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Social networks of rural–urban migrants after residential relocation: evidence from Yangzhou, a medium-sized Chinese city

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ABSTRACT

This paper analyses the effects of residential relocation on China's rural–urban migrants' social networks in light of evidence from Yangzhou, Jiangsu province. Our study contrasts voluntary moves with forced moves driven by demolition-led redevelopment of urban villages. Based on data from a survey conducted between 2012 and 2013, the regression analysis shows that voluntarily relocated migrants are more likely than forced movers to use phone/computer to contact their former neighbours, and communication technology allows them to maintain the frequency of their contact. Furthermore, when moving to a gated neighbourhood, voluntary movers are more likely than forced movers to participate in public activities, to have more contact with new neighbours and thereby to get more help from the residents' committee and new neighbours. The results suggest that forced moves have negative effects on migrants' social networks in the neighbourhood and that the demolition-led redevelopment programmes do not promote the migrants' integration in the city.

Introduction

Social networks in the local community play an important role in low-income migrants' integration into host societies (Mouw, 2002; Yue *et al.*, 2013). Any change of living environment, particularly through forced relocation, may cut off their social contacts. Research in Western countries has highlighted the negative outcomes of relocation driven by urban restructuring programmes on low-income residents' social networks (for a review, see Atkinson, 2002). Out-movers suffer a decrease of face-to-face contacts, and their social support mechanism is broken by this 'social displacement' (Davidson, 2011; Doucet, 2009).

Recently, the negative effect of relocation has been disputed. Even in forced relocation, some residents move only a short distance, because they are granted the 'right to return' to the renewed area (Kleinhans, 2003). By exercising that right, they can preserve their social networks (Posthumus *et al.*, 2013). Alternatively, displaced residents might substitute previous social contacts adequately with new ones in their destination neighbourhood

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(Kearns & Mason, 2013). Such new contacts can support low-income migrants in their pursuit of quality of life to make them better off than those who remain in the former socio-economically disadvantaged neighbourhood (Burns *et al*., 2001). Thus, relocation can be an opportunity to make an improvement, whether it is voluntary or not (Kleinhans & Kearns, 2013). In that light, migrants' social networking strategies should be taken into account when discussing the effects of residential relocation.

However, the consequences of movers' responses are rarely examined in empirical studies. We know little about how movers preserve existing contacts or construct new ones. The programme of inner city demolition-led redevelopment in China provides an opportunity to study the experience of affected low-income migrants. Before the demolition, because of limited housing resources, fresh rural migrants without a local *hukou* status often live in derelict, isolated urban villages (Wu, 2004). In time, some manage to move to a better living environment (Wu, 2006). Others are forced to relocate when an emerging real estate market results in housing clearance in central city areas (Wu *et al*., 2013). After their relocation, movers might use communication technology to keep in touch with their former neighbours (Liu *et al*., 2012). If they move to one of the many privately developed gated neighbourhoods (in the private-rental or owner-occupancy sector), they may take advantage of activities organized by the residents' committee. It usually promotes migrants' integration through initiatives such as book clubs, line dancing and film shows (e.g. Yangzhou Municipal Government, 2012a). Migrants might participate to get to know their new neighbours and thereby construct new social networks.

By examining if and how migrants' strategies preserve pre-existing social contacts and construct new ones, this paper seeks to fill some gaps in the literature on the effects of residential relocation. First, a distinction is made between different *types of moves*. Some people move voluntarily to improve their situation. Even when the move was instigated by redevelopment, some residents had the prior intention to seek improvement, while others were moved against their will. Second, a distinction is made between *types of destination neighbourhoods*. A move within the same urban village or to another urban village is distinguished from a move to a gated neighbourhood. To address these points, this paper poses the following research question: Does the type of intra-urban residential move affect rural migrants' social network strategies, and how does the type of destination affect their integration, as mediated by these strategies?

The first section reviews the literature on the nature of migrants' social networks and the effects of residential relocation on their contacts with neighbours. Then, using data from a 2012–2013 survey of 739 migrants in Yangzhou City in Jiangsu province, it describes and compares two strategies: to stay in contact with former neighbours by telecommunication, and to construct new contacts by participating in public activities organized by the residents' committees. The analysis examines the consequences of these two strategies.

Theoretical perspectives

Rural–urban migrants' social networks

Social networks of neighbours differ from family or kin ties. Besides fostering residents' sense of belonging and security, neighbourhood networks generate trust between different groups (Henning & Lieberg, 1996; Burns *et al*., 2001). These benefits play an important

role in low-income migrants' integration into host societies (Mouw, 2002; Yue *et al.*, 2013). Furthermore, contacts with native neighbours often lead to better opportunities for housing and employment by providing access to local knowledge and resources (Kanas *et al.*, 2011).

However, discrimination makes it hard for low-income migrants to develop social contacts with their native neighbours. In most Western countries, social distance is usually a result of ethnic differences (Vervoort, 2012). In China, largely ethnically homogeneous, discrimination is usually related to the division between those with an urban *hukou* and a rural *hukou* (Liu, 2005). A person with an urban *hukou* may be working for the government or a state-owned enterprise (SOE) known as a *danwei* (work unit). An urban *hukou* entitles them to access nationally funded public amenities and social services like health care, pensions and children's education (Treiman, 2012). People with a rural *hukou* work the farmland as assigned by the collective village. They are excluded from nationally funded public amenities and social services. Consequently, their educational level and socio-economic status are much lower than those of their urban counterparts. Upon arrival in the destination cities, rural migrants can only do lowly labour. They are often perceived as dangerous, unhygienic and uneducated, and are likely to be poor (Chen & Pryce, 2013). This perception increases the social distance between urban natives and rural migrants, resulting in the social marginalization of migrants (Liu *et al.*, 2008).

