RESEARCH

Open Access

Mobile immobility: an exploratory study of rural women's engagement with e-commerce livestreaming in China

Yanning Huang^{1*}, Zi Yang² and Kuan Chang³

*Correspondence: yanning.huang@xjtlu.edu.cn

 Department of Media and Communication, Xi'an Jiaotong-Liverpool University (XJTLU), Suzhou, China
Department of Media and Communications, London School of Economics and Political Sciences, London, UK

³ Social Media and Digital Communication, University of Westminster, London, UK

Abstract

Based on our fieldwork in Yunnan Province and Ningxia Hui Autonomous Region, this paper explores the different ways in which Chinese rural women engage with the rising industry of e-commerce livestreaming related to agricultural products and villages. Our analytical framework is informed by feminist political economy, which pays heed to the gendered social settings, operation of power, and entanglement between women's domesticity and productivity that underpin people's economic activities. We argue that Chinese rural women's simultaneous empowerment and disempowerment by e-commerce livestreaming are characterized by "mobile immobility", a term inspired by Wallis's (2013) research on rural women's technological empowerment by mobile phones a decade ago. On the one hand, this latest form of e-commerce has created an apparently accessible path for rural women, who tend to be geographically immobile, to achieve social mobility by becoming professional webcasters and/ or vloggers. On the other hand, this enablement is in fact classed, aged, and preconditioned on in-laws' support and willingness to share these women's domestic duties, which are not guaranteed. The urban-oriented digital economy of e-commerce livestreaming capitalizes on rural young women's femininity, docile bodies and labor as well as the reproductive labor performed by their family members at the microlevel, reinforcing the urban-rural disparity at the macrolevel. The paper ends with reflections on the role of information and communication technologies and e-commerce in the development of rural China.

Keywords: E-commerce, Livestreaming, Female empowerment, Urban–rural disparity, Chinese rural women

Introduction

My natal family did not prioritize having a son over a daughter that much, but I have hated being a woman since I was young. Because men go smoking after a meal, leaving women to do all the washing and cleaning here. Even if men and women work together on the hill, men lie down after going home, but women still need to cook. If you don't cook well, he will scold you... I performed relatively well in school,



© The Author(s) 2024. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http:// creativecommons.org/licenses/by/4.0/.

and I am also career-driven, so I had dreamed of leaving here since childhood. I don't want to marry a local man either. It is awful.

This opening quotation comes from Nannan,¹ a vlogger we interviewed who was born in a rural village in Yunnan Province. She fulfilled her childhood dream by leaving her home village and studying in a college in Sichuan Province. She then worked in urban Sichuan for 4 years with no initial intention to return home. However, Nannan could find little sense of meaning in her city jobs as a saleswoman or an assistant. When her father fell sick and needed care, she returned to her home village and has remained there ever since. Despite her previous yearning to break away from rurality, she now makes a living from it and has even achieved her career ambition in this way. Her accounts on digital platforms such as Douyin and YouTube have attracted millions of domestic and overseas followers with short videos representing local landscapes, food, and animals as well as her everyday interactions with family members and villagers. These videos are created not by Nannan alone but by a film crew that also includes her siblings. They have even hired a professional photographer and established a family business that capitalizes on her online popularity, selling local agricultural products through Douyin and Taobao. Now over the age of 30, Nannan still lives with her natal family, which is against the gender norms of patrilineage and patrilocal marriage (Evans 1997; Jin 2015).

In many ways, this woman vlogger's personal experiences are a telling (and encouraging) example that enables us to better understand the lived experiences of rural young women in contemporary China. First, her struggle with the deep-rooted patriarchy and her yearning to escape from it are common among young women born in rural China (Du 2017; Gaetano 2015; Jacka 2006; Pun 2005; Shen 2016). Scholars have largely agreed that migrant work empowers Chinese rural women to transcend patriarchal gender norms, roles and relationships by improving their incomes, skills and contributions to their rural households (Du 2017; Gaetano 2015; Jin 2015; Pun 2005; Shen 2016). Nevertheless, rural women's empowerment by migrant work is partial and transitory due to their structural inferiority along lines of class, gender and the rural–urban divide (Pun 2005). They tend to undertake low-paid work in cities with few job prospects. After marrying, they are more likely than rural migrant men to move back to rural villages to fulfill domestic duties.

However, as reflected in Nannan's case, the rise of digital media and e-commerce constitutes a new techno-economic force shaping rural (migrant) women's life chances and individual identity in China. Based on immersive fieldwork with a group of female service workers in Beijing between 2005 and 2011, Cara Wallis (2013) observed that purchasing mobile phones enabled rural migrant women to participate in China's burgeoning consumer culture and to construct a "modern" urban identity. However, she admitted that rural migrant women remained socially "immobile" even though mobile phones improved their geographical mobility in the cities. Their lack of cultural and social capital prevented them from valorizing technology-enabled networks, and their digital media uses tended to be family and entertainment oriented (see also Wallis 2011).

¹ To ensure the confidentiality of our interviewees, all names appearing in this paper are pseudonyms.

The past decade witnessed the boom of China's e-commerce and growing digital media usage among not only rural migrant workers but also rural residents. According to the *50th Statistical Report on China's Internet Development* published by China Internet Network Information Center (CNNIC 2022), the internet penetration rate in rural China almost doubled within eight years, reaching 58.8% in June 2022. The growth of internet connectivity in villages corresponds with China's national policy of "building a new socialist countryside" through improved transportation and telecommunication infrastructure (Zhao 2017) as well as the combination of agricultural development with e-commerce. Migrant returnees play a crucial role in transferring online entrepreneurship and sales skills from cities to the countryside and shipping rural artifacts and agricultural products the other way (Liu 2020; Zhang 2023). Previous studies have explored how the platform economy, return migration and entrepreneurship have reconfigured family ties and gender norms in rural China, with a primary focus on Taobao villages (Liu 2020; Yu and Cui 2019; Zhang 2021, 2023).

Informed by this scholarship, this paper sheds light on rural women's increasing participation in a new form of e-commerce productive activity—livestreaming and short video production. According to CNNIC, the number of internet users who shopped online through short video and livestreaming platforms had reached 495 million by June 2022 (CNNIC 2022:92). Whereas Taobao villages are characterized by family-owned businesses in which rural women oftentimes perform a secondary or supporting role (Liu 2020; Yu and Cui 2019), they come to the forefront of e-commerce upon becoming an individual webcaster or vlogger. To what extent Chinese rural women's more visible and individualized participation in the e-commerce livestreaming industry has reshaped their job prospects, self-identities and social relations is the main question this paper aims to address.

