Interface culture and gendered privacy risks in the context of Chinese locative social media use

Across the world, young people are increasingly using locative social media applications to socialize with strangers for dating opportunities. This phenomenon is also found in Chinese society, where such applications are very popular with young Chinese urbanites. This article presents a case study of how young Chinese urbanites navigate social interactions with strangers on WeChat People Nearby, based on the findings of interviews with 19 Chinese university students aged between 18 and 23. By drawing on the notion of interface, we uncover how gender dynamics are established in young Chinese urbanites' People Nearby use and how the gender dynamics are engineered by the privacy paradox of interfaced social interactions between strangers in the locality. The outcomes of the present research help us to understand the gender-related opportunity-risk axis established in young Chinese urbanites' everyday use of locative social media applications.

Introduction

While much scholarship in media and cultural studies criticizes capitalism for causing social alienation in our society, Illouz (2007) reminds us that businesses may provide people with new opportunities to develop and experience intimate relationships. In accordance with her observation, we have witnessed locative social media applications being increasingly used by young people to socialize with strangers (Gackenbach et al., 2016; Ward, 2017). Strangers, in this case, refers to people who were previously unknown to each other. In social encounters, people generally only recognize minimal obligations to strangers and avoid touching or

making eye contact with them in their everyday lives (Morgan, 2009). However, social interactions with strangers are not always undesirable as, in certain scenarios, we may also develop intimacies with them (Morgan, 2009). Interacting with strangers also comprises social functions, possibly allowing people to expand their social networks. Today, a long list of locative social media applications, such as Tinder and Grindr, have been launched by businesses. Based on locative technologies, these applications facilitate the detection of nearby users' profiles, enabling users to communicate with strangers in the same geographic area for friendship, romance, or even sexual encounters (Licoppe et al., 2016; Ward, 2017).

Following the global trend, young Chinese urbanites are active users of locative social media applications (Jia et al., 2018). The majority of these applications are designed for heterosexual users, addressing young Chinese urbanites' desire for dates in a fast-paced urban environment. Yet, the emergence of locative social media applications also raises privacy concerns among young Chinese urbanites because the social encounters with strangers on these applications may weaken users control over their privacy and "even invite stalking" (Hjorth & Gu, 2012, p. 704). This leads to an inconsistency between young Chinese urbanites' willingness to share personal information, and their desire to protect their privacy (Han et al., 2019). This inconsistency is often referred to as the privacy paradox (Barnes, 2006). It represents an opportunity-risk axis in today's digital technology use (Chambers, 2017), creating tensions between young Chinese urbanites' need to retain a level of confidentiality and their wish for interfaced dating opportunities. Accordingly, this article engages with the notion of the privacy paradox to explore how young Chinese urbanites cope with the opportunity-risk axis in their everyday locative social media use.

This article comprises a study of Chinese university students' use of the People Nearby function of WeChat. WeChat is currently the most popular social media application in China (Harwit, 2017), used by 1,098 million Internet users (Tencent, 2019). This application incorporates a function called People Nearby. By activating the function, WeChat users can find strangers from a list, which displays the profiles of other users, who are in the same geographic area and are also using the function. The use of People Nearby facilitates romantic encounters between female and male users in heteronormative Chinese society. Chinese university students are a particular group of young Chinese urbanites, who have often moved away from home to study at universities. To cope with feelings of loneliness in a new living environment, Chinese university students become early adopters of WeChat People Nearby, often actively using the function to socialize with nearby strangers for dating opportunities. Thus, an analysis of how Chinese university students use WeChat People Nearby is enlightening. It helps us to recognize the dynamic interplay between dating opportunities and privacy risks on locative social media, as established in the social encounters between young female and male Chinese urbanites.

In this article, we draw on the notion of interface culture to analyse how Chinese university students use WeChat to navigate social encounters with strangers of the opposite sex. Interfaces are the meeting points of socio-cultural dynamics, which transform how bodies and environments interact (Gane & Beer, 2008). Using locative social media applications, users can engage in interfaced interactions with limited distractions from their surroundings (de Souza e Silva & Frith, 2012). People Nearby facilitates social interactions between strangers on WeChat, allowing Chinese university students to develop romantic relationships with previously unknown users of the opposite sex. Yet, this use of People Nearby requires them to accept a collateral consequence, which is the possibility of being

stalked by strangers. Given the gendered organization of romantic encounters on People Nearby, a study of how Chinese university students navigate interfaced social interactions with strangers on WeChat sheds light on the gender dynamics of the privacy paradox established in young Chinese urbanites' locative social media use.

In what follows, we firstly articulate how locative social media applications form a type of interface and discuss how the notion of the privacy paradox helps analyse the interface culture. We then provide an explanation of the research methods, which is followed by a detailed analysis of the empirical data. We conclude by expounding the implications of the research findings.

Literature review

Interfaced social interactions

Locative social media applications are designed to enable young people to navigate social interactions with strangers. Such locative social media use can be unpacked following an interface approach. According to de Souza e Silva and Frith (2012), an interface is defined as an object or a collection of objects, which has the capacity to connect the different parts of a complete system. An interface facilitates certain modes of interactions between the different parts of the system (Ash, 2015). The Graphical User Interface (GUI), for instance, describes an interface that allows users to interact with a personal computer by using a mouse to click icons and images shown on the computer screen (Ash et al., 2018). However, interfaces not only describe a linkage between the human body and digital technology but also a "meeting point of a number of important social and cultural dynamics", which may inform certain socio-cultural practices (Gane & Beer, 2008, p. 61).