Upon arrival, an absence of social support from the local community affects migrants' access to information and resources. The lack of official support is especially frustrating when they look for accommodation (Liu *et al.*, 2013; Lu *et al.*, 2013). And owing to their limited access to public housing (lacking a local *hukou* status) and the unaffordable cost of market-rate housing, fresh migrants have little choice but to congregate with their relatives or fellow migrants in the low-cost rental sector (Wu, 2004). In contrast, the rents in gated neighbourhoods where urban natives concentrate are much higher, and it is not easy for the newcomers to find adequate space. In contrast, the until recently abundant low-cost rental stock in the inner city urban villages is thought to be the most likely destination for migrants as many established villagers prefer to move away and lease out their dilapidated units (Wu *et al.*, 2013).

Newcomers find not only shelter there but also the chance to form reciprocal relationships with other migrants and the native urban poor. Through these neighbourly networks, the migrants are able to become more integrated into the city (Du & Li, 2010; Li & Wu, 2013). They meet less discrimination there than in other types of destination, as most of their neighbours also have a low socio-economic status (Ma & Xiang, 1998; Li *et al.*, 2012). Indeed, the social resources in urban villages provide migrants with real benefits when seeking jobs, conducting business, exchanging rental information and acquiring loans at low interest rates (Liu *et al.*, 2013; Yue *et al.*, 2013). Getting into the information loop is particularly helpful to newly arrived migrants who need to make it through the transition period.

However, their concentration in urban villages is primarily the outcome of housing constraints rather than choices (Wu, 2002). In spite of the noted benefits, spatial concentration in a disadvantaged neighbourhood has its drawbacks. It makes it less likely to connect with native residents whose socio-economic status is higher. That separation results in migrants' segregation in the long term (Liu *et al.*, 2008; He *et al.*, 2010). In that light, it is instructive to consider some findings from the social network position generator in a survey conducted in Shanghai. According to that information, the average extent of social networks of native urban residents in Shanghai is about five persons, while it is only three for rural migrants

(Lu *et al.*, 2013). Moreover, because of the segregation, the social support in deprived neighbourhoods enables poor people to maintain only a basic lifestyle. They can just 'get by' rather than to pursue a desirable quality of life – to 'get ahead' (Burns *et al.*, 2001). To get better housing opportunities and higher chances of social integration, migrants need more social support (Liu *et al.*, 2013; Yue *et al.*, 2013). Therefore, if they want to improve their position, they probably need to move out of the deprived neighbourhoods. In practice, as the housing conditions and living environment are really bad in urban villages (Huang & Jiang, 2009), most migrants do intend to move – more than 90 per cent, according to a case study in Shenzhen (Hui *et al.*, 2014). They could also be induced to move by the housing stress related to stages in the household life cycle such as family growth and job change (for a review, see Wu, 2006).

But not all moves are made by choice. Urban villages have acquired bad reputations resulting from serious social problems such as crime, fire hazards, poor public health and crowding. To address the issue, large-scale demolition has been implemented there. This coincided with an emerging real estate market that led to housing clearance in the central areas for reasons of profit and city image (Wu *et al.*, 2013).

Residential relocation and social displacement

The general literature on residential relocation stresses its negative impacts on residents' social networks (for a review, see Atkinson, 2002). That is usually explained by two arguments. One, the geographic separation caused by relocation decreases contacts with former neighbours. The social support mechanism is disrupted; that is, they can no longer help each other in the course of daily life. Two, the migrants fail to replace their existing contacts adequately with new ones (Davidson, 2011; Doucet, 2009). These two negative impacts are particularly noticeable in forced relocation, as most involuntarily relocated low-income migrants do not remain in close proximity to their old residence. And because of ethnic or socio-economic differences, it is difficult for relocated migrants to develop social contacts with neighbours in their new location, especially when they move into middle-class neighbourhoods (Atkinson, 2002).

Exceptions have also been noted. With respect to the first argument, some residents relocate over a short distance if they are granted priority rights in the public housing market. That practice is common for urban renewal programmes in, for instance, the Netherlands (Kleinhans, 2003). And households take that option in order to satisfy their preferences, notably as the desire to preserve social networks (Posthumus *et al.*, 2013). In China, the migrants are out of the negotiation loop and they are generally not provided with on-site destination housing (He & Wu, 2005). Nonetheless, some of them can still rent cheap housing in the same urban village or in one nearby, because demolition and redevelopment tend to be gradual. It usually takes a long time for the government/developer and individual villagers to reach an agreement. Issues of compensation form the most troublesome and sensitive aspects of the land acquisition process and frequently lead to social conflicts (Li *et al.*, 2014). Even if migrants relocate over a long distance, it is possible for them to use a phone or computer to keep in touch with their former neighbours. A large majority of rural migrants (more than 95 per cent in a case study in Shanghai) use a mobile phone and the Internet for social contacts (cf. Yang, 2008; Yang, 2012). In this sense, whether people

stay in contact with their former neighbours depends on migrants' choice rather than on constraints posed by geographic separation.

With respect to the second argument, the key issue is social relations in the destination neighbourhood. Besides urban villages, the prevalent gated neighbourhoods are also destinations for (long-established) rural migrants. They buy or rent an apartment there (Li *et al.*, 2012). However, most residents in gated neighbourhoods are native middle-income people. It is not easy for migrants to get to know and be accepted by their new neighbours, even though they may have raised their economic status after years of hard work. Discrimination against rural migrants persists due to the perception that native urban dwellers hold of the migrants (Wang *et al.*, 2015). Moreover, the level of neighbourly interaction in gated neighbourhoods is much lower than in urban villages. Casual face-to-face meetings between neighbours are much less common (Forrest & Yip, 2007). Gated neighbourhoods usually emphasize privacy and security, signifying social status and mainly cater to China's expanding middle class (Pow, 2007; Zhu *et al.*, 2011). In view of that profile, the municipal government supports the outreach efforts of residents' committees. These committees organize activities such as line dancing and film shows to promote residents' local involvement and interaction. Some activities are specially designed for the migrants' children and elderly parents to encourage their participation (e.g. Yangzhou Municipal Government, 2012b). These events provide an opportunity to contact new neighbours and might help migrants become integrated in the destination neighbourhood.