Our research situates rural women's engagement with the digital economy at the intersections of family, village and online businesses. Informed by the perspective of feminist political economy (McEwen 2018; Yu and Cui 2019), we reflect upon how social settings in rural China and urban–rural disparity facilitate digital capitalism extracting value from rural women's productive labor and their families' reproductive labor under the guise of female empowerment and entrepreneurship (Zhang 2021, 2023). In this way, our research contributes to the general "empowerment vs. exploitation" debate in digital labor studies (Hesmondhalgh 2010; Tong 2022; Yao and Xu 2019) and the expanding literature on labor issues in the livestreaming industry (e.g. Baym 2015; Dong and Ye 2021; Zhou and Liu 2021), both of which have thus far remained urban-centric.

Empirically, this paper draws on ethnographic interviews with 34 women from Yunnan Province and Ningxia Hui Autonomous Region, where two of the authors come from. The two regions are scarcely represented in the literature on rural women's participation in online merchandising and webcasting despite their agricultural prominence in China. To gain a better understanding of the development of livestreaming and e-commerce in rural areas, we also interviewed five managers of local multichannel network (MCN) companies that train, manage and promote webcasters and a manager of China Post's e-commerce business in Ningxia. Before presenting our fieldwork information and empirical data, we first review the literature to clarify our research focus and approach.

Situating rural women's engagement with the digital economy at the intersections of family, village and online businesses

The Chinese government's active promotion of internet connectivity and e-commerce to invigorate the countryside and bridge the urban-rural gap has an interesting metaphorical resonance with McLuhan's (1962) famous notion of the "global village", as they both weave a rosy dream of how information and communication technologies (ICTs) can improve connectivity, mobility and development. However, Wallis's (2013) theorization of rural migrant women's mobile phone uses as "immobile mobility" underlines the fact that gender, entangled with women's other social positionings, largely filters out the great potential of technological empowerment. The digital divide is an issue not simply of different social groups' unequal access to ICTs but also of their varying approaches, skills and accordingly divergent outcomes of ICT uses (van Dijk 2020). Yu and Cui (2019:4) argued that demographic and socioeconomic factors, which are often analyzed at the aggregate level in digital divide studies, "should also be broken down into sub-categories" to explore rural women's gendered experience with ICTs and the digital economy at the individual level. Chinese rural women's ICT uses and their engagement with the digital economy need to be contextualized at the intersections of family, village and online businesses.

According to Jin Yihong's (2015) long-term observation of rural China's changing gender dynamics after the reform and opening-up, the three major pillars of Chinese rural patriarchy—patrilineage, patrilocal marriage and women's subordination to men—have all been challenged due to major social, economic and technological changes in the past 30 years. Nonetheless, the patriarchal family structure remains and has adapted to new socioeconomic situations. Additionally, Jin noted that the industrialization and modernization of rural China have resulted not in a decline of the family but rather in "an expansion of the family"—family businesses that "take root in the land and rely on a couple's partnership as well as cooperation with their close and distant relatives." (Jin 2015:568) These general observations regarding rural patriarchy and family have been confirmed by a series of studies on rural women's microentrepreneurship and engagement with online merchandising.

Based on field trips to three Taobao villages in Jiangsu and Shandong Provinces in 2016, Yu and Cui (2019) observed that the rise of rural e-commerce enabled *some* women, especially those with migrant work experience, to participate in more profitseeking activities. Upon becoming microentrepreneurs, they improved their status in patrilocal marriages and even provided employment opportunities to other female villagers. However, it is worth noting that domesticity and productivity, geographical immobility and socioeconomic mobility are intertwined in women's everyday practices and self-identification as Taobao microentrepreneurs (Yu and Cui 2019:7). Some respondents were left-behind mothers before opening a Taobao business, while others returned to the villages for their children. They thus aspired to achieve success in both business and parenting. Although e-commerce provides a "handy solution" to the issue of left-behind children in rural China, the two authors view rural women's involvement in e-commerce as "conditioned on their domesticity and hence invisibility in the public sphere" (ibid: 10; our emphasis). Yu and Cui (2019) concluded that technology-enabled female entrepreneurship in rural China is constrained by traditional gender norms, devalued as secondary income within a family and eventually exploited as cheap, flexible and docile labor with their "triple shifts" of productive, reproductive and care work at the same time (ibid:13).

Women's domestic duties, such as housework, childcare and domestic consumption, have been a focal point in feminist political economy (McEwen 2018; Sherman 2017; Yu and Cui 2019). The gendered division of labor within a family limits a woman's opportunities to participate in productive social activities as her husband does, but her domestic work is essential to reproduce his productive labor power. In this sense, as Fortunati put it, "When the paid labourer produces surplus value, he does so by not only selling his own labour power but also silently selling...(the)...reproductive labour (he has embodied). Reproductive labour is thus maximally exploited as hidden, unpaid labour." (Fortunati 1995:97) Based on this line of thought, it is worth reflecting on Chinese rural women's value creation for family-run Taobao shops and the digital economy in general.

Based on her fieldwork in a Taobao village in Southern Fujian between 2016 and 2017, Chiu-Wan Liu (2020) studied how rural female returnees who coworked with their husbands to run Taobao shops negotiated with the inner-outer boundary that underpins the gendered division of labor in rural China. According to Liu (2020), her female respondents, through their own exercise of agency, performed or claimed an auxiliary role to alleviate the inequality in a couple's engagement in e-commerce and gender norms that uphold men's superiority in the realm of social production. In addition, Liu highlighted the importance of family and kinship cooperation in rural e-commerce. The assistance from the older generation, particularly mothers-in-law, observed by Liu (2020) allowed her female respondents to undertake more tech-savvy tasks and develop business and professional skills comparable to those of their husbands. She thus argued that "the division of labour in these Taobao families is not so much gender-based as age-based" (ibid:485).

