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The National Association for Media Literacy Education's *Journal of Media Literacy Education* 8(2), 54 - 76

What Do You Use Mobile Phones For? A Creative Method of Thematic Drawing with Adolescents in Rural China

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Abstract

This study sets out to explore Chinese adolescents' subjectivities toward the use of mobile phones, and reveal the dynamic relationship among students, parents, and school concerning mobile phone usage in rural China. Twenty-one high school students were recruited, and asked to draw a painting that expresses their perceptions of mobile phones in relation to family and school life. After analyzing the thematic drawings and their self-explanations upon the drawings, several themes arise: the mobile phone as a bridge of love, as an extension of the home, as an iron cage, as the blasting fuse of family conflicts, and as a threat to school life. Contrary to popular belief that adolescents are digital natives who were immersed in mobile technologies since birth, this study suggests that digital culture divides based on social-economic status and the concept of digital natives should be used with caution when analyzing teenagers' mobile culture in rural China.

Keywords: mobile phone, education, adolescents, visual analysis, drawings

The role of mobile phones in teenagers' social lives has become a popular area of investigation since the 1990s. Scholars have studied the emerging mobile technologies with different emphasis, such as identity formation, gender politics (Ling, Baron, & Campbell, 2014), family relationships (Katz, 2010; Porter et al, 2015), as well as digital divide (Brown et al., 2011). Studies were conducted in different countries and regions, including Norway (Ling, 2000, 2007; Ling & Yttri, 2002, 2005), the United States (Katz, 2006), the United Kingdom (Livingston, 2007), Israel (Cohen, Lemish, & Schejter, 2008), Japan (Ito, 2005; Ito & Okabe, 2006), and Hong Kong (Leung & Wei, 2000), etc. These influential

studies were predominately conducted in developed countries and regions, and were based on the assumption that teenagers are digital natives with access to mobile phones from a very young age. However, the reality in developing countries such as China is very different. Michael Best (2013) found that although in many developed countries, more than 90 percent of 15 to 24-year-olds are considered to be digital natives, several developing countries lag far behind. For instance, he found that in China only 5.6 percent of people aged 15 to 24 are digital natives. Therefore, a study of China's teens and their relationship with new media and technology could contribute greatly to the "digital natives" debate.

This study sets out to draw on the social-psychological tradition in order to explore rural Chinese teenagers' subjectivities about mobile phone usage and to reveal their perspective about what roles mobile phones play in their familial, social, and school life. The data is based mainly upon drawings painted by 21 high school students in rural China and focus group interviews with them. The data is then analyzed using the method of thematization in the tradition of discourse analysis, that is, to develop themes from participants' detailed accounts of mobile phone usage. The resulting themes will help us generate a contextual understanding of rural Chinese adolescents' thoughts and feelings concerning their mobile phone usage at school and after school, and then revisit the application of the concept of digital natives in China.

Literature Review

To discuss the relationship between young people and mobile technology, a review of the literature on digital natives and teenagers' usage of mobile phones in familial and school life will help foster a solid ground for the theoretical discussion of this project.

The term "digital natives" was coined by Marck Prensky (2001) to refer to young people who were born in the digital world. The digital natives are "native speakers of the digital language of computers, video games, and the Internet" (Prensky, 2001). They have a new "brain structure" and a new mentality fitting the digital world. They are usually skilled at multi-tasking, prefer graphics to text for instant gratification, and prefer play to serious work. However, in the past decade, scholars gradually realized that young people's relationships to new media are complex and diverse, and children should not be automatically assumed as digital natives. In the book Deconstructing Digital Natives, Prensky admitted that the concept of digital natives is more a metaphor than a theoretical construct, and should bear strict academic scrutiny; Jone argued that the idea of digital technologies determining "the outlook of an entire generation" is problematic; Rachael Levy noted the heterogeneity of primary school children's digital expression (Thomas, 2011). These discussions opened up the concept of digital natives, and encouraged scholars to make detailed analysis of young people's mobile usage within specific social, cultural, and economic context.

Mobile phones have been ubiquitous in teenager's familial life. New communication technology allows parents to stay in closer touch with their children; while on the other hand, it brings up issues of emancipation of the children from parental surveillance (Ling, 2000). Parents take safety as a key factor in their decision of buying phones for children (Cohen, Lemish, & Schejter, 2008), and they often use mobile phones to monitor children's lives and track their homework. On the teenagers' side, their phone conversations with parents fall into two basic categories: the first is "ask and confer" calls, in which teenagers microcoordinated schedules and activities with their parents; and the other is social support calls, made when teens wanted advice or wanted to share emotional moments (Weisskirch, 2011). Generally speaking, teenagers tend to resist close communication with their parents. Instead, they actively engage themselves in "virtual brotherhood and sisterhood" with peers (Fortunati & Magnanelli, 2002), which plays a vital role in their identity formation process.