This paper addresses these two arguments. The following section builds a framework for investigating rural migrants' response to residential relocation with respect to their social network strategies. As shown in Figure 1, it frames the migrants' social networks in two strategies: to preserve existing contacts with former neighbours; and to develop contacts with new neighbours in the destination neighbourhood. The basic idea is that migrants apply coping strategies. To bridge the geographic separation between migrants and their former neighbours, migrants tend to preserve their pre-existing social contacts using phone and computer communications. To cope with their limited informal contacts in gated neighbourhoods, migrants tend to construct new networks at their destination by participating
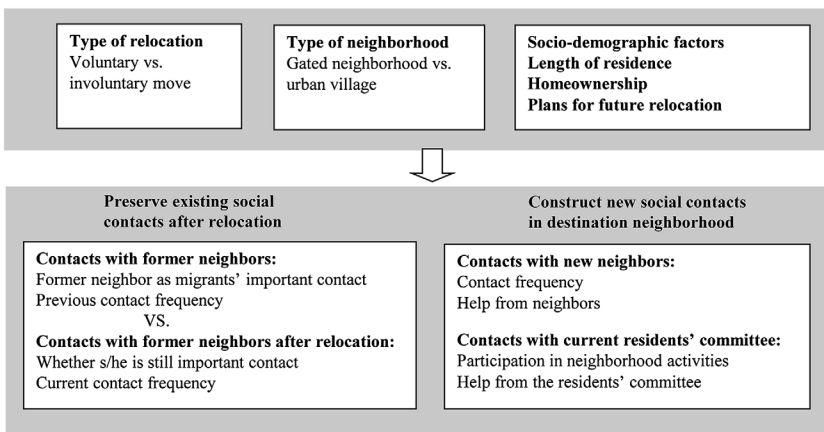

Figure 1. Framework of migrants' social networks in the neighbourhood.

in public activities organized by the residents' committee. And in an ideal situation, they would tend to do both to increase their social support.

We measured the use of the strategy called 'preserving existing contacts' by examining whether former neighbours are still the migrants' current important contacts, comparing current with previous frequency. The use of the strategy called 'developing new contacts' was measured by determining the frequency of contact with a new neighbour, the neighbour's help, the frequency of participation in public activities organized by the residents' committee and the amount of assistance derived from it.

These consequences are expected to be influenced by the type of relocation and the types of destination neighbourhood. Addressing the research questions, this paper poses two hypotheses: (1) Migrants who relocated voluntarily and migrants who intended to move prior to the demolition are more likely than involuntary movers to use phone/computer to contact their former neighbours, and the use of such communication technology will maintain the frequency of their contact. (2) Compared to the migrants who remained in an urban village as their destination, the ones who moved to a gated neighbourhood are more likely to participate in public activities organized by the residents' committee and to have more contacts with new neighbours and thereby to get more help from the residents' committee and new neighbours.

Research design

Fieldwork in Yangzhou and the data-set

Our data-set comes from a 2012–2013 survey in the city of Yangzhou in Jiangsu province, China. The city is located at the confluence of the Yangtze River and the Beijing–Hangzhou Great Canal, and covers a built-up urban area of 82 km^2 (see Figure 2). Over the years, the booming economy of Yangzhou city has attracted hundreds of thousands of rural migrants from less-developed regions. In 2010, 1.2 million people lived in Yangzhou city, and about one-sixth of them were rural migrants (Yangzhou Municipal Government, 2011). In view of its size and population, Yangzhou city is a suitable case to represent medium-sized Chinese cities.

Starting in the early 2000s, the Yangzhou municipal government engaged in the demolition and redevelopment of urban villages in the built-up area, beginning with those near the city centre (Yangzhou Municipal Government, 2003). The initiative to embark on this policy was linked to the city's objective to apply for the 2004 China Habitat Award, an initiative of the Ministry of Housing and Urban–Rural Development. Yangzhou City even won the United Nations Habitat Award in 2006 (Yangzhou Municipal Government, 2011).

The aim of our survey was to capture the migrants' latest relocation in the preceding three years (2009–2012), as the Department of Human Resources and Social Security of the Jiangsu Provincial Government (JSHRSS) had already investigated rural migrants' housing choice in Yangzhou between 2003 and 2009 (Zou, 2006; Huang *et al.*, 2014). About 50–60 per cent of the 200 000 migrants at the time, were renting (or had rented) housing in urban villages. When we designed our survey, we selected the higher end of the estimate of these renters (60 per cent of 200 000) to calculate the minimum sample size, employing the following equation (cf. Watson, 2001):

Figure 2. Map of Yangzhou city and survey sites.

$$n = \frac{P(1-P)}{\left(\frac{A}{Z}\right)^2 + \frac{P(1-P)}{N}} \times \frac{1}{R}$$

where:

n sample size required

N   number of people in the population

P   estimated variance in population, as a decimal: 0.5 for 50–50, 0.3 for 70–30; to maximize the heterogeneity regarding the variability of the attributes to be measured in the population, we selected P to equal 0.5 (cf., Watson, 2001)

A   level of accuracy desired, expressed as a decimal (0.03, 0.05, 0.1 for 3, 5, 10 per cent, respectively); we selected A to equal 0.05 for 5 per cent margin of error (cf. Watson, 2001)

Z   confidence level: 1.96 for 95 per cent confidence interval, 1.64 for 90 per cent and 2.57 for 99 per cent. In accordance to common practice in social-science applications, we selected *Z* to equal 1.96 for a 95 per cent confidence level (cf. Watson, 2001)

R   Estimated response rate, as a decimal. After we completed a pilot survey (50 cases), we predicted an effective response rate (*R*) to equal 50 per cent in our survey. To attain the desired levels of accuracy and confidence, the minimum number of effective cases was to equal 384, yielding a sample size of 768. To ensure fail-proof sampling, we oversampled by handing out 1000 questionnaires. As for the data collection strategy, in view of the close relation between migrants' housing choices and the type of work they do (Wu, 2004), we decided to use an employment-based probability proportional to size sampling strategy by contacting the migrants at their workplaces. If we would have approached people in existing urban villages, we would not have obtained information on the migrants who had moved out of existing and demolished ones. Our sampling strategy is also consistent with that in the official survey on rural migrants in Yangzhou (Yangzhou Municipal Government, 2011). That survey showed the migrants' jobs to be of three types: workers in service industries (about 30 per cent), workers in secondary industries (about 40 per cent) and self-employed migrants (about 30 per cent). Accordingly, the 1000 questionnaires were divided into three groups: 300 for service workers, 400 for workers in secondary industries and 300 for self-employed migrants.