According to Ash (2015, p. 31), an interface must work in an interface environment which is "positioned and spaced in relation to one another in order to convert qualities for both other objects in the interface and the user engaging with that interface". While particular qualities are generated through the encounters between these objects, these qualities cannot be solely reduced to any single object's property (Ash et al., 2018). The specificity of an interface environment is, therefore, based on how users use an interface and how the interface is used in relation to physical surroundings in certain socio-cultural contexts (de Souza e Silva & Frith, 2012). For example, users may use mobile phones as an interface to interact with others who are thousands of miles away from them. This interface must perform the task while being placed in an interface environment in which mobile phones are connected via a wireless communication system that supports "receiving calls, exchanging data, pulling electricity from a power source" (Farman, 2012, p. 64). It allows users to challenge space-time constraints by engaging in interfaced interactions that lead to the conjunction of various socio-cultural processes (Gane & Beer, 2008).

Locative social media applications may also work as an interface that enables users to engage with each other, focusing on the social interactions between strangers. Locative social media utilize the Global Positioning System (GPS) signal to locate each user's physical position (Fitzpatrick & Birnholtz, 2018). In order to activate this kind of interaction, users do not need prior knowledge of each other's existence but must be geographically close to each other. Research shows that this mode of interfaced social interactions has been extensively adopted by young people across the world to find dates or sexual encounters (Miller et al., 2016). In this way, an interface culture is established amongst these young people, normalizing the interfaced social interactions between strangers today (Fitzpatrick & Birnholtz, 2018).

The interface culture of locative social media use feeds into the rise of surveillance in the digital age. Surveillance is a part of the interface culture of locative social media applications. According to Foucault (1977, p. 201), surveillance is defined by using the "panopticon" as a metaphor. Panoptic surveillance involves top-down, imbalanced power relations in which authorities regulate people by monitoring their behaviours (Foucault, 1977, p. 201). Typical practices of panoptic surveillance include the CCTV system, which is used by the police forces to track people's everyday activities to prevent crimes. Today, this panoptic surveillance has been extended to the digital cultures, explaining 1) how authoritarian governments gather intelligence about dissidents (Rod & Weidmann, 2015) and 2) how high-tech companies collect Internet users' data for commercial purposes (Fuchs, 2015) by monitoring user-generated content on the Internet.

While panoptic surveillance also exists on locative social media applications, another form of surveillance, namely omnioptic surveillance, has played a pivotal role in the shaping of young people's locative social media use (Lambert, 2013). Omnioptic surveillance refers to "the-many-watching-the-many", describing how users consciously or unconsciously monitor each other because of their access to each other's information shared on the Internet (Kelsey, 2015, p. 2). On locative social media applications, the interfaced social interactions between strangers are based on their access to each other's digital profiles (Evans, 2015). These applications facilitate omnioptic surveillance by automatically updating users with the whereabouts of other users (Lambert, 2013). In this way, the protocol of locative social media use requires users to accept being monitored by strangers in the vicinity (Evans, 2015). Being active users of locative social media applications, young people constantly find themselves coping with a spectrum of the disclosure and preservation of their privacy (Chambers, 2017).

Scrutinizing young people's privacy behaviours, thus provides the grounding for an in-depth understanding of the interface culture of locative social media use, which centres around an opportunity-risk axis of the interfaced social interactions with strangers.

Privacy and the privacy paradox

Privacy concerns one's behaviour of controlling other people's "access to the self" (Altman, 1976, p. 8). The notion of privacy enables people to recognize a private-public boundary "along a spectrum of openness and closeness" (Palen & Dourish, 2003, p. 130), and manage it by regulating "the flow of information efficiently without interference or intrusion from the outside" (Chan, 2000, p. 1). Privacy behaviours encompass both socio-psychological and physical dimensions, including the management of one's personal information that helps identify the individual, and the control of one's body and physical surrounding to prevent the individual from uninvited interference (Kokolakis, 2017). In everyday lives, people not only preserve privacy but also share it, because the sharing of privacy facilitates the development of trust and intimacy between social members (Altman, 1976).

Today, a great deal of scholarly attention has been paid to young people's privacy behaviour on social media, focusing on an inconsistency between how they express concerns over their privacy and how they actually protect their privacy (Chambers, 2017). This inconsistency, namely the privacy paradox, is a thorny issue lying at the heart of young people's social media use (Barnes, 2006). In general, participation in social media use involves creating a personal profile and continuously sharing personal information through that profile (boyd, 2014). A sharing culture is thus fostered, encouraging a pattern of social interactions in which the public display of personal information is essential (boyd, 2014). Participation in social media use necessitates being prepared to "trade privacy regulation for

convenience" (Chambers, 2017, p. 30). In this way, a tension between young people's protection and their expectation of privacy is created by the privacy paradox in social media use (Kokolakis, 2017).

When young people use locative social media applications, their management of a private-public boundary has been further complicated by the privacy paradox established in interfaced social interactions with strangers. On traditional social media, where everyday friendships and interfaced social interactions converge, young people mainly share privacy with friends with whom they are connected on the platforms. They generally see strangers as uninvited stalkers and utilize the existing privacy settings provided by social media applications to block strangers' access to their digital profiles (Chambers, 2017). This privacy behaviour helps young people build a sense of safety in their everyday use of social media applications. Yet, with the emergence of locative social media applications, this way of protecting privacy has been challenged. Because the very purpose of using locative social media applications is to interact with strangers, the intended audiences of users' digital profiles are not friends but strangers with whom they do not share existing trust and intimacy (Timmermans & Courtois, 2018). In particular, young people often reveal their personal information by sharing photographs and selfies, and by indicating their sexual preferences on the digital profiles of their locative social media accounts (Licoppe et al., 2016). This information constitutes a set of objectified attributes or characteristics of users, which facilitates the matchmaking between strangers in interfaced social interactions (Licoppe et al., 2016, p. 2,541). Under these circumstances, young people have to give up control over aspects of their privacy and place it under the scrutiny of strangers when using locative social media applications. This process redefines the meanings of 'stranger' and 'privacy', thereby complicating young people's management of the public-private boundary (Xu & Wu, 2019).