Mobile phones also pose challenges to teachers and school administrators. Empirical research on mobile phone policies (Campbell, 2006; Hopke & Marsh, 2011; Lenhart et al., 2010; Obringer & Coffey, 2007) has started in the past decade. Many education practitioners consider phones as threats to the "fragile ecology" of classroom life (Merchant, 2009). The new technology allows for various activities besides learning in class, and students are able to surf the Internet, chat with friends, connect with family members, or even play games with phones during lectures. They use the phone because of boredom, the need for social connection, emergency, addiction, and lack of behavioral control (Olufadi, 2015). Mobile usage during class time has been a major factor of distraction and affected students' academic performance. A study on 91 schools in four cities in England shows that test scores were 6.41 percent higher at schools where mobile phone usage is prohibited (Beland & Murphy, 2015). The same study also finds that low-achieving students are more likely to be distracted by the presence of mobile phones. The new technology poses challenges to education practitioners on how to manage the potential levels of distraction and exercise necessary control over mobile usage in school.

Compared to the extensive study on teens and mobile phones in developed countries, however, few empirical studies address teenagers' mobile phone usage in rural China. Most of the existing studies emphasize on why Chinese teens adopted the new technology and what kind of gratification they sought from it. Based on a survey on 7720 Chinese middle school students, Zheng and his coworkers (2014) noted that inattention in adolescents is significantly associated with mobile phone ownership, and the time spent on entertainment on mobile phones per day. Scholars also found that both urban and rural adolescents seek sociability, entertainment, instrumentality, and fashion/status from mobile phones in China (Fu, 2013). For the rural adolescents, they prefer to pursue the

symbolic functions instead of the pragmatic function of mobile phones, and they like to compare their mobile phone with other students'. As a result, owning mobile phones can divide youths into two groups, the ingroup and the out-group (Xie et al., 2016). These variable-centered gratification studies have advantages in testing existing constructs, concepts and frameworks in the new media environment, but they do not provide new insights on the social implications of mobile phones or users' subjectivity. A hermeneutic approach is needed to reveal the real life and the new subjectivity of the Chinese adolescents, and to articulate their usage of new technology with the social, cultural, economic context of China.

Before proceeding to the research questions and methodology, it is necessary to briefly introduce some social-cultural background of rural Chinese adolescents' lives in order to have a better idea of their mobile phone usage.

The urban-rural divide. The development of China's economy is highly uneven between the urban and the rural. The teen students in rural areas of China mostly come from families with low social economic status, and their parents usually have low educational backgrounds (Liu, Chen, & Cheng, 2015). In addition, it is not uncommon for adult villagers to leave their household to seek jobs in big cities, since they cannot make enough money to support the family by farming alone. In 2012, the number of rural-to-urban migrant workers in China reached 262 million, and as a result, about 60 million children are left behind and grow up with their grandparents or other relatives (National Bureau of Statistics of the PRC, 2013). In these physically separated families, parents rely on mobile phones for remote parenting. What's more, most of the children do not have any siblings because of the "One Child Policy" initiated in the late 1970s and early 1980s in China. For them, mobile phones function as their playmates and also connect them with their peers.

School dormitory system. A large number of Chinese students start living in school dormitories during high school or middle school. The dormitory system is especially popular in rural areas of China. In some schools, more than half of the students live in school dormitories instead of at home. Since education resources are unevenly distributed in rural China, better schools are usually located in big towns and provide education services to the students from surrounding small villages. Students from poor families or remote villages have to move to school dormitories, where they share a room with five or seven students. Hundreds of teenagers live together from morning to night, and are only allowed to go home every two or three weeks to reunite with their family. According to Eric Mu, high school is considered:

A monastery and an army boot camp combined. Eleven classes every day. We had to rise before dawn and went to bed after 11 pm. After the last class, we were encouraged to use any bit of extra

time for study. There was one student who would go to read his lessons every night in the toilet, because that was the only place where the light would be kept on 24 hours.

The extremely tight school schedule deprived the teenagers of free time for non-academic activities, including the use of mobile phones.