The selection of the migrants' working sites was derived from the guide of the Yangzhou Planning Bureau – their land use map (about 150 sites: service enterprises, factories, open markets and construction sites, see Figure 2). For service workers and workers in manufacturing and construction, we selected a fraction of about one-fifths of the migrant workers per establishment but no more than ten respondents in each one. For instance, two migrant workers were selected randomly in a shoe factory with 10 migrant workers. For self-employed migrants, in each location where they concentrated for business, respondents were selected by random sampling – five-person interval sampling.

In the end, we handed out 973 questionnaires and collected 739 completed forms (a response rate of 76 per cent). Among them, 480 respondents had lived in urban villages within the last three years and provided full information on their social contacts. This means that with respect to the social contacts, the effective response rate equals 49 per cent (480/973). Our questionnaire used the recall method and subjective reporting. The questions directed the respondents to focus on their latest housing relocation within the last three years. Because the event was quite recent, it was not difficult for them to recall the experience. Moreover, to guarantee the accuracy of the information of their social contacts, we used the method of name generation in social network analysis (cf. Lu *et al.*, 2013). The respondents were asked to provide the surname of his/her top five social contacts in Yangzhou prior to relocation; and s/he provided another five after the relocation. If respondents were not quite sure about the details, they usually searched the records in their mobile phone (or in an address list) to recall the information of their social contacts.

Table 1. Profiles.

	Categories	n	Per cent
Age of household head	20–29	171	35.6
	30–49	269	56.1
	50 and above	40	8.3
Gender	Male	291	60.6
	Female	189	39.4
Education	Less than 12 years of education	376	78.3
	12 or more years of education	104	21.7
Household *Hukou*	All family members own No Jiangsu Yangzhou *hukou*	423	88.1
	At least one member owns Jiangsu Yangzhou *hukou*	57	11.9
Household structure	Single	111	23.1
	Couple	104	21.7
	Core family (parents with children under 16 years old)	114	23.8
	Adult family (all family members are adults)	105	21.9
	Extended family (three-generation family)	46	9.6
Household monthly income	Low (less than 3000 Yuan)	138	28.7
	Medium (3000–5000 Yuan)	222	46.3
	High (more than 5000 Yuan)	120	25.0
Type of residential relocation	Voluntary move: respondents move for housing improvement, or for better job housing balance, or for children's education	191	39.8
	Prior intention to move in forced relocation: under redevelopment, some residents have a prior intention to move for housing improvement	50	10.4
	Forced move: under redevelopment, respondents are forced to move with no prior intention against their will	239	49.8
Type of destination neighbourhood	Urban village as destination: a move within the same urban village or to another urban village	331	69.0
	Move to gated neighbourhood: move from urban village to gated commercial housing neighbourhood	149	31.0
Length of residence in neighbourhood	Less than 1 year living in previous neighbourhood	118	24.6
	1 year or more living in previous neighbourhood	362	75.5
	Less than 1 year living in destination neighborhood	123	25.6
	1 year or more living in destination neighbourhood	357	74.4
Future plan in next five years	Intend to stay in destination neighbourhood	107	22.3
	Move to another neighbourhood, or return home, or go to another city, or remain undecided	373	77.7
Total		480	100

Half (241) among the 480 respondents, had experienced demolition redevelopment, and 50 of these indicated a prior intention to move. On average, the 480 households moved a distance of 2.3 km. With respect to the type of destination neighbourhood, 30 per cent of these respondents (149/480) moved to gated neighbourhoods. The characteristics of the respondents' socio-demographic profiles are listed in Table 1.

After completing their questionnaires, we invited respondents to participate in in-depth interviews. We had shown him/her the invitation letter (both in English and Chinese) signed by the supervisors of the research. It stated the academic purpose of the fieldwork, and listed the rights of respondents, for instance, the right to terminate the interview at any time and to delete the record. Participation was entirely voluntary.

In practice, 30 of 480 respondents were then selected for this follow-up (18 males and 12 females) according to their housing career (as recorded in the questionnaires). They were interviewed about their housing relocation and their social networks: within the last three years, 16 respondents had experienced demolition redevelopment and 14 respondents had moved voluntarily. It was decided to overweight the sample of self-employed sellers and service workers (3 worked in construction, 3 in manufacturing, 11 in services and 13 were self-employed), because these two groups had more subtypes of employment. Each interview

lasted from 60 to 120 min. Twenty were audio-recorded; 10 were recorded by taking notes. Each of these respondents received a monetary reward of 100 Yuan. The names used in the manuscript where presenting their responses are aliases.

Measurement and methodology

With respect to the measurement of migrants' social networks, the first problem is how to define a *neighbour*. The terms neighbourhood and neighbour are used at three different scales. The survey used the smallest unit of neighbourhood, referred to as the 'home area, encompassing a 10-min walk (about 1 km) from one's home (Kearns and Parkinson, 2001)'. Living at this scale, a 'neighbor' should meet another criterion: the respondent got to know the person after arrival, which means the person is not his/her relative or fellow migrant. In the survey, the respondent was invited to provide the surname of his/her top five social contacts in Yangzhou prior to relocation; and s/he provided another five after the relocation. The respondent also described the current relationship with each contact, including the 'relative living in Yangzhou', 'fellow migrant from the same hometown', 'colleague', 'new friend living in Yangzhou' and 'neighbor living in the home area'. If the respondent listed more than one neighbour, the top one was taken into account.