The "small peasant economy" (xiaonong jingji, 小农经济), which is characterized by the family-based productive regime of "half working and half farming", continues to loom large in contemporary rural China (Huang 2022). In fact, it has been incorporated into the rising digital economy, as both operate on the flexible accumulation of capital and a fuzzy distinction between work and life (Zhang 2023). While a young couple takes the stage in their e-shop to perform a series of productive tasks, such as maintaining their shop's web page, branding their products, sourcing products, and dealing with customers, their parents or even grandparents are in charge of various kinds of reproductive work behind the scenes, such as cooking, housekeeping and childcare. The intersection of gender and age in the everyday work arrangement of rural families involved in online businesses was well addressed by Lin Zhang (2021, 2023), who studied how the rise of platform-based e-commerce has been energized by and reinvented the traditional regime of family production in rural China. Based on her 8-year participant observation of a Taobao village in Shandong Province between 2011 and 2019 and intermittent field trips to three more villages in Shandong Province, Zhejiang Province and Sichuan Province, Zhang (2021) emphasized that rural women's roles in the digital economy vary in accordance with age, educational level, migration experience and socioeconomic background. On the one hand, young rural women's entrepreneurship and participation in productive e-commerce activities tend to be preconditioned on older women's reproductive labor

within an extended family. On the other hand, the older generation of rural women, with little education, digital literacy and migration experience, continue to undertake the backbreaking physical labor of handicraft making that sustains the local e-commerce business chain but is often rendered invisible by its mode of valorization.

Research significance, focus and methodology

The literature reviewed thus far offers numerous insights into the complex interplay between the rise of online entrepreneurship, return migration and female empowerment in rural China. However, these studies all focus on one type of rural e-commerce— Taobao villages. It is worth enriching these insights in light of the latest forms of online merchandising—webcasting and vlogging. Compared with (co)operating a Taobao shop, rural women's engagement with e-commerce is more visible when they speak and perform in front of a camera as a webcaster or vlogger. In addition, they have more chances than men to become webcasters or vloggers given the industry's highly gendered nature (Craig et al. 2021).

There is another crucial difference between rural Taobao shops and commercial livestreaming/vlogging in terms of women's engagement. The former tend to be familyowned businesses, so the boundary between women's productivity and domesticity is blurred, and the value of their productive work may be subsumed under their reproductive work despite the "aged" division of labor, as noted by Liu (2020). However, as we demonstrate below, agricultural and MCN companies now directly employ rural women to work as webcasters. They thus cross the inner-outer boundary to work "outside" home and participate in social production. This paper explores all these changes that have introduced new gender dynamics to contemporary rural society regarding women's domesticity, productivity and socioeconomic mobility.

Our research pays particular attention to the heterogeneity of rural women and the various ways in which they engage with commercial livestreaming and vlogging in accordance with age, family background, educational level and migration experience. Furthermore, we discuss their self-identities and life outlooks on becoming webcasters or vloggers. With previous scholarship in mind, we also explore how the entanglement between the domesticity and productivity of different generations of women has unfolded and become integrated into the digital economy of rural e-commerce livestreaming. Inspired by Wallis's (2013) term "immobile mobility", we develop the concept of "mobile immobility" to guide our data analysis below.

Our fieldwork was conducted in Yunnan Province and Ningxia Hui Autonomous Region, where two of the authors come from. The choice of locations was related not only to the accessibility of fieldwork sites but also to their analytical value. Both Yunnan and Ningxia are famous for their rich natural resources, agricultural production and tourism, but they have been scarcely represented in the literature and academic debates on the development of e-commerce and female empowerment in rural China. Their similarities and differences also help to illustrate how the development of e-commerce is implicated in local geography, the agricultural development model and governance.

Ningxia is much smaller than Yunnan, and the distinction between its urban and rural areas is not clear-cut. All cities in Ningxia, including the capital, Yinchuan, are small cities (third-tier or below) surrounded by numerous villages. As an underdeveloped area in North China, Ningxia has not gained a high degree of mobility and is still generally characterized by rurality and regionalism. All these features constrain the development of e-commerce in Ningxia. The online businesses of our respondents from Ningxia remained at the local level, and there was a close connection between their online followers and offline customers. Conversely, Yunnan boasts a fairly well-established transportation and logistics network for shipping agricultural products, such as garlic, mushrooms and flowers, from rural villages to other parts of Yunnan and China. Its local governments, especially the affiliated "Women's Federations" (*fulian*, 妇联), have taken active steps to cooperate with platform companies such as Douyin to cultivate and reward local women webcasters. To date, this has not been the case in Ningxia.

Our fieldwork lasted from October 2022 to February 2023. We utilized a snowball strategy and convenience sampling to reach rural women webcasters/vloggers in Yunnan and Ningxia, respectively. The main platform they used was Douyin. Altogether, we interviewed 26 rural women who worked as webcasters and/or vloggers (eighteen from Yunnan and eight from Ningxia) plus eight women from rural Yunnan who worked as temporary laborers to select and cure garlic for sale online. We also visited their webcasting sites and observed their daily routines. Our fieldwork sites covered seven villages, seven county seats and four small cities (third-tier and below). To gain a better understanding of the whole livestreaming industry in rural areas, we also interviewed five managers of local MCN companies and one manager of China Post's (*zhongguo youzheng*, 中国邮政) e-commerce business in Ningxia. The fact that all these managers were men, whereas most rural webcasters are women, implies the kind of gender order implicated in the industry of rural e-commerce and livestreaming. The data analysis below considers this point in more detail.

Becoming women webcasters/vloggers: the entanglements between domesticity and productivity, geographical immobility and inspirational socioeconomic mobility

The rise of livestreaming e-commerce in rural China in the past 3 years co-occurred with the COVID-19 outbreak, which severely restricted the geographical mobility of the whole Chinese population. Almost all the respondents mentioned the pandemic when explaining what motivated them to start webcasting or creating short videos on Douyin. Several respondents turned to livestreaming/vlogging because their previous businesses were affected by their customers' immobility. For example, a middle-aged woman who owned a snack bar near a school in the Litong District of Wuzhong County in Ningxia said that because of the long-term closure of the school, she was forced to use short videos and livestreaming to popularize her store and attract more delivery orders. Approximately half of the respondents became webcasters because they had lost their previous migrant work. However, as indicated in Nannan's story at the beginning of the paper, rural migrant women's social immobility and gloomy prospects in cities can also lead them back to the countryside when major social or family changes take place. An unmarried woman we interviewed in Yunnan had an extremely painful experience when she worked in Shanghai—so painful that she was unwilling to share the details. After that, she returned to live with her parents and worked as a rural webcaster. As Shiyong Zhang (2013) noted in his research on Chinese migrant workers from a life-course perspective,

owing to discrimination, precariousness and high living costs in cities, many of these workers aspire to return to their home villages and run small businesses. To this end, they endure the hardship of migrant work, viewing it as an essential means to accumulate various forms of capital, skills and knowledge. Their migration choice between cities and villages is related to the life cycles of their families at the microlevel and the country's economic situation and policy changes at the macrolevel (Zhang 2013).