School policies. Chinese high school administrators believe that mobile phones have strong negative impacts on students' studies, and usually apply strict policies concerning mobile usage in school. This is the case especially in the rural parts of China, where mobile phones are banned in most elementary, middle and high schools (Gao et al, 2014). In the high school I investigated, mobile phones are banned entirely in school. If a student is found violating the school policy, the device will be temporarily confiscated by the teacher. For the first offense, the phone will be taken away until the end of the day; for the second offense, the phone must be picked up by a parent or guardian; and for the third offense, the phone will be kept by the teacher until the students perform very well in the following exams. In general, mobile phones are considered as threats to study by most if not all high schools in rural China.

When I talked with the students and observed their daily lives, I realized that there is a great discrepancy between the findings based on western social contexts and the real lives of rural Chinese adolescents. It is important to understand the teenagers' own opinions and feelings about mobile phones and the surrounding environment, as "children have to live their lives in terms of their understandings, just as adults do; their ideas are grounded in their experience and thus equally valid" (Toren, 1993). The current project aims to shed light on this area of youth culture and technology.

Research Ouestions

As mentioned above, most middle and high schools in rural China have strict policies on mobile phone use in school, and hence rural adolescents have limited access to mobile phones. In this situation, what are the adolescents' attitudes toward mobile phones? How do they think of the mobile phone's role in mediating parent-child, student-student, and teacher-student relations?

In this exploratory qualitative research, I would propose the following rather broad research questions to guide the investigation, aiming to gain insights into the real life and thoughts of the rural Chinese adolescents concerning their mobile usage.

- RQ 1: How do rural Chinese adolescents consider the role of mobile phones in their parent-child relationships?
- RQ 2: How do rural Chinese adolescents from dispersed families use mobile phones in their family communication?

RQ3: How do rural Chinese adolescents react to the school mobile phone policy?

Methodology

The methodology of this study is a combination of focus groups and creative visual methods. With the creative visual method, I asked the selected participants to first draw a picture about the role of mobile phones in their family and school life, and then proceed to give a brief explanation of the drawings. Drawings have been frequently used in child-focused research as an eliciting device in individual interviews and focus groups (Guillemin, 2004; Johnson, Pfister, & indrola-Padros, 2012; Gauntlett, 2004, Vindrola-Padros, 2012). Gauntlett (2007) argues that creative methods, such as drawing, painting and photography, give participants more time to think, reflect and organize their answers. Unlike interviews, where there is time pressure and emphasis to answer quickly, or a survey, which provides participants only a pre-set list of questions and answers. With the use of creative methods, researchers can better understand how the child thinks and reacts.

Drawing methods can be used with participants from various age groups. The method works not only for children, but also for teenagers who can write essays and give verbal responses, for it provides them a holistic, empathic way of looking at the reality. The use of drawing allows access to a different part of human consciousness (Proser & Loxley, 2008), and can facilitate investigating the layers of experience that cannot be easily put into words (Gauntlett, 2007). In addition, participants' self-interpretation of the drawings reveal how they give meaning to their own visualizations (Thomps, 2008).

Recruiting participants. 21 teenagers, all high school sophomores (equivalent to a 10th grader in the American system) from a high school in a rural county of Southern China, were recruited. The high school has 1900 students. Its dormitories have the capacity to accommodate 1200 people and the dorms are usually fully occupied. A student pays about 40 RMB (7 dollars) per semester for the dorm, and they share a room with another 7 students. High schools like this one are commonly seen in each of the 2850 counties of China.

Collaborating with the high school, I asked 150 junior students to write essays on their use of mobile phones on Chinese New Year's Eve on February 10th, 2013. The essay consisted of two parts: their mobile phone usage diary and their reflection about the mobile phone usage. After discarding incomplete essays, I got 134 essays, and from them I picked 21 students to participate in this study.

Although not a representative sample, the 21 teen participants were selected with an aim to diversify various factors. The factors considered include: 1) their phone usage habits including the frequency and topics of their phone calls with family members, 2) the functions they explore on their mobile phones, and 3) social contexts such as whether they live in

school dorms or at home, with their families or not, and 4) personal information including gender, age, and academic performance.

The selected 21 participants, aged between 15 and 17 were labeled with gender (M=male, F=female), class number (3,5,8), and case number (1 to 7). In order to protect the participants' identity, I used a pseudonym for each participant. For example, Case Tom (M53) refers to the 3rd participant in class 5 who is a male with the pseudonym of Tom. The data of media diaries were not used in this project because it was initially designed for another larger project about young people's mobile phone usage in festival celebrations, and did not fit well with the current research design. In this project, the media diaries only provide the background information of the participants.

