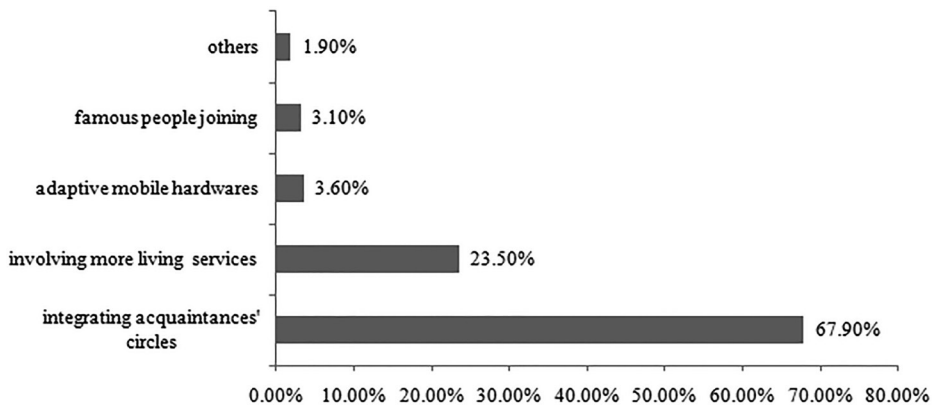
Figure 7 Distance Preference of Chinese Users to Get to Know Others on the First Half of Year 2015



Source: <http://www.iimedia.cn/39428.html>

Second, it is vital to organize abundant activities and promote relations transformation. 74.7% respondents report that they would like to participate in offline activities. Most users of strangers' social applications are not satisfied with online relations and expect to take part in offline activities in order to increase social capital. However, safety and trust problems are barriers when strangers meet offline. Thirdly, integrating acquaintances' social relations to strangers' social relations will be a better way to solve the two questions. Asked about the expectations of new functions of strangers' social applications, 67.9% respondents hope that social applications integrate strangers into acquaintances circles. For the vast majority of people, if they have friends or families to accompany, they will be relieved to get involved in activities. Besides, it also plays a role for security when setting the minimum number of activities.

Figure 8 Expectations of New Functions in Strangers' Social Applications on the First of Year 2015



Source: <http://www.iimedia.cn/39428.html>

The well-known social network in Japan, *Mixi*, which requires an exclusive invitation, deserves to be adopted by other social applications as a reference. More specifically, a registered member has the right to invite his or her friends, classmates, colleagues, or neighbors to join in

various groups that combine different kinds of online discussion and real life communications, pushing forward the transformation from weak ties to strong ties during media communication and face-to-face interaction.

Clay Shirky (2008) supports the idea that social ability is one of the core capabilities of human beings'. Society is the product of both individual members and constituent groups; as he puts it: "the desire to be part of a group that shares, cooperates, or acts in concert is a basic human instinct that has always been constrained by transaction costs"^[23]. The social applications on mobile phones are platforms for coordination because they share information to cut transaction costs. In other words, group-forming has gone from hard and complicated to easy and simple. Take going out in China, for example: the development of urbanization leads to a sharp increase of private cars, causing increasingly heavy traffic jams and adding difficulties to going out. Quite a few cars have only one driver—and no passengers—meaning these cars are not being utilized to their full capacity. Some of these drivers want to carpool with others who have no car in order to share and save on gas. But this kind of carpooling predominantly happens between friends or among other familiar people because it is difficult to coordinate with strangers ahead of time. In other words, carpooling occurring among strangers is rare due to a lack of social platform for such a thing. Still, we cannot take full advantages of private cars and there is still a great deal of trouble for people who want to go out. Therefore, information and communication are the keys to meeting both sides' demands. "Micro-Carpooling"—the first mobile application of China devoted to solve this problem—is based on LBS and IM and combines the convenience of transportation with real sociality. People can send information about on-and off-duty modes of transportation, tourism travel, and home-returning travel on festivals and holidays, while waiting for others to connect to the application. It also offers a search engine to find people nearby who want to carpool. In this way, it solves the going-out problem to a certain extent. What is more, the platform would take strict steps to verify the information of cars, drivers and hitchhikers in order to ensure both sides' safety. Under this kind of protection, people can be at ease when they want to get a lift and interact with acquaintances, achieving a stable and lasting relationship. As a Customer to Customer (C2C) sharing economy model, disintermediated social going-out solution overturns the traditional B2C(Business to Customer) traveling market, transforming the relationship between driver and passenger from agency-client to friendship.

Overall, in a ubiquitous social circle, people do not establish relationships randomly driven by desire but join in a group and increase interaction within the same community. Importantly, this kind of sociality aims at solving problems in real life, which decreases the "prisoners' dilemma" that result from a fully-strange sociality and helps to produce an effective social capital. Human beings are a social community. Although the modern-life style is changing, the eagerness to communicate with others has always been the absolute, necessary part of our daily life.