Gender dynamics

It is worthwhile noting that the notion of privacy is intersected with gender dynamics. Existing literature shows that stalking on social media involves a greater impact on the mental wellbeing of young women than on that of men (Ringrose et al., 2013). However, while being fearful of being stalked, young women often consider that the benefits of participation outweigh the risks of sacrificing privacy, as this participation, to a certain extent, signifies their control over their personal realm (Ringrose et al., 2013). They tend to deny the "significance of distressing experiences with reproving tales of others", so as to avoid being described as victims (Chambers, 2017, p. 31). As such, the privacy paradox associated with stalking creates a heavier burden on young women in their locative social media use. In this regard, Licoppe and Inda's (2009) research of the Japanese locative mobile gaming application – Moji provides a vivid example by illustrating how female users reported extreme anxiety about their safety because of being stalked by male users. Their research findings remind us of the importance of gender dynamics in the interface culture of young people's locative social media use.

On locative social media, given the ambivalent "structural gender inequality embedded in the sexual double standard, marriage expectations, and state policies" in Chinese society (Chan, 2018, p. 298), the gender dynamics engineered by the privacy paradox are particularly notable in the way young Chinese urbanites navigate interfaced social interactions with strangers, In a society where the prosperity of a family is historically associated with a reliance on male offspring, the implementation of the Chinese government's fertility control has caused an imbalanced female-male ratio in the Chinese population today (Lund et al., 2014). This imbalance provides young female Chinese

urbanites with a seemingly privileged status in the marriage market since there are more single men than there are single women available in Chinese society (Luo, 2017). Under these circumstances, the sexual attraction of Chinese men is often associated with their wealth and social status (Song & Hird, 2014). As Song and Lee (2010, p. 176) note, "men without money simply cannot have sex at all. They are neither able to seduce women outside marriage nor to find wives". This has led to Chinese men being pressured to buy a property and thereby improve their relative attractiveness in the marriage market (Liu, 2019). Having enjoyed this seemingly advantageous position, young female Chinese urbanites have developed a heteronormative convention about engaging with romantic relationships, and so tend to wait to be pursued by men.

However, the seemingly privileged status of young female Chinese urbanites is situated within a patriarchal system which often measures women's achievements against their sexual attraction to men (Peng, 2019). Failing to adhere to these patriarchal norms results in a social penalty, as exemplified by the widespread use of the term "leftover women", which stigmatizes Chinese women who do not marry before their late 20s (Luo, 2017, p. 195). These patriarchal norms amplify the desire of young female Chinese urbanites for serious romantic relationships, whilst restricting their ability to express this desire, by expecting them to adhere to male-pursuing-female dating traditions in all circumstances (Chan, 2018). In this way, gender dynamics are engineered in young Chinese urbanites' locative social media use by the amplified risks associated with the privacy paradox for female users. Based on an account of the intersection gender and privacy, the present research integrates the gender dynamics-related, opportunity-risk axis established in the use of locative social media applications in young Chinese urbanites.

Research questions and methods

With the intersection of the privacy paradox and gender dynamics in mind, we explore the following three interrelated research questions to unpack the opportunity-risk axis of the interface culture in young Chinese urbanites' use of locative social media applications.

- How do young Chinese urbanites exploit the dating opportunities of interfaced social interactions with strangers?

- How do young Chinese urbanites cope with the privacy risks associated with their locative social media use?

- How do gender dynamics lead to young Chinese urbanites' gendered navigation of the opportunity-risk axis?

To answer these research questions, we conducted interviews with 19 Chinese university students aged from 18 to 23, of whom eleven are women and eight are men. Our participants were recruited from a typical Chinese university with the assistance of the university's student administration office. The participant recruitment advertisement was distributed to students' university email. The recruitment was of a voluntary nature. A total of 19 students enthusiastically agreed to participate in the present research. The female-male ratio of the participants is generally balanced, while the participants present a wide range of habits in their use of WeChat. We added the participants as friends on WeChat and conducted semi-structured interviews with them via instant messages. No participant was interviewed until they had signed the information sheet and consent form.[1] In the interviews, we first asked the participants general questions, such as whether they had used People Nearby and what the main factors were that encouraged them to use or discouraged them from using the

---

[1] The information sheet and consent form were distributed and signed digitally.

function. Having built a rapport with the participants, we then invited them to talk about their personal experience with the function and encouraged them to share specific examples. We conducted the interviews with all participants in Mandarin Chinese and have translated the interview transcripts into English for analysis purposes. The interview transcripts were coded by using a thematic analysis method (Guest et al., 2014), which codes "data in terms of its content" and then "[collate] related codes into thematic categories" (Peng et al., 2020, p. 7). The analysis focuses on identifying the differences between female and male participants' use of People Nearby.

In this research, the primary risk associated with the data collection concerns the confidentiality of the information supplied by the research participants. To address the risk, we anonymized the personal information of the research participants and provided them with pseudonyms. The table below summarizes the demographic details of each research participant.