Focus group: Data collection is mainly conducted in the form of focus groups with the 21 participants from the 27th to 30th of May 2013. Each focus group was consisted of seven participants, and was divided into three phases: interviewing, drawing, and self-interpreting. The whole process lasted about two hours, with one hour for interviews, followed by 15 minutes of drawing, and a further 45 minutes for self-interpreting.

Phase 1 – interviewing: The participants were asked to make a brief introduction about the habits of their mobile phone usage: when they got the first mobile phone, which brand is it, what functions of the phone they use, how frequently they use it to contact their family, whether they use it in school, and what strategies they use in order to avoid getting caught, etc.

Phase 2 - drawing: After the first phase interviews, the participants were given a sheet of paper and a pencil, and were asked to draw a picture of the role that mobile phones play in their family and school life. They were asked to complete the drawing in 15 minutes. The time pressure aims to encourage them to focus on the contents they want to express instead of the aesthetic aspects of the drawings.

Phase 3 - self-interpreting. After completing the drawing, the participants were asked to explain to the researcher and other group members what he/she drew and why. In this self-interpreting section, I mainly followed the instructions given in the book of Media and the Make-Believe World of Children (Gotz, Lemish, Aidman, & Moon, 2007), and led the discussion by asking questions about 1) the situation, including what are the various elements in the drawings, such as objects, people, animals, mobile phones, and what are the related narrative embedded in it; 2) the participants and the mobile phone's positions in relations to other figures in the drawing; and 3) the meanings, like how the participants feel about the situation and what it means to them. This process was recorded both in audio and video. Video recording is necessary because the selfexplaining process involves extensive use of "demonstrative pronouns" such as "this, that, it, they" when referring to figures and characters in the drawing, and it is difficult to identify what they refer to with only audiotapes.

Analysis: Each participant was considered as a case, and its data package includes his/her discussion in the focus group interview, the summary of the drawings he/she made, and his/her self-interpretation about the drawings.

The analysis of the data uses the method of thematization (Strauss & Corbin, 1994; Lindlof & Taylor, 2011) and follows the instructions provided by Maya Gotz and her coworkers (2007). At first, I developed summary descriptions of the drawings. The participants' self-interpretation of the drawings is important in this process since it gives meaning to the figures and objects in the drawings, as well as provides insights into participants' feelings and emotions. I then coded the summaries, the transcripts of the self-interpretation, and the focus group discussions. I broke down the data into smaller, meaningful concepts that were then labeled and stored. Categories began to emerge during this process. As the categories gained more evidence from the coded data, we were able to generate themes. Below I show an example of how I developed a summary for Nancy (F31)'s drawing (shown in Figure 1).



Figure 1. Nancy (F31)'s drawing

The drawing made by Nancy consists of three scenarios, from the top right to the top left, and then to the bottom. It uses a number of speech bubbles that contain the words representing the words or thoughts of a given character. The speech bubbles are widely used in comic books, especially Japanese comic books that were popular among Chinese youngsters. The upper right scene is about her family watching TV in the living room. All three people on the couch are using mobile phones while watching TV. Dad is talking with a friend about playing Mahjong; Mom is looking at the tabloids about a female singer on the phone; and her cousin was chatting with friends on an instant messenger app. Grandpa is calling his other son and asking him to come back home. Grandma is a little upset, complaining that everyone is on the phone and no one is paying attention to the television program. The subtitle below the television set is "no one

is watching me!" On the contrary, the major part of the scene in the upper left is a house with austere decoration. In front of the house is a can labeled, "mobile phone depository," where people have to deposit their mobile phone before entering the house. From the house come bursts of merry laughter and compliments of the television content. However, Wu herself did not appear in either of the two pictures, which implies that she wants to distance herself from the two scenarios. She would rather put herself in the bottom scene, which represents her imagination of an ideal family life, where Dad, Mom, sister and herself hold each other's hands, communicate through warm hearts instead of cold mobile phones, and live a happy life.

From the summary, we can see that a consistent theme articulates three scenarios in Nancy's drawing: firstly, the amount of mobile phone usage is negatively correlated with the level of intimacy in the family; secondly, in the family with extensive mobile phone usage, family members are more isolated from each other; and thirdly, in the family with less mobile phone usage, the family members are happier even when they are poor. I then proceeded in double-checking this concept with Nancy's self-interpretation and her speech in focus group discussion. As she mentioned in the focus group discussion, "face-to-face communication is the key factor for achieving a harmonious relationship in my family", we were able to argue that she is aware of the negative effects of mobile phone usage on familial relationships. Finally, after checking other participants' data packages, I found that Sam (M33) and Shirley (F55) showed similar concerns. A theme will then be saved and wait for further theoretical considerations, for instance, what is the best way to designate it.