Previous research on Taobao villages has thoroughly documented the flux of return migration and the crucial role played by migrant returnees in the development of rural e-commerce since the 2010s (Liu 2020; Zhang 2021, 2023). The booming industry of livestreaming e-commerce is complicating this broad trend. Compared with opening a Taobao shop, creating an account on a video-sharing platform such as Douyin or Kwai to sell agricultural products apparently requires less initial investment and fewer digital skills. Similar to the prominent role played by mobile phones in increasing the internet penetration rate among rural migrants and rural population in China (Oreglia 2014; Qiu 2009; Wallis 2013) over 15 years, video-sharing platforms, which are embedded in smart phones, have lowered the threshold for rural people to engage in various online activities and further popularized e-commerce in rural areas. As vividly described by a respondent from Binchuan County, Yunnan Province, "even elder aunts now record their dancing and singing and put them on Douyin."

In fact, approximately one-third of our respondents who worked as webcasters had little or no migration experience. Only three of the eight webcasters we interviewed in Ningxia had worked or studied outside the region. The rest had been involved in small local businesses for many years, including two middle-aged women who were trying to expand the sales channels of their local stores through livestreaming. Among our respondents from Yunnan, the majority had been born in the 1990s and married at a relatively young age (20–25 years old). They had given birth to children soon afterward, becoming left-behind mothers while their husbands worked elsewhere. According to local gender norms, they were expected to stay close to their parents as daughters to help them with seasonal farm work and take care of them when they grew old or fall sick. In fact, local women are supposed to marry men from their own villages or nearby villages—within 100 km and reachable by car in a few hours. We also encountered two young webcasters whose parents had not allowed them to do migrant work before they married.

These rural women's geographical immobility and domesticity were entangled with their aspirations for self-actualization and connection with the outside world. In this regard, livestreaming and online short videos constitute a prominent channel for them to watch and imagine an alternative life that is more independent, modern and economically successful. They started livestreaming or creating short videos of their everyday lives because they saw others doing so and achieving apparent success. At least six respondents mentioned that they had been inspired by short videos on Douyin to become more independent and career-oriented. Further exploration is needed to determine the extent to which digital platforms contribute to popularizing the notions of autonomy and self-actualization among Chinese rural women. A sense of female empowerment was most explicitly expressed by a few respondents who had never worked before. As one of them said, "I'm incredibly thrilled to get paid every month after I became a webcaster. I can buy things on my own without owing anyone." However, in contrast to the socialist feminist call for women to participate in the productive activities defined by manual work before 1978 (Wang 2017), none of our respondents associated their socioeconomic mobility with manual work or farming, both of which continue to be marginalized and devalued despite the rise of e-commerce in rural China (Zhang 2021).

The discourse that articulates rural women's productivity with microentrepreneurship is officially recognized by some local governments in Yunnan. The Women's Federation of Dali Autonomous Prefecture has established the Association of Women Entrepreneurs, which regularly organizes events for local webcasters to communicate with each other and even offers them financial support. The association's official WeChat account publishes personal stories of successful webcasters from local villages. Interestingly and tellingly, this series is entitled "The Most Beautiful Family" (e.g. Binzhou Women's Federation 2021) and celebrates local women webcasters' entrepreneurship in terms of both their capabilities and domesticity. For example, an article featuring Xie Shuangjiao's family emphasized the joint efforts of the woman webcaster and her husband in running a successful online business that enables villagers to sell their agricultural products (Binzhou Women's Federation 2021). It also praised the couple's community contributions, such as helping elderly people who live alone, and their donations of vegetables to locked-down areas during the pandemic. The article represented female entrepreneurship within the framework of familial harmony-family in both narrow and broad senses. In contrast to Yu and Cui's (2019) earlier observation, here, we do see some rural women's visibility in the public domain with their e-commerce productive activities being officially recognized and celebrated. Nonetheless, the dual emphasis on their productivity and domesticity indicates the double shifts that rural women are still expected to take on. This gender expectation means that not every rural woman is afforded the same chance to participate in e-commerce livestreaming.

Rural women's heterogeneous and stratified engagement with e-commerce livestreaming

The article on Xie Shuangjiao's family contained another telling detail: her motherin-law supported Xie in livestreaming and supported the couple in starting their own agricultural business (Binzhou Women's Federation 2021). In fact, the mother-in-law was herself an established rural businesswoman who had once been awarded the title "PioneerinRuralPovertyReduction" (*nongcunzhifudaitouren*,农村致富带头人).Support and understanding from in-laws are important preconditions for rural women, especially those in patrilocal marriages, to participate in e-commerce livestreaming. Furthermore, the intergenerational and intracouple sharing of resources is one of the crucial factors for rural women to truly achieve socioeconomic mobility through livestreaming and vlogging. Rural women's various living conditions, ages and possession of resources lead to their heterogeneous and stratified engagement with e-commerce livestreaming.

First, livestreaming requires rural women to communicate with online and offline strangers, and this productive work outside the home affects the domestic duties they are expected to fulfill. All of these issues are in tension with patriarchal norms and gender configurations in rural China. Given most rural women's patrilocal marriage status (Jin 2015), it is no wonder that their participation in e-commerce livestreaming is largely preconditioned on the understanding and support of their in-laws. When describing their current lives as webcasters, numerous married respondents in Yunnan mentioned their mothers-in-law with gratitude. They emphasized that not everyone was "so lucky"—they had friends who could not work as webcasters because their mothers-in-law refused to share childcare duties or disapproved of this kind of work outside the household.