Table 1. Details of the research participants

Name	Age	Gender	Using People Nearby at the time of the research
Chen	*21*	*Woman*	*Yes*
Zhang	*23*	*Woman*	*Yes*
Li	*18*	*Woman*	*Yes*
Su	*19*	*Woman*	*No*
Lin	*20*	*Woman*	*Yes*
Xue	*22*	*Woman*	*No*
Di	*21*	*Woman*	*Yes*

Mi	22	Woman	Yes
Si	19	Woman	No
Song	18	Woman	Yes
Zeng	20	Woman	No
Ning	19	Man	Yes
Ding	22	Man	Yes
Liang	18	Man	Yes
Fei	21	Man	Yes
Zu	19	Man	Yes
Hao	20	Man	Yes
Liao	22	Man	Yes
Niu	19	Man	Yes

In the present research, the sample size is relatively small, meaning that the generalizability of the research findings is not guaranteed. Yet, as previously mentioned, Chinese university students are a particular group of young Chinese urbanites, who are early adopters and active users of WeChat People Nearby and are leading the trend of locative social media use in Chinese society. Given the exploratory nature of the present research, these qualitative data provide a glimpse into how young Chinese urbanites cope with the opportunities and risks of befriending strangers in their everyday use of locative social media applications.

Analysis and discussion

Through the interviews, we discovered that 15 of the 19 participants, including seven women and all eight men, were using People Nearby at the time of the research. By using People

Nearby to browse the digital profiles of strangers, these young Chinese university students are provided with means to cope with boredom. Participant Di, for instance, said that she sometimes uses People Nearby late at night to ease her homesickness. Her quote below offers a good illustration of this phenomenon.

> Di, woman, 21 years old: People Nearby offers me a way to pass the time. It allows me to find out who lives around and what they are doing every day, […] through, for example, browsing their profiles and their Moments.[2]

Similar to Di, most Chinese university students are temporary migrants of the cities where they attend university. The feeling of university life as the experience of 'being removed from a familiar environment' is commonly shared by our participants. The use of People Nearby, to a certain extent, addresses the needs of these young Chinese urbanites to satisfy their curiosity in this new environment, a guilty pleasure which is akin to 'gossip' (Lambert, 2016).

Romantic relationships and dating norms

Yet, while commonly using the phrase – 'passing the time' to describe their reason for using People Nearby, most participants admitted to having used the function to interact with strangers for heterosexual dates. Only two female participants said that their use of People Nearby was entirely to fill free time, with no dating intention at all. Seven other participants, including two female and five male students, related that they successfully found dating

---

[2] Moments is a function that allows WeChat users to share original content with friends – similar to Facebook Timeline.

opportunities through this function. These findings show that most of the participants are motivated to socialize with strangers with a desire for sexual or romantic relationships.

Locative social media applications are designed in such a way that they enable users to socialize with strangers in their locality by participating in interfaced social interactions (Timmermans & Courtois, 2018). On People Nearby, these interfaced social interactions are based on the technological design of the function that makes users' digital profiles publicly available on a list. On the list, the digital profiles are ordered by physical distance from close to far away, allowing young Chinese urbanites within the same geographical area to find other users' profiles, whether or not they were previously known to each other or connected on WeChat (Xue et al., 2017). This locative feature is furnished with a gender filter, which allows a user to search for female or male strangers only. In China where the socio-cultural trend is still heteronormative, this gender filter encourages young Chinese urbanites to use People Nearby to search for nearby strangers of the opposite sex so as to find dating opportunities (Xue et al., 2017).

In contrast to the prevailing attitudes of many Western societies, adolescent love in China is strictly forbidden in schools because it is generally considered by parents and teachers to be premature (Yang, 2017). This means that most Chinese university students have little experience of romantic relationships before entering university, and so are potentially disadvantaged by a lack of skill in this area of their emotional development. As a consequence of this, People Nearby forms an interactive interface environment in which Chinese university students begin exploring their sexual desires and contemplate the relationship between sexuality and romance. These young Chinese urbanites swiftly develop gendered approaches to the interfaced social interactions on People Nearby, unveiling the

15

gender dynamics of the opportunity-risk axis established in the interface culture of their locative social media use.

In general, we discovered that male Chinese university students tend to be more active than their female counterparts on People Nearby. One reason for this apparently gender-influenced level of activity on People Nearby is given by Ning, a male participant.

Ning, man, 19 years old: To be absolutely frank with you, I do not have a girlfriend [at the moment…]. This is why [I only socialize with women on People Nearby]. I mean… a single man can pursue women, right? […] Here you [as a man] have to take the initiative if you want to find a girl.

Contrastingly, the female participants' approach to locative social media use is much more passive, evidenced by the fact that none of them said they ever initiated a conversation with male strangers on People Nearby. For example, female participant Chen suggested that she would never initiate a conversation with a male user on People Nearby:

Chen, woman, 21 years old: I always receive a lot of messages sent by men on People Nearby […]. I do not talk to any of them unless he talks to me first […]. This is just what a girl does […]. Like in a movie, a gentleman is supposed to start the conversation with a lady when they meet each other for the first time, not the other way around.

Ning and Chen's quotes provide a glimpse into the ambivalent gender dynamics influencing young Chinese urbanites' exploitation of the dating opportunities on People

Nearby. As previously mentioned, young female Chinese urbanites are seemingly advantaged in romantic relationships in China today (Liu, 2019). When in their late teens or early 20s, the responsibility for finding partners is placed on their heterosexual male peers, who are in surplus on China's marriage market (Luo, 2017). The advantageous position of young female Chinese urbanites in the marriage market is paired with Chinese men's enthusiasm for pursuing sexual or romantic relationships (Yin et al., 2013). Together they contribute to an acceptance of 'male-chasing-after-female' traditions in the development of romantic-relationship by both young female and male Chinese urbanites' in their everyday lives.

Privacy risks

In locative social media use, young Chinese urbanites may be tempted to 'trade-off' their privacy in order to develop a romantic relationship. Yet, because of the entangled relationship between romance and sex in Chinese perceptions of locative social media use, this trade-off comes at a price. Such entanglement is confirmed by the below quote from female participant Su.