Results

The following is the basic information of the 21 participants. The range of the participants' age is from 15 to 18, with an average of 16.3 years old. Among the 21 participants, there are 6 male students (29%) and 15 female students (71%); five of all the participants (23%) come from rural-to-urban migrant workers' families with at least one of the parents working in other cities. Of all the participants, only three (14%) participants are local residents who can stay with their families and the other 18 (86%) were separated with their family, living either in school dormitories or in the apartments outside of the school, and are not able to see their parents on a daily basis.

Among the 21 participants, six either do not have a phone or do not bring the phone to school. In addition, only two of the participants are using smart phones. One possible explanation is that in this rural high school most students are from poor families and cannot afford a smart phone. Mobile phone usage is banned in school, and the students are not allowed to bring mobile phones to the classrooms. They can only use it

secretly in the dormitory. The participants use mobile phones mainly for offline features, such as alarms, making or receiving phone calls, etc. When they have to surf the Internet on the mobile phone, they do it via WAP. They usually have a small data package of 20 megabytes per month, which does not support extensive online activities.

After carefully interpreting the drawings and the corresponding narratives, the following themes are generated: a phone as a bridge of love, a phone as an extension of the home, a phone as an iron cage, a phone as the blasting fuse of family conflicts, and a phone as a threat to school studies.

"Phone as a Bridge of Love"

Many teens used a bridge as a metaphor to refer to the mobile phone's role in their parent-child relationships. A total of 10 (48%) of the 21 drawings fall into this category. Through mobile phones, the participants are able to tell their parents about school, coordinate transportation, send birthday and festival wishes, and ask about their health status. On the other hand, parents are able to monitor students' study and living situation, "My mom calls me every Saturday and asks me to have more food, because she thinks that in order to handle the heavy study load I need more nutrition" [Self-interpretation, Tom (M53)].

Mobile phones have enabled remote parenting in geographically separated families. With mobile phones, parents are able to partially fulfill the care giving duties, such as emotional nurturing, value-formation, and care for the physical wellbeing of the children (Uy-Tioco, 2007). Caregiving was traditionally considered location-bond, especially the aspects involving ritualized activities, such as bedtime rituals and dinner rituals. However, scholars like Baldassar (2007) and Finch (1989) found that separated families engage in the same five forms of care giving as proximal families, including financial (e.g., remittances), practical (e.g., sharing expertise), personal (hands-on care, including nursing the sick), accommodation (having a place to stay), and emotional or moral support. Jessie (F82) (Figure 2) visually represented the major topics of her phone conversation with parents. Parents ask whether she sleeps well (represented as a quilt in the drawing), eats well (a bowl of rice with a pair of chopsticks), dresses well (a shirt), has enough fruit (a piece of watermelon), and how her study performance is going (a math test paper). Through the mobile phone, her parents are able to micro-manage her studies from a distance and call to check on the details of her life.

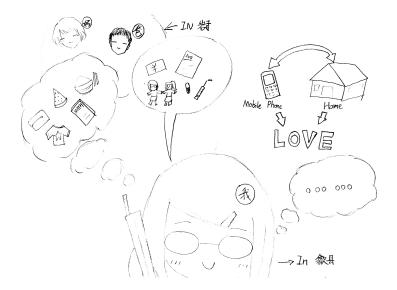


Figure 2. Jessie (F82)'s drawing

The drawings also show that the parent-child phone conversation is not a unidirectional but a bidirectional way of communication. In the same drawing as we mentioned above, Jessie called her parents to ask for money (represented as Chinese currency RMB), to report her academic performance (represented as graded test papers), and to inquire about her parents' health (represented as pills and a syringe). Cathy (F84) also mentioned, "as a big girl, I feel that I need to provide emotional support to my parents too" [Self-interpretation, Cathy (F84)]. The reciprocal emotional caring reinforces the parent-child bond and creates a more democratic atmosphere in the family of the rural Chinese adolescents. Therefore, mobile phones facilitate the two-way parent-child socialization, bridging the separated worlds of the teens and their families in rural China.