Before relocation, 480 respondents listed neighbours among the top five contacts. Afterwards, 192 respondents still considered their former neighbours among their top five contacts, while the rest (288 respondents) only listed new neighbours, and they deleted the former ones and rarely met former neighbours. Among those 192 respondents, 136

Table 2. Characteristics of migrants' social contacts.

	Categories	Per cent or mean value
Contact mode with former neighbours (480 cases)	In terms of contact frequency, Phone/computer facilitate social contacts with the former neighbour after relocation	83 cases (18 per cent)
Contact frequency with former neighbours (480 cases)	Contact frequency with former neighbours before relocation, evaluated by Likert Scale – the respondent scores the frequency from 1 to 5 (1-occasional contact; 2-once a month; 3-once every two weeks; 4-once a week; 5-more than once a week). Likert Scale has five levels, as respondents had contacts with their former neighbours – otherwise, they would not list former neighbours as top-five contacts before the relocation	4.2
	Contact frequency with former neighbours after relocation, evaluated by Likert Scale – the respondent scores the frequency from 0 to 5 (0-no contact at all; 1-occasional contact; 2-once a month; 3-once every two weeks; 4-once a week; 5-more than once a week). Likert Scale has six level, and level 0 is for the ones who did not list former neighbours and rarely met them	1.6
Contact with new neighbours in the destination neighbourhood (480 cases)	Contact frequency with a new neighbour (ditto)	3.9
	How much help does s/he get from the neighbour: 0-no help at all; 1-very little help; 2-a little help; 3-some help; 4-much help; 5-very much help	3.0
Social participation in the destination neighbourhood (480 cases)	Participation in public activities organized by the residents' committee: 0-not attend at all; 1-almost never attend; 2- occasionally attend; 3-sometimes attend; 4-usually attend; 5-attend almost every time	2.5
	How much help does s/he get from the residents' committee: 0-no help at all; 1-very little help; 2-a little help; 3-some help; 4-much help; 5-very much help	2.5

respondents also listed new neighbours. So in sum, 424 respondents developed new contacts in the destination neighbourhood. Characteristics of the respondents' social contacts are listed in Table 2.

The empirical analysis consisted of two parts: one examined respondents' social contacts with their former neighbours; the other focused on their new social contacts in the destination neighbourhoods.

The first part applied binary logistic regression to model whether the respondent still listed the former neighbour among the top five social contacts after relocation. Ordinal regression was employed to model the current frequency of migrants' contacts with their former neighbours and then compare it with the previous frequency. The measurement of contact frequency used a Likert scale as specified in Table 2. In the model for the frequency change – whether respondents maintained the level of contact frequency, if it decreased after relocation, the value of the dependent variable was set to zero; if it stayed at the same level or increased, the dependent variable equalled one. In addition to contact frequency, the analysis explored the new contact mode by binary logistic regression – whether using communication technology facilitated social contacts between migrants and their former neighbours.

Except for the type of relocation and the type of destination neighbourhood, the set of independent variables includes the socio-demographic status of the household (gender of the household head, education level of the household head, household structure, household income and household *hukou* status), the length of residence in the previous neighbourhood and the length of residence in the current neighbourhood. These factors may also have an impact on migrants' social networks according to existing studies (cf. Liu *et al*., 2012; Wang *et al*., 2015). Moving distance proved to have a significant co-variation with the type of destination neighbourhood – the moving distance to a gated neighbourhood was significantly longer (3 km vs. 2 km), so this characteristic was excluded from the analysis.

Household structure relates to whether the household has a child under 16 or an elderly person over 60, because that might impact migrants' social network with neighbours (Wang *et al*., 2015). The age of the household head and the marriage status proved to have significant co-variation with household structure, so these two characteristics were excluded from the analysis.

Employment type was also not entered into the set of dependent variables in the analysis. Most respondents (about 90 per cent) who had lived in urban villages in the last three years were service workers or self-employed migrants. That is consistent with existing knowledge which outlined the close relation between migrants' housing in urban villages and the type of work they do (cf. Wu 2004; Li *et al.*, 2009). Had we included the employment sectors in the models, would have resulted in a bias against manufacturing workers. Many of these live in a factory dormitory (four to eight people per unit), and therefore their neighbours are their colleagues at the same time (Li *et al.*, 2009). That would have compounded their social contact patterns and besides, it was not our focus in this research.

Although 'occupation' was not set as a dependent variable in the statistical model, we did take account of the close relation between migrants' living place and their occupation. The type of their work was diverse: we interviewed waiters, waitresses, cooks and cleaners in restaurants or hotels; children's nurses, interior cleaners and nursing assistants in hospitals; street cleaners and street repairmen; day labourers; small shopkeepers, taxi drivers, truck drivers and street peddlers. Some respondents might have greater opportunity and

motivation to develop and maintain their social networks, especially migrants who are self-employed or working in the hospitality industry who do their business in the neighbourhood where they live. This aspect is discussed using the outcomes of the interviews.

In the second part of the analysis, ordinal regression was employed to model the frequency of migrants' contacts with their new neighbours, the level of help from new neighbours, the frequency of migrants' participation in public activities and the level of help from the residents' committee. In the ordinal regression analysis, the frequency of contact with former and new neighbours was measured with a Likert Scale as specified in Table 2. The same set of independent variables was used in this second part of the analysis, with the exception of the length of residence in the previous neighbourhood – as it is irrelevant to migrants' social networks in the current neighbourhood. In contrast, current homeownership and plans for future relocation may affect migrants' contacts with new neighbours (cf. Guest & Wierzbicki, 1999). However, the factor 'plan for future relocation' (whether or not to stay in the current neighbourhood in the next five years) showed significant co-variation with the type of destination neighbourhood. Most migrants who moved to a gated neighbourhood tend to stay, so this variable was excluded from the regression analysis. The factor 'homeownership' was also excluded because all homeowners lived in gated neighbourhoods. We also take into account the impact that contacts with the former neighbour have on contacts with the new neighbour, for instance, putting 'whether the former neighbour is listed among the current top five contacts' into the set of independent variables. But it has significant co-variation with other independent variables like 'type of relocation' and 'type of destination neighborhood', so this variable was also excluded from the regression analysis. Instead, the effects of these excluded variables are discussed using the outcomes of the interviews.