The residence types of our webcaster respondents were diverse. While some of them lived with their husbands' families, others still lived with their natal families after marriage or split their living arrangements between the two sides. The specific arrangement was based mainly on practical considerations—for example, which place was closer to the workplace so that a webcaster could reach home earlier. Our respondents' flexibility in residence choice after marriage and their in-laws' willingness to share domestic duties correspond with Jin's (2015) observation that both patrilocal marriage and women's subordination within it are to some extent declining after the reform and opening-up. However, the qualitative nature of this research makes it impossible to estimate the scale. We can only say that the rise of livestreaming e-commerce provides another precious opportunity for *some* rural women to work outside the household and negotiate with the patriarchal social structure in rural China, which has been in flux for the past 30 years.

Regarding working hours, the respondents in Yunnan who were employed by local MCN or agricultural companies worked more than 12 hours a day with only four days off per month. On a typical working day, they left home for work shortly after sunrise, traveled to the field containing the agricultural products that they planned to feature in their webcast, and stayed there until nighttime. Before livestreaming began, a site was carefully chosen and set up to suit urban customers' tastes. To attract as many viewers as possible, the Douyin account of a company runs 14–15 hours a day. Three to four women take shifts to cover the whole livestreaming period, with each person webcasting for half an hour at a time. Their livestreaming time totals between 7 and 7.5 hours per day. Even when no audience is present, they need to talk in case a viewer appears. Their talk and performance follow scripts provided by their companies. They mostly repeat the same lines, although their different looks and personalities result in different livestreaming styles. These respondents' long working hours and standardized performance content were far from some scholars' celebratory understanding of livestreaming as an enabler of rural users becoming the "unlikely creative class" (Lin and de Kloet 2019:2).

The majority of our respondents in Yunnan worked as employed webcasters. Despite their long working hours, their monthly salary was between 3,000 and 5,000 RMB, which was less than what they could have earned if they had worked for a similar amount of time in a large city. However, given the scarcity of employment opportunities for rural women in the countryside, they considered webcasting an ideal job, as it balanced their career aspirations and geographical immobility as rural women. As one of them commented, webcasting allowed her to "contribute both strength and money" (*chuqian you-chuli*, 出钱又出力) to her family. Among those respondents who were married, almost all of their husbands worked elsewhere and rarely stayed at home for long. Their husbands' monthly income tended to be double the amount of theirs. Consequently, these women's salaries were used mostly for their families' daily consumption, whereas their

husbands' income was saved for long-term larger investments, such as children's education and house purchases and renovation. Their new careers as webcasters did not substantially change the gendered income gap due to the double shifts they were expected to take on. The inner-outer boundary was also retained in the sense that the husbands worked outside the villages, earning more, whereas the wives worked inside the villages, earning smaller incomes that could be treated as "domestic sidelines" (*jiating fuye*, 家庭 副业) in the new era (Yu and Cui 2019).

Notably, after becoming familiar with the essential skills and business models of e-commerce livestreaming, some of the employed webcasters aspired to work on their own instead of "laboring for the boss" (gei laoban dagong, 给老板打工). Two respondents from Yunnan quit their previous jobs and tried to establish their own livestreaming businesses, but they eventually failed and returned to being employed by companies. In effect, although playing the most visible part, the webcaster is by no means the only important role in a successful livestreaming business. This position must be supported by a number of other roles, such as complementary webcasters, operators and field controllers who monitor data flows and adjust product prices and webcasters' scripts during a livestreaming session (see Dong and Ye 2021). The roles of video photographers, editors and script writers are all essential for high-quality livestreaming and vlogging. A local MCN manager claimed that finding and training rural women to become webcasters is relatively easy, but he struggled to recruit people who had a deeper understanding of the market and urban customers' preferences.

Consequently, very few rural women can truly become entrepreneurs through participation in e-commerce livestreaming and vlogging. Only three of the 24 respondents had managed to establish their own businesses. One of them was Nannan, whose story is described at the beginning of the paper. It actually took her 3 years to accumulate her fan base and come up with her own business model. She continually learned, explored and created short videos during those 3 years without gaining much economic benefit in return. Her success derived from her high level of education, her migrant work experience and the constant support of her natal family. While her accounts on Douyin, Taobao and YouTube were under her own online name, the name served more as the brand of her family-owned business. For the other two entrepreneurs, their career success as webcasters was built upon and further improved their families' preestablished agricultural businesses. In one case, the company had been created by her husband, who was an expert in agricultural technology, while the other woman's livestreaming career had been successfully integrated into her parents' agricultural company. They both had local migrant work experience in Yunnan as well.

None of our respondents from Ningxia had reached a level of economic success comparable with that of the three from Yunnan, but the one who was relatively successful had also built her online popularity upon her parents' business—a fish stall in a morning market in Yinchuan City. In the days before she did livestreaming, their daily business would end in the morning when the market closed. However, her followers now placed orders via WeChat. Her father continued to do the most laborintensive work—killing and cleaning the fish—while her mother was in charge of bargaining with buyers, which was formerly done by the daughter. In the afternoon, her boyfriend drove her around Yinchuan to deliver goods to customers. The whole



Fig. 1 One of the authors chatting with elderly women curing garlic for e-commerce livestreaming in Yunnan

family worked together on order management and packaging. Resonating with previous studies (Jin 2015; Yu and Cui 2019; Zhang 2021), our findings indicate that the support, participation and socioeconomic background of rural women's families, especially their natal families, plays an essential role in their microentrepreneurship and success in e-commerce livestreaming and vlogging. Migration experience and education level are two other important factors. Regarding the gendered nature of the livestreaming industry, there is one more crucial factor: age.

All of the MCN managers we interviewed mentioned that women webcasters' popularity is more guaranteed and lasts longer than that of men in rural e-commerce livestreaming. What they had in mind was actually rural young women. They perceived webcasting as an "an occupation of youth" (*qingchunfan*, 青春饭); women aged between 20 and 30 are most suitable for the job. Since professional livestreaming is time-demanding, they particularly welcomed unmarried women with fewer domestic duties. Even when women of this type are rather inexperienced, MCN companies are willing to invest in their training. Their labor can be more docile and flexible than married women.