In addition, over half of the participants (12) used a heart-shaped sign of love to refer to the mobile phone, which shows they highly appraise the mobile-mediated parent-children relationship. For example, in Jennet (F55)'s drawing, she connects "I" and "family" with a bridge that consists of 13 heart signs, in which a mobile phone with a speech bubble says, "Mom, everything goes well at school!" Mandy (F35) (Figure 3) creatively transformed the four directional keys "up, down, left, right" into love signs. She thinks that family members should communicate with each other in a heartfelt way, and each phone call provides an occasion for the reunion of hearts. "Every time when we make a phone call, we need to think that we are connecting to a warm, dynamic, lively heart, rather than a cold number. We will try to let them (other family members) feel that we care for them, miss them, and love them. And I wish to see their smiling faces" [Self-interpretation, Mandy (F35)].



Figure 3. Mandy (F35) 's drawing

For these teenage participants, mobile phones have successfully worked as a bonding device and fostered "emotional harmonization" within the family (Katz, 2000).

"My Home is Located Within the Phone"

Family separation has been a situation that a large number of rural Chinese teenage students have to face. For these teenagers, the mobile phone is an extension of home that can be carried with them. There are two groups of students who have to live away from their family and rely on mobile phones to stay connected with the family. The first are those whose home is far away and have to live in school dormitories. In rural China, many teenagers cannot find an ideal school nearby, and have to move to a town where the school is located. Of the 21 student participants, 18 (86%) live away from home, and in the whole school, two-thirds of the students live in school dormitories and can only visit their parents every two weeks to once every three months. The other group are the left-behind teenagers whose parents have migrated to big cities to seek jobs. There is an overlap between these two groups, for most left-behind teenagers also live in dormitories. The difference lies in that the left-behind students have far fewer opportunities to see their parents, and mobile phones represent a more valuable device for them to maintain the vulnerable family bonds.

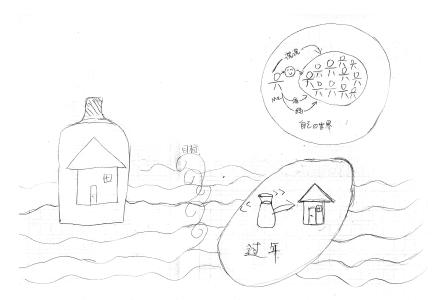


Figure 4. Linda (F32)'s drawing

Linda (F32)'s drawing (Figure 4) provides a good example. Linda is 16 years old. Her father works in a big city 500 miles away from the school, her mother works in another city 50 miles away, and she lives with her grandparents in a rented apartment nearby the school. The only way for Linda to communicate with her parents is by phone. Her mom calls her every night to check on her school activities. The call is usually brief and lasts no longer than 10 minutes. Her dad calls her every week, but the call is shorter. Although her mom visits her once a month, the only moment for a grand reunion of all the family members is during Chinese New Year, which is "the happiest moment for the whole year" [Self-interpretation, Linda (F32)]. From Drawing 4, we can see that in the left part of the sheet is a floating bottle representing a mobile phone, within which is located a house that is Lin's home. The bottle and the house are drifting in the ocean. The right part depicts the scene when the family reunites during Chinese New Year, "Only at this moment, I can let our home out of the floating bottle (the mobile phone) and talk face-to-face with my parents" [Selfinterpretation, Linda (F32)]. She also reminded us that even during the reunion the house and the mobile phone are still floating in the sea. Although I tried to avoid over-psychoanalyzing the drawing, it is still clear to see Linda's anxiety towards her family's rootless and drifting lifestyle. For her, mobile phones help maintain and restore the vulnerable integrity of the family. It creates a feeling that parents are just a dial away. For the left-behind teenagers in rural China in general, mobile phones work as the embodiment of "home" base and facilitate the extension of a wider reach of "home".

"I Brought a Mobile Iron Cage with Me Everywhere"

Not all the participants embraced mobile phones with passion and considered them as the solution to alleviate the problems brought by family separation. Some teens showed self-refection towards the negative effects of the mobile phone, illustrated by the "iron cage" metaphor.

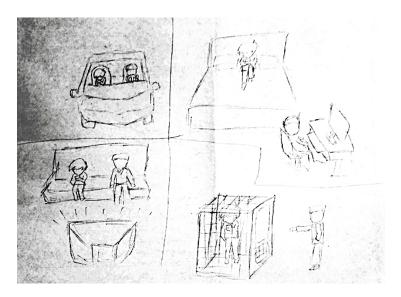


Figure 5. Sam (M33)'s drawing

Sam (M33) (Figure 5) is a local student who goes home every day. In Drawing 5 he depicted the way he uses mobile phones in everyday life. It's a story with only two characters: he and his father. When his father drives, he is using a mobile phone; when his dad uses a computer at home, he is using mobile phones; and when his father watches television in the living room, he is still using a mobile phone. He felt trapped in the iron cage of the mobile phone, and his father tries to reach out to him, "The mobile phone is like a prison. It helps me understand the outside world, but it also prevents me from communicating with my dad. I should learn to talk more with my family, rather than be on the phone all the time" [Self-interpretation, Sam (M33)]. The mobile phone creates an electronic cocoon (Ito, 2005), that is, a personal and private world for people to hide in, while at the same time, it also represses people's desire for contact with the outside world. Mediated communication, hence, it displaced the adolescents' face-to-face interactions with physically close people.