Empirical findings

Preserving existing social contacts

Table 3 displays the results of the models regarding contact with former neighbours: the first model, the third model and the fourth model use binary logistic regression for 'whether the respondent still listed the former neighbour among the current top five social contacts', 'change of contact frequency' and 'the use of communication technology', respectively. The second model uses ordinal regression for 'current contact frequency with the former neighbor'. The Nagelkerke R square equals 0.098, 0.086, 0.094 and 0.124, respectively, with 11 degrees of freedom for 480 cases (see Table 3). All regression models are significant through Chi Square test.

With respect to the effects of the type of relocation, compared to 'forced move', two types – namely 'voluntary move' and 'intention to move prior to demolition' – are not statistically significant to predict whether the respondent had listed the former neighbour among the current top five social contacts. However, these two categories are positive to predict the use of communication technology and a positive value for maintaining in contact frequency (see Table 3). These results suggest that, although forced relocation might not result in absolute social disconnections, it would have a negative impact. Indeed, few respondents used communication technology as the mode of contact and the contact frequency decreased.

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Table 3. Regression models for migrants' contacts with the former neighbour.

	Previous neighbour is listed as current top-five contact		Current contact frequency with previous neighbor		Whether respondents keep the contact frequency or not		ICTs facilitate social contacts	
	B	Odds	B	Chi square	B	Odds	B	Odds
Household income (Z-score)	−0.204	0.816	−0.123	1.249	−0.216	0.805	0.166	1.180
Relocation type ('forced move'= ref)								
Intention to move prior to demolition (dummy)	−0.068	0.934	0.034	0.011	0.118	1.125	1.297***	3.659
Voluntary move (dummy)	0.302	1.353	0.272	1.720	0.477**	1.612	0.929***	2.531
Destination neighborhood is gated ('urban village as destination neighborhood'= ref)(dummy)	0.923***	2.516	0.791***	10.257	0.637**	1.891	0.624*	1.866
Living in previous neighborhood for at least one year (dummy)	0.467**	1.595	0.659**	5.388	0.373	1.452	0.331	1.393
Living in destination neighborhood for at least one year (dummy)	−0.038	0.963	−0.178	0.429	−0.066	0.936	−0.022	0.978
The household head is female (dummy)	0.161	1.175	0.192	1.023	0.239	1.270	0.281	1.325
A higher education of the household head ('12 years and less'= ref) (dummy)	−0.180	0.836	−0.110	0.210	−0.058	0.943	0.096	1.101
Having a child less than 16-year-old (dummy)	0.292	1.339	0.402*	3.698	0.539**	1.715	0.021	1.022
Having a member more than 60-year-old (dummy)	0.044	1.045	0.019	0.003	0.203	1.226	−0.279	0.757
Having a Yangzhou *Hukou* status (dummy)	0.262	1.299	0.223	0.596	0.409	1.505	0.168	1.183
Constant	−1.291				−1.758		−2.889	
Threshold for level zero			1.397					
Threshold for level one			1.539					
Threshold for level two			1.657					
Threshold for level three			1.845					
Threshold for level four			2.842					
Nagelkerke R^2	0.098		0.086		0.094		0.124	
Cases/df	480/11		480/11		480/11		480/11	

Significance levels: * $p \leq 0.10$; ** $p \leq 0.05$; *** $p \leq 0.01$.

To understand this, the reason that the respondents no longer list the former neighbour should be kept in mind. The explanation lies in the loss of the mechanism of mutual assistance (cf. Kearns & Mason, 2013; Yue *et al.*, 2013). Because of the geographic separation caused by relocation, former neighbours provide little help to migrants. From a practical angle, they are not as important as before. This outcome is reflected in the interviews, as in the case of Xiaodong, who chose to not stay in contact with her former neighbour when she moved from the *Guangling* district to the *Hanjiang* district.

> I usually bought clothes online, and *Shunfeng* [express company] delivered them to my home … Mr. Zhu [her former neighbor] could help me by signing for express delivery … after relocation, we sometimes sent short messages to each other. But he is a little bit boring, so we do not have much contact now. (Xiaodong, female, 19 years old, waitress)

Before relocation, Xiaodong viewed Mr Zhu as an important contact for practical reasons. After the move, they kept in touch through communication technology instead of face-to-face contact. However, their relationship was based on reciprocal benefits. In spite of contact by phone or Internet, Mr Zhu could not help Xiaodong anymore; therefore, the estrangement seemed unavoidable. This case suggests that the preservation of existing contacts depends on two conditions. One, migrants have to be able to (or to be willing to) use communication technology to keep in touch with former neighbours if they are to overcome the geographic separation. Two, communication technology helps them develop a closer friendship instead of just being neighbours, or at least they can still help each other after relocation. Meeting these two conditions, migrants are likely to continue viewing their former neighbours as important contacts after relocation.

However, compared to 'voluntary relocation' and 'prior intention to move', 'forced move' is significantly negative to predict using communication technology as the major contact mode (See Table 3). That is because voluntary movers have made an obvious improvement in housing facilities after relocation, such as having Internet access in their dwelling. Although almost every respondent has a mobile phone, the percentage of those who use a computer for these two groups is 56 per cent (161/289), while it is only 34 per cent (65/191) in the group 'forced relocation'. And the use of a computer could help migrants develop new social activities with their former neighbours, which would increase the contact frequency. That is very important for working migrants, as they do not have much time for face-to-face contacts. Consider the story of 24-year-old Xiaohe. He moved from the *Donghuayuan* neighbourhood to the *Niansi Xincun* neighbourhood 4 km away, and his former neighbour did not move.