5. Conclusion and Discussion

Prior to landline telephones, people communicated with others who were not physically present with them asynchronously. Though landline telephones made up for the previous delay of information and emotional distress, human were still tied to a physical space. The mobility and portability of mobile phones, however, allow people to communicate instantly. Mobile phones not only satisfy human's desire to keep in touch and talk with others at anytime and anywhere, but it also widens the scope of social interaction beyond just a strong ties and weak ties circle. With the development of mobile technology, from singular to comprehensive, one-to-one to one-to-many, synchronous to asynchronous, the mobile phone provides multiple choices in sending information sending and emotional expression. The style constructed by mobile phones has created oral communication with voice calls, character communication based on short text messages and double-negation face-to-face communication based on instant messages that integrates voice, text, picture and video into one application. From the evolution of mobile phones, the humanization trend is the result of rational choice. With the freedom to choose between visual concealment and presentation and asynchronous delay and instant synchronicity, self-shaping and self-disclosure make the communication easier and smoother. All of the above points have been always mentioned by people who hold positive attitudes toward the mobile sociality. However, it is worthwhile to note that our time and energy used on social contact is limited. There is a reciprocal relationship between mediated communication and face-to-face communication. Using mobile media too much is guaranteed to bring forth negative impacts on face-to-face communication. People will forget or lose the skills and abilities to communicate in person. However, in reality, people still have to come into direct contact with real people and thus improvise in their communication every day. This kind of communication cannot provide multiple choices for responders like mobile media can. How will people who are used to communication by mobile phones deal with such situations? For instance, when faced with a job interview, it is possible for candidates to first prepare on phone, edit their responses, and then send their answers directly to the interviewer? Clearly, this is impossible. Today, the pace of life is so fast with technological advancement that mediated communication is inevitable. That is to say, face-to-face communication is the foundation of our society, but mediated communication is becoming more main stream. How should we create a better combination of the two types of communications? This paper holds the view that ubiquitous sociality—joining in mobile groups to solve specific problems in real life through online coordination and offline cooperation—is one of the effective solutions. This solution acts as a bridge between the virtual world and reality. Furthermore, being a member in a group also reduces the risk of danger when coming into contact with strangers. Ubiquitous sociality on mobile phone integrates accuracy of matching, richness of offline activities and acquaintance-stranger into a coherent whole. And the advent of this kind of social application solves existing mobile phone social problems properly.

Therefore, this study has achieved research purposes. With the aid of ubiquitous social applications, human beings will create great life in healthy and reasonable social activities. During the entire process of creating a ubiquitous sociality, we have put both media and sociality into rightful positions: mobile phones help to organize and coordinate and return sociality to the real life.

References

- [1] Ruth Rettie: Mobile Phone Communication: Extending Goffman to Mediated Interaction [J], *Sociology*, Vol.43, 2009 (3):421-438.
- [2] Andrea C Nakaya: How Do Cell Phones Affect Society? Reference Point Press, 2015.
- [3] Okada Tomoyuki, Matsuda Misa: Understanding Mobile Media, YuHiKaku.Co, Ltd, 2002.
- [4] Daisuke Okabe and Mizuko Ito: Keitai in Public Transportation, Personal Portable and Pedestrian, Mobile Phones in Japanese Life, The MIT Press, Cambridge, Massachusetts, London, England. 2005.
- [5] Wang Ping: Research on Mobile Phone Culture in Modern China, HuaXia Press, 2008.
- [6] Hu Chunyang: Mobile Communication and Interpersonal Relationship, Sdxjoint Publishing Company, 2012, P.131.
- [7] Zeng Hang: Nation of Mobile, Zhejiang University Press, 2014, P.8.
- [8] Daisuke Okabe and Mizuko Ito: Keitai in Public Transportation, *Personal Portable and Pedestrian, Mobile Phones in Japanese Life*, The MIT Press, Cambridge, Massachusetts, London, England, 2005, P.23.
- [9] Thorstein Veblen: The Theory of the Leisure Class, Oxford University Press, 2007. Chinese edition translated by Cai Shoubai, The Commercial Press, 2009, P.68.
- [10] Mike Featherstone: Consumer Culture and Postmodernism, SAGE Publications, 1990. Chinese edition translated by Liu Jingming, Yilin Press, 2000, P.39.
- [11] Takeshi Natsuno: I-mode Strategy, Nikkei BP Press, 2000.
- [12] Marshall McLuhan: Understanding Media: The Extension of Man, The MIT Press, 1994.
- [13] Pierre Bourdieu, "The Forms of Capital". *Cultural Theory: An Anthology*, Wiley Blackwell, 2011, P.89.
- [14] Edward L. Deci, Richard M. Ryan. The "What" and "why" of goal pursuits: human needs and the self-determination of behavior [J], *Psychological Inquiry*, Vol.11, 2000 (4):227-268.
- [15] Michael E Roloff: Interpersonal Communication: The Social Exchange Approach, SAGE Publications, Inc. 1982. Chinese edition translated by Wang Jianglong, Yiwen Press, 1991, P.69.
- [16] Mark S. Granovetter: The Strength of Weak Ties [J], *American Journal of Sociology*, Vol.78, 1973(6):P1360-1380.
- [17] Paul Levinson: Cellphone: The Story of the World's Most Mobile Medium and How It Has Transformed Everything, Palgrave Macmillan, 2004.
- [18] Erving Goffman: An Essay on the Organization of Experience, Northeastern University Press, 1986, P. 3.
- [19] Sherry Turkle: Alone Together: Why We Expect More from Technology and Less from Each Other, Basic Books, 2011, P. 174.
- [20] Joshua Meyrowitz: No Sense of Place: The Impact of Electronic Media on Social Behavior, Oxford University Press, Inc. 1985. Chinese edition translated by Xiao Zhijun, Qinghua University Press, 2002, P. 34.
- [21] Erving Goffman: An Essay on the Organization of Experience, Northeastern University Press, 1986, P. 302.
- [22] Blaise Pascal: Pensées and Other Writings, Oxford University Press, 1995, P.72
- [23] Clay Shirky: Here Comes Everybody: the Power of Organizing without Organizations. Allen Lane an imprint of Penguin Books 2008, P.60.