Figure 6. Shirley (F55)'s drawing

The conflicts between mobile phone usage and a harmonious family relationship are also expressed in Shirley (F55)'s drawing (Figure 6). The main part of the drawing is a scale with a mobile phone and a house on each side. An arrow connects three family members and a house which refers to Shirley's home. Her home is so heavy that the scale is obviously leaning toward it, even about to break. In Shirley's opinion, home weighs much more than the mobile phone does. The words below the house say, "This is our home, I love our home". Unlike Sam, Shirley did not worry that the mobile phone has prevented her from communicating with her parents face to face; instead, her concern is that the mobile phone might affect her study. She is afraid that her bad academic performance will disappoint her family. Consistent with her attitude towards mobile phones, Shirley refused her mother's offer to buy her a new phone. For some Chinese teens, they are aware of the displacing effect and the addictive features of the mobile phone, and try to limit their own access to the phones.

"My Parents Check My Phone all the Time"

Although mobile phones have proved to be able to facilitate parentchild communication, parents' attempts to supervise children's mobile phone usage will lead to strained parent-child relations. Most of the participants reported parents' checking messages / phone call history as unacceptable behavior.



Figure 6. Shirley (F55)'s drawing

Lisa (F34) (Figure 7) comes from a family that emphasizes education as a core family value, "Since middle school, my parents kept telling me that studying means everything, and that I should fully concentrate on study" [Self-interpretation, Lisa (F34)]. She portrays herself as a Japanese warrior wearing a bandana on her head with a word "Victory" written on it. She explained that from her parents' point of view. studying is a long-term war, and in order to survive she has to fight very hard to obtain victory. Lisa's parents like to call to check where she is and what she is doing. In the upper right part of the picture, Lisa tells a story that one time her parents called her when she was riding a bicycle on a busy road. She crashed into a truck and fell down from the bike when she tried to answer the phone. The bike was destroyed and she broke both arms. As a result, she decided not to use the mobile phone any more. The conflicts between children's increasing urge to escape from parents' supervision and parents' excessive care have been intensified by the mobile phone, "My mobile phone is not private. If I leave the phone at home, they will definitely check it. I am very careful about saving the messages exchanged with my friends. I delete messages periodically" [interview, Lisa (F34)]. For privacy reasons, Lisa didn't use her phone much. She used her phone mainly as an alarm and never used it to surf the Internet.

Despite the conflicts, Lisa also depicts a happy experience with her parents and phone usage in the bottom of Drawing 7. There was a time when she got a bad grade on a math test and she called her mother crying. Her mother's words soothed her sadness and anxiety. In general, mobile phones have greatly enhanced the parents' presence in adolescents' life, in forms of either supervision or support.

"My Teacher Smashed My Phone"

Mobile phones have been an important part of schooling in recent years, and supervising students' mobile phone usage has been an important task of the teachers. What are the teen students' attitudes towards the school policy?

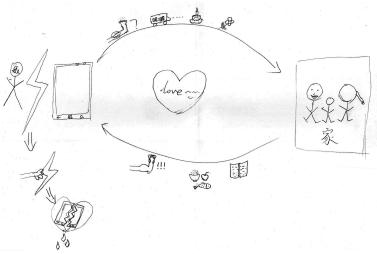


Figure 8. Tom (M53)'s drawing

In Tom (M53)'s drawing (Figure 8), the major part depicts a perfect reciprocal positive relationship between him and his family, with a big sign of love in the center. However, when mobile phones encounter school, there comes a storm: "I hated my school. My teacher smashed my phone at school. It broke my heart. This phone cost my mom a lot of money, and her heart will be broken too. It also made my parents lose face" [Interview, Tom (M53)]. When Tom said that, the other six participants in the focus group laughed. I guess they felt the same way as Tom but did not dare to say it. The parents have reason to feel humiliated, because in Chinese culture, if the school punishes your child, that means your child is considered a "bad student", and the whole family shall feel shamed for not providing a good education to the child. One of the teachers of the high school I investigated said, "Good students don't use mobile phones. 90% of them don't even have one. On the contrary, bad students use mobile phones more. They are not focused on studying. That's why they need to spend their energy and time somewhere else. The mobile phone is a breeding ground for bad things." [Interview, teacher Ying). From the schools' perspective, mobile phones are hard to supervise. They have greatly enhanced the chances for the teenage students to maintain romantic relationships, organize fighting, or play games. These three types of behavior were strictly prohibited at school and considered as the "bottom line" of the school policy.