> After the move, we kept in touch by QQ [Chinese instant messaging software, it operates like MSN] … recently, he invited me to play 'Cross Fire' [an online game developed by QQ, it resembles Counter Strike], and we played almost every day online. (Xiaohe, male, 24 years old, self-employed bicycle repairman)

The use of the computer has also promoted their relationship. After his move, they went to an Internet cafe together almost every week, and became good friends. Migrants can also use communication technology to ask their former neighbours for help, as in the story of 36-year-old Lijie with her eight-year-old son. She moved from the *Renzhuang* neighbourhood to the *Yaozhuang* neighbourhood (1.5 km away).

> My son is doing the second grade in *Weiyang Shiyan* primary school. He gets on well with Ms. Yang's son [her former neighbor]. They are also classmates … The school closes at five p.m. But if there are customers in my hair salon, I cannot take him home. I then call Ms. Yang for

help, and she will pick up her son and my son together. They go back to Yang's home [still in *Renzhuang* neighborhood], do homework and play there. I will pick him up after work in the evening. (Lijie, 36 years old, self-employed hairdresser)

Of course, reciprocity exists in their contacts. If Ms Yang were busy, Lijie would also offer to help. Communication technology has facilitated their mutual assistance and their friendship. Friendship is particularly important to migrants who have moved from an urban village to a gated neighbourhood. That type of destination has a strongly positive effect on the preservation of social contacts (see Table 3). It is relatively hard for these migrants to make contacts in gated neighbourhoods, where many of the neighbours are middle-income local residents (Li *et al*., 2012; Wang *et al*., 2015). Instead, they particularly value their connections with former neighbours. Consider the case of 32-year-old Tanjie. She previously rented an apartment of 70 m² in *Donghuayuan* village and then purchased an apartment of 120 m² in *Nanjue Zhuangyuan,* a gated neighbourhood 5 km away. She explained that 'Everyone closes their door after coming back home. I cannot meet neighbours on the street'.

The lack of face-to-face contacts increases the difficulty of developing a social network in gated neighbourhoods. Instead, Tanjie has kept in touch with her former neighbour Ms Liao by mobile phone. More importantly, Ms Liao could provide useful information after relocation. As Tanjie recounted, 'If Ms Liao knows someone who wants to have a massage, she will call me'. Thus, using phones or computers, the mechanism of their mutual assistance continued and their contact frequency did not decrease. That is particularly manifest among self-employed respondents or the ones working in the hospitality industry – they may have greater opportunity and motivation to maintain their former social networks not only for daily life, but also for their business.

We should notice that, although 'forced move' predicts that the contact frequency will not be maintained at the previous level after relocation, it is not statistically significant to predict the absolute loss of existing social contacts (see Table 3). The reason is related to the simultaneous relocation. Their former neighbours also moved out when the entire village was to be demolished, and the government/developer relocated all the villagers to resettlement housing built nearby to accommodate relocated residents (Yangzhou Municipal Government, 2003). Relocated villagers could obtain the ownership of resettlement housing in exchange for their previous dwellings. Or they could purchase commercial dwellings in other neighbourhoods with the money they received as compensation. The villagers may continue to lease out their dwellings to migrants. In that case, migrants and their former neighbours still lived in one neighbourhood, and their habit of mutual assistance did continue, no matter how far they have moved. In the group of a 'forced move' (67 of 192 migrants who still viewed their former neighbours as important contacts), the percentage of these cases is 66 per cent (44 of 67), much higher than that for the other two groups – 7/19 fall into 'intention to move' and 28/106 into 'voluntary move'. This is why a 'forced move' is not statistically significant to predict the loss of existing social contacts (see Table 3).

These models also take the duration of residence into account. A longer period of residence in the previous neighbourhood has positive effects on the preservation of existing contacts. It predicts a higher contact frequency with former neighbours; they still list their former neighbours among their top five contacts after relocation. Conversely, a longer residence in the destination neighbourhood has a negative effect, such as decreasing the contact frequency with former neighbours (see Table 3). In the case of 19-year-old Xiaodong, she

still contacted Mr Zhu for a short time after the relocation but no longer did so as time passed.

These stories also hint at ways to explain the effects of socio-demographic variables. Having a child and living with elderly parents are both positive to predict a higher value of contact frequency and its rate of change; this applies especially when a respondent has a child (see Table 3). Consider Lijie's case. Her son is close friends with the neighbour's child. In spite of the relocation, this connection between children facilitates contact between the parents, which is consistent with findings in the literature (cf. Wang *et al*., 2015).

Not surprisingly, a higher income level plays a positive role in the use of phones and the Internet (see Table 3). It is reasonable to assume that higher income migrants are more likely to purchase a computer, smart phone and the related Internet service. Conversely, lower income migrants are disadvantaged in this respect.

In view of the evidence presented in Table 3 and the anecdotes cited above, our first hypothesis seems plausible: that voluntarily relocated migrants and migrants who had the intention to move prior to demolition are more likely to use phone/computer to contact their former neighbours, and the use of that technology can maintain their contact frequency. In that light, the use of phones and computers cushions the negative impacts of residential relocation on migrants' existing social contacts. It even seems that mobile phones and Internet connections can sustain their mutual assistance.

Developing new social contacts

In the models for 'contact frequency with the new listed neighbor', 'the level of help from the new listed neighbor', 'frequency of participation in public activities' and 'the level of help from the residents' committee', ordinal regression is employed. With 10 degrees of freedom, the Nagelkerke R^2 equals 0.080, 0.106, 0.186 and 0.181, respectively (see Table 4). All regression models are significant through Chi Square test.