> Su, woman, 19 years old: I used People Nearby but I have stopped using it because I felt embarrassed if my profile was found by people who know me in real life […]. I am conservative. I do not want to be misunderstood [by my friends] that I am looking for […] one-night stands.

Su's concerns that others will perceive her unfavourably have brought an end to her participation in People Nearby. Interestingly, such concerns were almost never mentioned by our male participants in the interviews, which points towards a gendered perception of sexuality in the Chinese context. In the West, using locative social media applications for

casual sex is associated with "slut-shaming" (Birnholtz et al., 2014, p. 5). In China, however, simply using applications of this kind, whatever the intention, could "jeopardize one's reputation" if discovered by friends (Chan, 2018, p. 305). This slut-shaming phenomenon is amplified in China by the mass media, which often, in their coverage, relate locative social media use to seeking one-night stands (Liu, 2016). The slut-shaming phenomenon has a greater impact on young female Chinese urbanites than on their male peers, especially given the gender inequality of sexuality entrenched in China's patriarchal traditions (Chan, 2019). Specifically, obedience to husbands has long been held as an important virtue of women in Chinese culture (Schaffer & Song, 2007) while freedom to pursue sexual desire is, to this day, largely reserved for Chinese men (Song & Hird, 2014). This gender inequality consequently grants young male Chinese urbanites more freedom to express their sexual desires than their female counterparts (Chan, 2019). Women who openly express sexual desires are often accused of being a 'slut' (Farrer, 2007) and dating norms still require young female Chinese urbanites to adhere to the 'male-chasing-after-female' traditions in romantic encounters. Having been digitally reproduced on locative social media, these traditions leave young female Chinese urbanites with a dilemma concerning the privacy paradox in their navigation of the interfaced interactions with strangers on People Nearby, as evident in female participant Xu's quote:

> Xue, woman, 22-year-old: I actually feel this is unfair for women […]. Unlike men, we cannot freely talk to a boy we like because we have to be restrained in a date, […] because otherwise, he might take you for granted […]. However, waiting to be chased after on People Nearby means you have to keep your profile accessible to anyone for a long time […]. The feeling is like being placed on the market.

As Xue noted, the dilemmatic problem faced by young female Chinese urbanites in People Nearby use is further amplified by its algorithm for interfaced social interactions between strangers. Specifically, users' do not themselves automatically share personal information on People Nearby. Instead, their digital profiles become visible on the list when they manually activate the function. In addition, unless they manually hide their traces, their digital profiles remain visible for a few hours. In this way, these young Chinese urbanites are required to voluntarily reveal their apparent willingness to seek opportunities for romantic encounters. The 'male-chasing-after-female' traditions in romantic encounters mean that male users can easily hide their pursuit of romantic relationships by manually deleting their locative traces without decreasing the likelihood of finding dating opportunities on People Nearby. However, the same privacy behaviour is not available for their female counterparts who wish to exploit the opportunities for finding dates on People Nearby. This is because the social expectation that female users do not initiate interfaced social interactions in romantic encounters requires young female Chinese urbanites to keep their digital profiles publicly accessible for a long time. If they fail to do so, they provide fewer opportunities for male users to find their profiles on People Nearby. Such a pattern of matchmaking becomes an inducement to be less protective of young female Chinese urbanites' privacy.

The socio-psychological and physical dimensions of privacy

The privacy paradox becomes an even more difficult issue for young female Chinese urbanites to navigate interfaced social interactions with strangers because of the intersection of the socio-psychological and physical dimensions of privacy in People Nearby use. Altman's (1976, p. 8) definition of privacy as the control of others' "access to the self" is intriguing since it implies a potential connection between privacy and body, which suggests a physical dimension to this concept (Kokolakis, 2017). The interface function of People

Nearby facilitates the intersection of the physical and socio-psychological dimensions of users' privacy by locating each user's physical position and connecting the position to their presence on the locative social media. This locative feature is designed to support social interactions between strangers seeking real-life dating opportunities in the same geographic areas (Xu & Wu, 2019). Given the institutional constraints on their pursuit of romantic relationships at university, this feature is important for Chinese university students' love lives. ,

In China, university accommodation consists of single-sex, on-campus dormitories, which physically segregate women and men. All Chinese university students are required to stay in these dormitories. This is also the case for our research participants, as confirmed in the interviews. Such a living environment results in an institutionally restricted capacity for cross-gender interaction. The emergence of locative social media applications like People Nearby presents a challenge to such institutional constraints as it enables these students to contact others with whom there is a sexual attraction. Yet, using this function also means providing other users with knowledge of their whereabouts (Ward, 2017). While the physical and socio-psychological dimensions of privacy intersect in users' publicly accessible profiles on locative social media (Hjorth & Gu, 2012), heightened privacy risks are created for female users when they participate in interfaced social interactions with strangers in their immediate vicinity.

Zhang, woman, 23 years old: I think it is risky to be found by strangers in People Nearby, [because] you never know who exactly is watching and if they are good people. They live nearby and may pass you in the street […]. It is very dangerous if they could follow you [through the locative traces you left] on People Nearby.

Participant Zhang described herself as an 'inactive user' of People Nearby. She occasionally uses the function to browse the digital profiles of others in her locality but said that she does this just to pass the time. To prevent strangers who may live close-by from discovering her WeChat profile, she always deletes her locative traces after using the function because it contains information which could potentially be used to locate her whereabouts. As previously discussed, young female Chinese urbanites who want dating opportunities have to keep their digital profile publicly accessible because it is an established prerequisite for the interfaced social interactions in People Nearby. Yet, to do so increases the risks of stalking by strangers with whom they have shared this information. Given the intersection of the physical and socio-psychological dimensions of privacy in locative social media use, this technologically engineered interface culture challenges the young, female Chinese urbanites' desire for privacy and jeopardizes their personal safety. Such safety concerns are most tellingly revealed in the interview with female participant Zeng, who said that her disinclination to use People Nearby resulted in part from her having heard an unsettling story.