On the other hand, some teenage students also internalized the idea of "only bad students use mobile phones in school." Many students agree that mobile phones will affect their study and will be detrimental to their

future. Because of the huge urban-rural divide and household registration system in China, education is the primary path to upward mobility for the people living in rural areas (Chan & Zhang, 1999). A practical goal of high school training in China is to prepare the students for the annual National College Entrance Examination, which decides whether the young people can leave villages for big cities and have a bright future. In this sense, students and teachers both consider mobile phones as threats to accomplishing the goal. For example, Shirley (F55) refused her mother's offer of buying her a phone, because she is afraid that it might affect her study:

Shirley: For us, the high school students in the rural villages, it is vitally important to get admitted to a good college. That's the only way we can change our life and go to big cities in the future. In the eyes of the teachers, the mobile phone is detrimental to our future. *Interviewer:* Do you agree with them?

Shirley: We are definitely influenced by their opinions. It is better to enter a good college first, and then I can allow myself do whatever I want.

[Interview, Shirley (F55)]

This exploratory study does not aim to imply a simple conclusion about whether phones should be banned in school or not, but to reveal dynamic relationships among high school students, their parents, as well as their school in rural China.

Discussion

This study situated the question of adolescents and technology in the context of rural China. With the creative method of thematic drawing and focused interviews, it reveals Chinese adolescents' mobile phone usage patterns, as well as their innate perception and wishes concerning mobile phones. Since most high schools banned mobile phone usage in rural China, the teenage students do not use mobile phones as much or in as diversified ways as the concept of digital natives implies. Their level of media literacy is relatively low. The teenage students reported using only basic functions of the mobile phone, such as the traditional phone call, text, alarm, e-book, and basic web surfing. They are not allowed to access the Internet through other digital devices, such as tablets or personal computers as well. The monastery lifestyle prevented the students from using digital media to acquire advanced knowledge and skills. In addition, most adolescents in rural high schools could not afford an expensive smart phone or a bigger data plan for richer online activities. As a result, rural Chinese adolescents were deprived of the time and financial support needed to fully explore the mobile world. Therefore, scholars should be cautious when using the concept of digital natives to analyze rural Chinese adolescents

The teenage students in rural China, however, have a positive view about the role of mobile phones in family communication. The fact that mobile phones are always associated with heart-shaped love signs in their drawings shows their positive attitudes toward the role of new technology in their familial life. For these 16 to 18-year-olds facing the pressure of living far away from home and the strict study schedule, mobile phones restore family bonds and enable them to share emotional moments with parents. However, if parents monitor their children closely, call frequently, check on their activities, or check their messages/ phone conversation history secretly, parental-child conflicts can arise easily.

For the adolescents from dispersed families, they tend to have a romantic view of mobile phones, and consider the phones as an extension of their home. When physical reunion of the family is not possible, mobile phones can at least bring family members together virtually. Mobile phones are essential for remote parenting in physically separated families, and both parents and children use the phone to foster emotional harmonization in the family. In general, the left-behind teenagers project their longing and expectations of a warm and harmonious home into the use of the mobile phone.

Chinese high schools apply strict policies concerning the use of mobile phones, while the teenage students from rural areas of China are ready to accept the school's idea of mobile phones as a threat to their current study and future career. Chinese philosophy traditionally values education and emphasizes human malleability. The students have to devote their time and energy entirely to studies, with the faith to change their life through succeeding in education. The teenagers are aware of the negative effects and addictive features of the mobile phone, and they show, to a certain extent, a sense of self-control and self-regulation on mobile usage. Some teens refused to acquire a mobile phone in fear of it affecting their studies.

Overall, China holds a significant position in terms of growing Information and Communication Technologies, the study of China's teenagers and their relationship with new media could contribute greatly to the discussion of youth mobile culture. The findings of this study are consistent with previous studies in that digital culture divides based on social-economic status. However, dynamic social and cultural elements, such as the disparity between rural and urban areas, the unique family structures due to the "One Child Policy", and the trend of rural-to-urban migration, might be factors that affect the perception of teens and their families, and need to be considered when we study teenagers mobile culture in China.

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