In addition to working as webcasters, rural women can engage with e-commerce livestreaming in other productive ways. Our respondents in Yunnan included eight women aged over 50 who worked in the quality control sector as temporary workers. Receiving a daily wage of 120 RMB, they were mainly in charge of selecting and curing garlic (see Fig. 1). This step is essential because otherwise, urban customers may complain about product quality and demand refunds. Urbanites expect to receive agricultural products that look like livestreamed products—more or less clean and of equal sizes. These women worked for the livestreaming industry only when they were not busy with their own farm work. They had all had previous migrant work experience and returned home because of aging or illness that prevented them from continuing to labor intensively in cities. In addition to earning extra money, they enjoyed this type of temporary work because they could chat with other women from the same village or nearby rather than staying at home all the time. In a broader sense, all farmers who sell their agricultural products via e-commerce livestreaming are also part of the business chain of rural livestreaming. However, their lives and incomes have hardly changed. They continue to farm and sell their crops at more or less the same prices as before to local dealers or agricultural companies. It is the local dealers and agricultural companies that are increasingly engaging in e-commerce livestreaming by hiring or becoming professional webcasters. However, if an agricultural product becomes extremely popular online, the farmers will be able to sell all that they grow and attract more people to grow that product. We observed that the rise of rural e-commerce livestreaming had impacted the distribution and consumption of agricultural products more than production. Due to the short duration of our fieldwork, this observation is preliminary and is to be enriched by future research.

Discussion: the "mobile immobility" of rural women in e-commerce livestreaming

This section summarizes the major findings presented in the previous two sections. Inspired by Wallis's (2013) theorization of rural migrant women's technological empowerment by mobile phones as "immobile mobility", we argue that Chinese rural women's simultaneous empowerment and disempowerment by the booming e-commerce lives-treaming industry are characterized by "mobile immobility". That is, the industry creates an apparently accessible path for rural women, who tend to be geographically immobile, to achieve social mobility. However, in reality, not only is this path unreachable for many rural women, but even for those who embark on it, working as a professional webcaster/ vlogger rarely enables them to achieve the social mobility to which they aspire. Their femininity, their docile bodies and labor, and the reproductive labor performed by their family members are exploited by the urban-oriented digital economy under the guise of female empowerment and entrepreneurship.

Chinese rural women are geographically immobile due to their disadvantaged social positioning under the "triple oppressions" of class, gender and rural-urban disparity (Pun 2005). On the one hand, their productivity tends to be marginalized and devalued in cities due to their low educational level and rural background, so they have few prospects for settling in urban China. On the other hand, their domesticity continues to be emphasized by rural patriarchy, so they are expected to shoulder more family responsibilities than rural men. This gendered expectation further constrains their job prospects in cities. Against this backdrop, not only does the popularization of smart phones and video-sharing platforms in rural China enable these women to watch and imagine an alternative life that is more autonomous and career-oriented, but the booming industry of e-commerce livestreaming also offers them an apparently feasible path to achieve selfactualization and socioeconomic mobility despite their geographical immobility. Our respondents identified with a kind of feminist discourse that celebrates women's productivity in articulation with microentrepreneurship. This discourse has been disseminated via digital platforms such as Douyin. In some cases, it has even been integrated into officially endorsed discourses that celebrate rural women's empowerment by livestreaming e-commerce with a dual emphasis on their productivity and domesticity. Compared with opening a Taobao shop, working as a professional webcaster requires less digital literacy and prior accumulation of resources. It is one of the few job opportunities available to ordinary rural women whose domesticity and inspired productivity, geographical immobility and yearning for socioeconomic mobility are entangled with each other in shaping their lived experiences. By working outside the home and earning a monthly salary of their own, some of our respondents, especially those who had never worked before, experienced a manifest sense of empowerment from their livestreaming career.

However, to put it in many respondents' own words, they were the "lucky" ones. Not every rural woman can become empowered by working in the e-commerce livestreaming industry. The job is time-demanding, so a precondition for rural women in patrilocal marriage status becoming webcasters is their in-laws' support and willingness to share childcare duties, among other domestic obligations. Even if they obtain in-laws' understanding and support, women webcasters who are employed by local MCN or agricultural companies still earn significantly less than their husbands who work outside the villages. Their economic inferiority, the gendered division of labor and the innerouter boundary between their husbands' work and theirs still remain. The majority of our respondents in Yunnan were employed webcasters. Although they played a visible and apparently individualized role in e-commerce livestreaming, which is part of the high-tech creative industry in general, their daily work content was in fact highly standardized and prescribed by male managers who knew more about the market and urban customers' expectations and tastes. Their productivity was associated with their young bodies, femininity and docile labor. This point resonates starkly with some critical feminist scholars' earlier observations of female migrant workers (Pun 2003, 2005; Yan 2003). Few rural women webcasters can truly become entrepreneurs. Their job prospects depend on age, migration experience, educational level and, most importantly, family background. Among the few entrepreneurial webcasters and vloggers we interviewed, only Nannan had transformed her online popularity into a family e-commerce business. The others' career success was built upon and integrated into their families' preestablished businesses. In these cases, livestreaming e-commerce had improved these women's socioeconomic mobility less than it had reinforced their families' businesses, resources and socioeconomic status.

Previous scholarship on Taobao villages has pointed out that the development of e-commerce in rural villages is community-driven and family-based (Yu and Cui 2019; Zhang 2021). Our findings reveal that with short-video platforms lowering the threshold for rural people to engage in the productive activities of e-commerce, the community-driven and family-based peasant economy in rural China is not only incorporated into the digital economy but also extracted by it with additional value. A rural wife who operates a Taobao shop with her husband is able to participate in more productive work because members of the older generation, especially her mother-in-law, perform most of the reproductive work within a family. They are willing to do so because the Taobao shop is family owned and oftentimes registered under the husband's name (Liu 2020). However, when a young rural woman becomes a professional webcaster hired by an MCN or agricultural company, she steps out of the family-based peasant economy in which the boundary between women's productive and reproductive work is blurred. With her productive work outside the household being distinguished from the reproductive work she is expected to perform, she may not receive her in-laws' understanding and support in covering her domestic

duties. During our fieldwork in Yunnan, we observed that a rural family would weigh the amount of salary of a professional webcaster against the economic benefits of other domestic sideline activities (e.g., farming) that members of the older generation could do while young women attended to housework and childcare. Therefore, when some rural women do become professional webcasters with the support of their in-laws or their own parents, they not only sell their own productive labor power but also silently sell the reproductive labor power of these family members, which belongs to the family-based peasant economy.