According to Zeng, the unsettling story described how a young woman was kidnapped by a gangster and sold into prostitution after her frequent use of People Nearby enabled the gangster to find out where she lived. The function revealed the woman's locative traces, which enabled the gangsters to find out where she lived, despite the fact that they have never crossed paths before. According to the story, although there were witnesses at the crime scene, they failed to rescue the victim because one of the kidnappers was able to give accurate details of her home address, alongside many other personal details. This convinced the witnesses that the woman was the gangster's wife and they were just having a family argument. Typical of an urban legend, which serves as a cautionary tale and often comprises

an element of horror/fear (Brunvand, 2003), this story carries a warning that young female Chinese urbanites living alone in cities should avoid using People Nearby; their whereabouts have to be carefully concealed to avoid being stalked by strangers. Zeng's story reveals that young female Chinese urbanites apparently are more concerned about the breaching of physical privacy on locative social media than their male peers. Such concerns enlarge the risk axis of the privacy paradox and cause many of our female participants' anxiety about their privacy, similar to the phenomenon noted by Licoppe and Inda's (2009) study. This anxiety prompts young female Chinese urbanites to self-limit the potential of using locative social media applications.

Unlike young female Chinese urbanites, their male counterparts raised few concerns about unknown stalkers, as typified by Zu's explanation.

Zu, man, 19 years old: I do not think any strangers [with suspicious motives] would be interested in following me […]. This story [about someone being kidnapped by gangsters after revealing personal information on People Nearby] could only scare women but is nonsense for me […]. Men are much stronger. We are capable of protecting ourselves.

Existing literature shows that the complexity of locative social media users' navigation of interfaced social interactions with strangers who live locally is caused by the "difficulty of identifying the very contexts of [locative] data capture, interception, generation, registry, and 'leakage'" (Leszczynski, 2015, p. 980). Building upon these findings, the analysis of young Chinese urbanites' use of People Nearby reveals the gendered dynamics in the opportunity-risk axis on locative social media. To a certain extent, the research findings

corroborate the ethnographic study by Miller et al. (2016), which reveals similar gender dynamics within Chinese migrant communities by showcasing how locative social media applications enable male Chinese migrant workers to organize affairs outside marriage while away from home. This research, of a privileged group of young Chinese urban university students, is in accordance with the findings by Miller et al. (2016) in rural China, and it lends further weight to the argument that gender dynamics is being established, in part, through privacy concerns in the use of locative social media applications.

Conclusion

This article presents an analysis of the interface culture in young Chinese urbanites' use of locative social media applications, based on a case study how Chinese university students navigate interfaced social interactions on WeChat People Nearby. Using the present research, we reveal that Chinese university students, as a representative group of young Chinese urbanites, are actively using the People Nearby function of WeChat to challenge the institutional constraints that limit their everyday pursuit of romantic relationships. However, this practice has collateral consequences; it requires these young Chinese urbanites to accept the risk of being stalked by strangers. Given the entanglement of romance and sex in Chinese perceptions of locative social media use, an opportunity-risk axis associated with the privacy paradox is constituted in the interface culture, reshaping how these young Chinese urbanites use People Nearby in their everyday lives. In particular, young female and male Chinese urbanites are directed to adopt different strategies to cope with the privacy paradox when they use the function to exploit the dating opportunities provided by the function. These young Chinese urbanites' gendered navigation of interfaced social interactions with strangers on People Nearby provides a glimpse into the production of the ambivalent gender dynamics in the interface culture of locative social media use.

Significantly, we noted that Chinese society provides young female urbanites with a seemingly privileged status in heterosexual romantic relationships. This seemingly privileged status constitutes a kind of pseudo-empowerment, which appears to liberate women's desire for romantic relationships (Chan, 2018). However, our analysis of the gender dynamics in young Chinese urbanites' use of People Nearby suggests that locative social media applications have actually created a dilemma for young female Chinese urbanites seeking to protect their privacy. Existing dating norms require Chinese women to be courted by men. These dating norms are reproduced in the way young Chinese urbanites use People Nearby. Thus, unlike men, who can easily delete their locative traces after using People Nearby, women pursuing romantic encounters by way of this function, are compelled to keep their profile available to a large cohort of users who reside in the vicinity. This action not only risks them divulging private information concerning their sexuality to people whom they know, but it also risks attracting nearby strangers with potentially malicious intent. Bearing in mind the intersection of the socio-psychological and physical dimensions of privacy on locative social media applications, the gendered dimensions of the privacy paradox have been amplified in locative dating communications, restricting the ability of female urbanites to exploit the benefits of using these applications for their sexual liberation.

Given the sample size and the scope of the study, the research findings on gender differences between female and male Chinese university students are limited in terms of their generalizability. However, as an in-depth, qualitative study, the present research, which furnishes an insightful analysis of a typical group of the way young Chinese urbanites use WeChat People Nearby, provides a glimpse into the intersection of privacy and gender dynamics in the interface culture of locative social media use. It shows that the privacy

paradox in locative social media use is of a gendered nature, which somehow privileges male users over their female counterparts. Accordingly, the research provides a new angle from which to examine the complex interplay between the privacy and gender dynamics as reflected in the way people utilize everyday technology (Goransson & Rolfstam, 2013). A better understanding of this interplay is necessary, as it would help to anticipate the impacts of technology use on gender power relations within and beyond the Chinese context (Peng, 2020). As such, we propose future research to examine the interplay between privacy and gender dynamics in people's use of other social media applications with a balanced account of how the socio-cultural background of users may make a difference in this process.

References

Altman, I. (1976). Privacy: A conceptual analysis. *Environment and Behavior*, *1*(8), 7–30.

Ash, J. (2015). *The Interface Envelope: Gaming, Technology, Power*. Bloomsbury.

Ash, J., Anderson, B., Gordon, R., & Langley, P. (2018). Digital interface design and power: Friction, threshold, transition. *Environment and Planning D: Society and Space*, *36*(6), 1,136-1,153. https://doi.org/10.1177/0263775818767426

Barnes, S. B. (2006). A privacy paradox: Social networking in the United States. *First Monday*, *11*(9). https://doi.org/10.5210/fm.v11i9.1394

Birnholtz, J., Fitzpatrick, C., Handel, M., & Brubaker, J. R. (2014). Identity, identification and identifiability: The language of self-presentation on a location-based mobile dating app. *Proceedings of MobileHCI 2014*, 3–12. https://doi.org/http://dx.doi.org/10.1145/2628363.2628406

boyd, danah M. (2014). *It's Complicated: The Social Lives of Networked Teens*. Yale University Press.

Brunvand, J. H. (2003). *The Vanishing Hitchhiker: American Urban Legends and Their*

Meanings. W. W. Norton & Company.

Chambers, D. (2017). Networked intimacy: Algorithmic friendship and scalable sociality. *European Journal of Communication*, *32*(1), 26–36. https://doi.org/10.1177/0267323116682792

Chan, L.-S. (2018). Liberating or disciplining? A technofeminist analysis of the use of dating apps among women in urban China. *Communication Culture & Critique*, *11*(2), 298–314. https://doi.org/10.1093/ccc/tcy004

Chan, L.-S. (2019). Paradoxical associations of masculine ideology and casual sex among heterosexual male geosocial networking app users in China. *Sex Roles*, 1–11. https://doi.org/10.1007/s11199-019-1002-4

Chan, Y. (2000). Privacy in the family: Its hierarchical and asymmetric nature. *Journal of Comparative Family Studies*, *31*(1), 1–17.

de Souza e Silva, A., & Frith, J. (2012). *Mobile Interfaces in Public Spaces: Locational Privacy, Control, and Urban Sociability*. Routledge.

Evans, L. (2015). *Locative social media: Place in the digital age*. Palgrave Macmillan.

Farman, J. (2012). *Mobile Interface Theory: Embodied Space and Locative Media*. Routledge.

Farrer, J. (2007). China's women sex bloggers and dialogic sexual politics on the Chinese Internet. *China Aktuell*, *36*(4), 10–44.

Fitzpatrick, C., & Birnholtz, J. (2018). "I Shut the Door": Interactions, tensions, and negotiations from a location-based social app. *New Media & Society*, *20*(7), 2,469-2,488. https://doi.org/10.1177/1461444817725064

Foucault, M. (1977). *Discipline and Punish: The Birth of the Prison*. Vintage.

Fuchs, C. (2015). Baidu, Weibo, and Renren: The global political economy of social media in China. *Asian Journal of Communication*, *26*(1), 14–41.

https://doi.org/10.1080/01292986.2015.1041537

Gackenbach, J., Yu, Y., Lee, M. N., Zhou, Z., & Yu, G. (2016). Gaming, social media, and

gender in Chinese and Canadian cultures. *Gender Technology and Development*, *20*(3),

243–278. https://doi.org/10.1177/0971852416660650

Gane, N., & Beer, D. (2008). *New media: The key concepts*. Berg.

Goransson, B., & Rolfstam, M. (2013). Development and use of gender-specific

technologies: Evidence from China, Poland, and Sweden. *Gender Technology and*

Development, *17*(3), 281–312. https://doi.org/10.1177/0971852413498740

Guest, G., MacQueen, K., & Namey, E. (2014). *Applied Thematic Analysis*. SAGE.

Han, M., Shen, S., Zhou, Y., Xu, Z., Miao, T., & Qi, J. (2019). An analysis of the cause of

privacy paradox among SNS Users: Take Chinese college students as an example.

Proceedings of the 52nd Hawaii International Conference on System Sciences, 6,115-

6,124. https://doi.org/10.24251/hicss.2019.736

Harwit, E. (2017). WeChat: Social and political development of China's dominant messaging

APP. *Chinese Journal of Communication*, *10*(3), 312–327.

https://doi.org/10.1080/17544750.2016.1213757

Hjorth, L., & Gu, K. (2012). The place of emplaced visualities: A case study of smartphone

visuality and location-based social media in Shanghai, China. *Continuum*, *26*(5), 699–

713. https://doi.org/10.1080/10304312.2012.706459

Illouz, E. (2007). *Cold Intimacies: The Making of Emotional Capitalism*. Polity Press.

Jia, Y., Liu, X., & Xu, W. (2018). When online dating meets Nash social welfare: Achieving

efficiency and fairness. *Proceedings of the 2018 World Wide Web Conference*, 429–438.

https://doi.org/10.1145/3178876.3186109

Kelsey, D. (2015). Discourse, affect, and surveillance: Gender conflict in the omniopticon.

Journalism and Discourse Studies, *1*(2), 1–21.

Kokolakis, S. (2017). Privacy attitudes and privacy behaviour: A review of current research on the privacy paradox phenomenon. *Computers and Security*, *64*, 122–134. https://doi.org/10.1016/j.cose.2015.07.002

Lambert, A. (2013). *Intimacy and Friendship on Facebook*. Palgrave Macmillan.