In addition, a major business model of e-commerce livestreaming—"interest-based e-commerce" (*xingqu dianshang*, 兴趣电商)—has fed on close-knit community settings in rural China. Interest-based e-commerce means that the popularity of certain products is mandated not by a platform but by the data flows of users who webcast, sell, watch and buy them. When many people webcast the same agricultural product (e.g., a seasonal fruit) at the same time, they are likely to gain more data traffic and visibility on a platform and thus make more profits for the companies they work for. According to our respondents, it is common for rural young women to teach and imitate each other in terms of what to webcast and how. They also mobilize their friends and family members to join their livestreaming room to create more data traffic. The complex relationship between the platform-based digital economy and the community-driven, family-based peasant economy in rural China is worth studying in more detail.

At the macrolevel, by comparing the different ways in which livestreaming e-commerce has unfolded in Yunnan and Ningxia, we can see that ICTs and e-commerce play more of an amplifying role than a transforming role in social development. Whereas the webcasters in Yunnan sold agricultural products to urban customers living in different parts of China and had little real-life interaction with them, our respondents from Ningxia viewed webcasting as a channel to popularize their stores among the local population and attract more people to visit them offline. Although some of the respondents delivered their products to customers who placed orders online, their businesses were locally based. The specific geographical conditions, economic status and self-sufficiency of Ningxia limit the space for the development of e-commerce in the region. People in Ningxia are more accustomed to purchasing goods directly from local stores and markets or relying on transportation networks operated by acquaintances they trust. Both the MCN manager and the manager of China Post's e-commerce business in Ningxia mentioned the difficulties in popularizing e-commerce in the region, especially in its numerous villages and county seats where local communities continue to be built upon strong local ties and face-to-face communications despite the increasing penetration of ICTs.

In addition, despite Ningxia's rich natural resources, its agricultural products are less well known nationwide than those of Yunnan. While the local governments in Yunnan encourage rural women to participate in e-commerce livestreaming and support them in doing so, this is thus far not the case in Ningxia, where the few well-known agricultural products, such as wolfberries and milk, are distributed by a few large local companies. How e-commerce and livestreaming are localized in different parts of China is worthy of further study (e.g. Qian 2023).

Conclusion

By conducting ethnographic interviews with 34 rural women from Yunnan and Ningxia who worked as webcasters/vloggers in the booming industry of e-commerce livestreaming, this paper contributes to the expanding literature and ongoing debates on rural women's empowerment or disempowerment by their engagement with e-commerce. Our findings reveal that it is imperative to recognize rural women's heterogeneity and stratified involvement in the Chinese digital economy, which is dominated by an urban consumerist and patriarchal capitalistic logic (Meng and Huang 2017). While e-commerce livestreaming does provide Chinese rural women, who are geographically immobile, with an apparently promising opportunity to participate in productive activities outside the domestic realm, the kind of socioeconomic mobility and female entrepreneurship they aspire to is unreachable in most cases. Instead, the urban-oriented digital economy of e-commerce livestreaming capitalizes on rural young women's femininity, their docile bodies and labor, and the reproductive labor performed by their families.

We end this paper with some reflection on the role of ICTs and e-commerce in the development of rural China. The "mobile immobility" of rural women reflects the limitation of reviving the Chinese countryside in a market-based and technocentric manner. ICTs are tools, not agents, for social change. In a marketized environment, they tend to amplify—rather than transform—existing social trends and relationships (van Dijk 2020). At the microlevel, the limited empowerment of rural women by webcasting is classed and aged. As Zhang noted, "E-commerce becomes a new site where gendered service labor and consumption proliferates, which divides rural women and perpetuates intra-gender inequalities along generational and class lines." (Zhang 2021:355). At the macrolevel, the rise of e-commerce livestreaming has thus far reinforced the urban–rural disparity, which is epitomized by young rural women webcasters being disciplined by male managers who claim to know more about the market and urban customers. Mostly born in the 1990s, our respondents were approaching the end of their webcasting careers. We may wonder what comes next when they become "too old" to work as a webcaster/vlogger.

To expand rural women's job opportunities and productivity, childcare and other reproductive work they are expected to fulfill need to be socialized. In Yunnan, public kindergartens have emerged as an increasing number of rural women have gone to work in e-commerce livestreaming in the past three years. However, this is not enough. We ultimately need to imagine an alternative urban-rural relationship that is not defined by urban consumerism so that a truly socialist new countryside—where workers' and farmers' hard work is recognized and adequately compensated—can arise. The technology of livestreaming and vlogging has the potential to represent the backbreaking physical labor behind the agricultural products we consume, but thus far, this potential has not been realized in the prevailing platform economy. We may therefore ask, after livestreaming, what? (Zhao 2007).

Abbreviations

ICTs Information and communication technologies CNNIC China Internet Network Information Center

Acknowledgements

We acknowledge the interest of the *Journal of Chinese Sociology* in the social bearings of digital technology and platform economy in contemporary China and we are grateful to the two editors, Prof. Bingchun Meng and Dr. Linliang Qian, for inviting us to contribute to this special issue. We also greatly appreciate the two peer reviewers whose constructive feedback helped us to improve immensely the research focus, analytical framework and structure of this paper. It goes without saying that we appreciate the time and the trust of our respondents who shared with us their experiences and understandings of the e-commerce livestreaming industry in rural China.

Author contributions

YH was in charge of developing the research's analytical framework and writing up the paper based on the empirical data collected by both ZY and KC. Y and C contributed equally to the literature review, data collection and initial data analysis for this paper. This paper is more informed by Y fieldwork though.

Funding

This project is supported by the "Seed Fund" of the Department of Media and Communication at XJTLU.

Availability of data and materials

Not applicable. This research does not use any existing database. It collected first-hand qualitative data through our fieldwork.

Declarations

Competing interests

The authors declare they no competing interest.

Received: 20 March 2023 Accepted: 8 December 2023 Published online: 25 January 2024

References

Baym, Nancy. 2015. Connect With Your Audience! The Relational Labor of Connection. *The Communication Review* 18 (1): 14–22.

Binzhou Women's Federation. 2021. The Most Beautiful Family in Dali—The family of Xie Shuangjiao: Co-establishing a happy family hand in hand and heart with heart [大理州最美家庭谢双姣家庭: 携手同心共建幸福家庭]). https://www.sohu.com/a/487356348_121106902

CNNIC. 2022. The 50th Statistical Report on China's Internet Development. http://www.cnnic.net.cn/NMediaFile/2022/ 0926/MAIN1664183425619U2MS433V3V.pdf

Craig, David, Jian Lin, and Stuart Cunningham. 2021. Wanghong as Social Media Entertainment in China. Basingstoke: Palgrave Macmillan.