Lambert, A. (2016). Intimacy and social capital on Facebook: Beyond the psychological perspective. *New Media & Society*, *18*(11), 2,559 –2,575. https://doi.org/10.1177/1461444815588902

Leszczynski, A. (2015). Spatial big data and anxieties of control. *Environment and Planning D: Society and Space*, *33*(6), 965–984. https://doi.org/10.1177/0263775815595814

Licoppe, C., & Inada, Y. (2009). Mediated mutual "proximity" and its dangers in a location-aware community: A case of stalking. In A. de Souza e Silva & D. M. Sutko (Eds.), *Digital Cityscapes: Merging Digital and Urban Playspaces* (pp. 100–126). Peter Lang.

Licoppe, C., Riviere, C. A., & Morel, J. (2016). Grindr casual hook-ups as interactional achievements. *New Media & Society*, *18*(11), 2,540-2,558. https://doi.org/10.1177/1461444815589702

Liu, F. (2019). Chinese young men's construction of exemplary masculinity: The hegemony of chenggong. *Men and Masculinities*, *22*(2), 294–316. https://doi.org/10.1177/1097184X17696911

Liu, T. (2016). Neoliberal ethos, state censorship and sexual culture: A Chinese dating/hook-up app. *Continuum*, *30*(5), 557–566. https://doi.org/10.1080/10304312.2016.1210794

Lund, R., Kusakabe, K., Panda, S. M., & Yunxian, W. (Eds.). (2014). *Gender, Mobilities, and Livelihood Transformations: Comparing Indigenous People in China, Laos, and India*. Routledge.

Luo, W. (2017). Television's "leftover" bachelors and hegemonic masculinity in postsocialist China. *Women's Studies in Communication*, *40*(2), 190–211.

https://doi.org/10.1080/07491409.2017.1295295

Miller, D., Costa, E., Haynes, N., McDonald, T., Nicolescu, R., Sinanan, J., Spyer, J., Venkatraman, S., & Wang, X. (2016). *How the World Changed Social Media*. UCL Press.

Morgan, D. (2009). *Acquaintances: The space between intimates and strangers*. Open University Press.

Palen, L., & Dourish, P. (2003). Unpacking "privacy" for a networked world. *Proceedings of the Conference on Human Factors in Computing Systems*, *5*(1), 129–136. https://doi.org/10.1145/642633.642635

Peng, A. Y. (2019). Neoliberal feminism, gender relations, and a feminized male ideal in China: A critical discourse analysis of Mimeng's WeChat posts. *Feminist Media Studies*, 1–17. https://doi.org/10.1080/14680777.2019.1653350

Peng, A. Y. (2020). Alipay adds "beauty filters" to face-scan payments: A form of patriarchal control over women's bodies. *Feminist Media Studies*, *20*(4), 582–585. https://doi.org/10.1080/14680777.2020.1750779

Peng, A. Y., Cummings, J., & Li, Y. (2020). Post-reform gender politics: How do Chinese Internet users portray Theresa May on Zhihu. *Feminist Media Studies*, 1–18. https://doi.org/10.1080/14680777.2020.1788110

Ringrose, J., Harvey, L., Gill, R., & Livingstone, S. (2013). Teen girls, sexual double standards and "sexting": Gendered value in digital image exchange. *Feminist Theory*, *14*(3), 305–323. https://doi.org/10.1177/1464700113499853

Rod, E. G., & Weidmann, N. B. (2015). Empowering activists or autocrats? The Internet in authoritarian regimes. *Journal of Peace Research*, *52*(3), 338–351.

Schaffer, K., & Song, X. (2007). Unruly spaces: Gender, women's writing and indigenous feminism in China. *Journal of Gender Studies*, *16*(1), 17–30.

https://doi.org/10.1080/09589230601116125

Song, G., & Hird, D. (2014). *Men and Masculinities in Contemporary China*. Brill.

Song, G., & Lee, T. K. (2010). Consumption, class formation and sexuality: Reading men's

lifestyle magazines in China. *The China Journal*, *64*(2010), 159–177.

https://doi.org/10.1086/tcj.64.20749251

Tencent. (2019). *Tencent Holdings Limited - 2018 Annual Report*.

https://www.tencent.com/en-us/articles/17000441554112592.pdf

Timmermans, E., & Courtois, C. (2018). From swiping to casual sex and/or committed

relationships: Exploring the experiences of Tinder users. *The Information Society*, *34*(2),

59–70. https://doi.org/10.1080/01972243.2017.1414093

Ward, J. (2017). What are you doing on Tinder? Impression management on a matchmaking

mobile app. *Information Communication & Society*, *20*(11), 1,644-1,659.

https://doi.org/10.1080/1369118X.2016.1252412

Xu, D., & Wu, F. (2019). Exploring the cosmopolitanism in China: Examining mosheng ren

("the stranger") communication through Momo. *Critical Studies in Media*

Communication, *36*(2), 122–139. https://doi.org/10.1080/15295036.2019.1566629

Xue, M., Yang, L., Ross, K. W., & Qian, H. (2017). Characterizing user behaviours in

location-based find-and-flirt services: Anonymity and demographics: A WeChat Case

Study. *Peer-to-Peer Networking and Applications*, *10*(2), 357–367.

https://doi.org/10.1007/s12083-016-0444-5

Yang, C. (2017). *Television and Dating in Contemporary China: Identities, Love, and*

Intimacy. Palgrave Macmillan.

Yin, J., Zhang, J. X., Xie, J., Zou, Z., & Huang, X. (2013). Gender differences in perception

of romance in Chinese college students. *PLoS ONE*, *8*(10), 1–12.

https://doi.org/10.1371/journal.pone.0076294