Dong, Chenyu, and Zhen Ye. 2021. Learning to Live-stream: A Digital Ethnography of Relational Labor [做主播: 一项关系 劳动的数码民族志]. Chinese Journal of Journalism & Communication 43 (12): 6–28.

Du, Ping. 2017. Factory Boys, Factory Girls: Gender, Family and Migration of Migrant Workers in Contemporary China [男工,女工]. Hong Kong: The Chinese University of Hong Kong.

Evans, Harriet. 1997. Women and Sexuality in China: Dominant Discourses of Female Sexuality and Gender since 1949. Cambridge: Polity.

Fortunati, Leopoldina. 1995. The Arcane of Reproduction: Housework, Prostitution, Labor and Capital. New York: Autonomedia.

Gaetano, Arianne M. 2015. Out to Work: Migration, Gender, and the Changing Lives of Rural Women in Contemporary China. Honolulu: University of Hawai'i Press.

Hesmondhalgh, David. 2010. User-Generated Content, Free Labour and the Cultural Industries. Ephemera 10 (3/4): 267–284.

Huang, Zongzhi. 2022. How Do I Reflect on Chinese Small Peasents. Pengpai Blog (澎湃号). https://m.thepaper.cn/newsD etail_forward_20210553

Jacka, Tamara. 2006. Rural Women in Urban China: Gender, Migration, and Social Change. London: M.E. Sharpe.

Jin, Yihong. 2015. Mobile Patriarchy: Study on Gender Structural Transition in New Rural China [流动的父权: 流动农民家庭的变迁]. Nanjing: Nanjing Normal University Press.

Lin, Jian, and Jeroen de Kloet. 2019. Platformization of the Unlikely Creative Class: Kuaishou and Chinese Digital Cultural Production. Social Media and Society 5 (4): 2056305119883430.

Liu, Chiu-Wan. 2020. Return Migration, Online Entrepreneurship and Gender Performance in the Chinese 'Taobao Families'. Asia Pacific Viewpoint 61 (3): 478–493.

McEwen, Karen Dewart. 2018. Self-Tracking Practices and Digital (Re)productive Labour. Philosophy & Technology 31 (2): 235–251.

McLuhan, Marshall. 1962. The Gutenberg Galaxy: The Making of Typographic Man. Toronto: University of Toronto Press.

Meng, Bingchun, and Yanning Huang. 2017. Patriarchal Capitalism with Chinese Characteristics: Gendered Discourse of 'Double Eleven' Shopping Festival. *Cultural Studies* 31 (5): 659–684.

Oreglia, Elisa. 2014. ICT and (Personal) Development in Rural China. Information Technologies and International Development 10 (3): 19–30.

Pun, Ngai. 2003. Subsumption or Consumption? The Phantom of Consumer Revolution in 'Globalizing' China. Cultural Anthropology 18 (4): 469–492. Pun, Ngai. 2005. Made in China: Women Factory Workers in a Global Workplace. Durham: Duke University Press.

Qian, Linliang. 2023. The Differential Mode of Association in Chinese E-Commerce Economy: Industrial Clustering, Spatial Perception, and Consumption Inequality in the Digital Age [电商**经**济中的差序格局: 产业集聚、空间想象**与**数 字**消**费不平等]. *Zhejiang Academic Journal* 258 (1): 106–116.

Qiu, Jack Linchuan. 2009. Working-Class Network Society: Communication Technology and the Information Have-less in Urban China. Cambridge: MIT Press.

Shen, Yang. 2016. Filial Daughters? Agency and Subjectivity of Rural Migrant Women in Shanghai. *The China Quarterly* 226: 519–537.

Sherman, Rachel. 2017. Uneasy Street: The Anxieties of Affluence. Princeton: Princeton Unvieristy Press.

Tong, Xin, ed. 2022. Digital Labour: Freedom and Imprisonment (数字劳动: 自由与牢笼). Beijing: China Workers' Publisher. van Dijk, Jan. 2020. The Network Society, 4th ed. Los Angeles: SAGE.

Wajcman, Judy. 2010. Feminist Theories of Technology. Cambridge Journal of Economics 34 (1): 143–152.

Wallis, Cara. 2011. Mobile Phones without Guarantees: The Promises of Technology and the Contingencies of Culture. New Media & Society 13 (3): 471–485.

Wallis, Cara. 2013. Technomobility in China: Young Migrant Women and Mobile Phones. New York: New York University Press. Wang, Zheng. 2017. Finding Women in the State: A Socialist Feminist Revolution in the People's Republic of China, 1949–1964. Oakland: University of California Press.

Yan, Hairong. 2003. Neoliberal Governmentality and Neohumanism: Organizing Suzhi/Value Flow through Labor Recruitment Networks. *Cultural Anthropology* 18 (4): 493–523.

Yao, Jianhua, and Sisu Xu. 2019. Global Digital Labor Studies and the Chinese Context: A critical review [全球数字劳工研究与中国语境:批判性的述评]. Journal of Social Science of Hunan Normal University 48 (5): 141–149.

Yu, Haiqing, and Lili Cui. 2019. China's E-Commerce: Empowering Rural Women? The China Quarterly 238: 418–437.

Zhang, Shiyong. 2013. Migrant Worker Returnees: A Study from the Perspective of Life Course Theory [返乡农民工研究: 一个 生命历程的视角]. Beijing: Social Sciences Academic Press (China).

Zhang, Lin. 2021. Platformizing Family Production: The Contradictions of Rural Digital Labor in China. *The Economic and Labour Relations Review* 32 (3): 341–359.

Zhang, Lin. 2023. The Labor of Reinvention: Entrepreneurship in the New Chinese Digital Economy. New York: Columbia University Press.

Zhao, Yuezhi. 2007. After Mobile Phones, What? Re-embedding the Social in China's "Digital Revolution." International Journal of Communication 1: 92–120.

Zhao, Yuezhi. 2017. Global to Village: Grounding Communication Research in Rural China: Introduction. International Journal of Communication 11: 4396–4422.

Zhou, Min, and Shih-Diing. Liu. 2021. Becoming Precarious Playbour: Chinese Migrant Youth on the Kuaishou Videosharing Platform. *The Economic and Labour Relations Review* 32 (3): 322–340.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.