'Voluntary move' and 'intention to move prior to demolition' play significantly positive roles in all models, unlike 'forced move' (see Table 4). These results suggest that forced relocation has a negative effect on migrants' record of building new social networks in the destination neighbourhood. A majority of the involuntarily relocated migrants have listed new neighbours among their top five contacts (162/191). Nonetheless, their level of contact frequency is lower, and these migrants are less likely than voluntary migrants to participate in public activities organized by the residents' committee. The reason is related to their experience of forced relocation. Consider the case of 31-year-old Xiaoliu.

> My husband visited the committee to ask whether they could help us to look for a room for rent [after demolition]. They were rude to my husband, and did not give us any help as we did not have a local *hukou* … we think it is useless to participate in public activities. The residents' committee will not help us, if another demolition happens. (Xiaoliu, female, 31 years old, milk-tea peddler)

The residents' committee in the urban village did not provide the necessary help for involuntarily relocated migrants. In line with that experience, they expressed a negative impression of the committee in the interviews. Involuntarily relocated migrants are therefore reluctant to participate in activities organized by the committee in their destination neighbourhood. That further impedes the development of social networks with new neighbours – they have little chance to meet their new neighbours. In contrast, voluntarily relocated

Table 4. Regression models for migrants' social networks in the destination neighbourhood.

	Frequency of contacts with new neighbors		Help from new neighbors		Frequency of participation in activities		Help from the residents' committee	
	B	Chi square	B	Chi square	B	Chi square	B	Chi square
Household income (Z-score)	0.004	0.002	−0.098	1.608	−0.351***	12.053	−0.264***	**7.185**
Relocation type ('forced move' = ref)								
Intention to move prior to demolition (dummy)	0.800**	6.438	0.822***	7.936	1.049***	11.893	0.848***	8.152
Voluntary move (dummy)	0.500**	6.704	0.556***	8.997	1.029***	26.817	0.844***	19.298
Destination neighborhood is gated ('urban village as destination'=ref)(dummy)	−0.804***	11.464	−0.025	0.012	0.797***	11.375	0.493**	4.570
Living in destination neighborhood for at least one year (dummy)	0.558***	7.560	0.515***	6.862	0.449**	4.805	0.565***	7.837
The respondent is female (dummy)	0.041	0.051	0.350**	4.213	0.229	1.673	0.610***	12.137
A higher education of the respondent ('12 years and less'=ref) (dummy)	0.222	0.943	0.556**	5.515	0.767***	11.603	0.535**	5.660
Having a child less than 16-year-old (dummy)	0.042	0.046	0.108	0.322	0.469**	5.580	0.408**	4.400
Having a member more than 60-year-old (dummy)	0.075	0.053	0.673**	4.622	0.533*	2.753	0.402	1.622
Having a Yangzhou *Hukou* status (dummy)	0.244	0.736	0.667**	5.859	0.072	0.065	0.595**	4.582
Threshold for level zero	−2.792		−1.856		−2.204		−2.224	
Threshold for level one	−1.488		−0.879		−0.090		0.081	
Threshold for level two	−0.999		0.715		2.333		2.120	
Threshold for level three	−0.537		1.675		3.021		3.070	
Threshold for level four	0.705		3.319		5.060		5.083	
Nagelkerke R^2	0.080		0.106		0.186		0.181	
Cases/df	480/10		480/10		480/10		480/10	

Significance levels: * $p \leq 0.10$; ** $p \leq 0.05$; *** $p \leq 0.01$.

migrants hold a neutral or positive attitude on the residents' committee. They are more active than involuntary movers in the contacts with the residents' committee and thereby get to know their new neighbours. They also get more help from the residents' committee and their new neighbours.

That particularly applies to those migrants who moved to a gated neighbourhood from the urban village. Such a move is significant to predict a lower level of contacts with new neighbours. On the other hand, it has a positive effect on participation in public activities organized by the residents' committee (see Table 4). To understand this discrepancy, we should consider the role that participation in public activities plays in migrants' social networks. As cited above, Tanjie provided one reason for the low level of contact between neighbours: 'everyone closes their door after coming back home'. The chance of encountering one's neighbours is much lower in gated neighbourhoods than urban villages. In addition, new neighbours, especially middle-income local natives, are hesitant to make friends with migrants. Consider the experience of 30-year-old Xiaohuang. He moved from *Niansi* village to the *Ji'an* neighbourhood in the *Hanjiang* district.

> I feel they do not want to have trouble. They think I will usually ask them for help, if we get to know each other very well. They are worried about that … They are polite to me. Say hello to each other, but no friendship. (Xiaohuang, male, 30 years old, construction worker)

In that case, migrants can turn to the residents' committee and participate in public activities. For instance, they could join the programme called 'neighboring care for migrant children and elderly' in Yangzhou. Every committee member is responsible for several migrant households. They visit their home at regular intervals in order to invite the migrants' children and aged parents to take part in public activities. They also discuss ways to help during the visit. Supported by a subsidy from the Yangzhou Municipal Government, this programme is better implemented in gated neighbourhoods (Yangzhou Municipal Government, 2012b). In contrast, public activities in urban villages rarely get any municipal subsidy because urban villages have their own collective revenue source (Li *et al.*, 2012). However, their residents' committees are unwilling to use the collective revenue to subsidize this programme, as most of the established villagers have already moved out. Thus, although the chance of encountering one's neighbours on the street is relatively low in gated neighbourhoods, the residents' committee there can provide more help and more public activities for migrants than a committee in an urban village. While participating, 36-year-old Lijie mentioned the problem of picking up her child, and the committee member introduced her to Ms Gao. It is convenient for Ms Gao to pass by the school after work and bring the child home.

> If Ms. Yang [her former neighbor] is busy, I have to call Ms. Gao [her new neighbor] for help. She can pick up my son, when she passes by the school after work. (Lijie, 36 years old, self-employed hairdresser and salon owner)

As cited above, Lijie continues to contact her former neighbour Ms Yang because Ms Yang can take care of her son. If Ms Yang cannot help out, Lijie turns to her new neighbour. To reciprocate, she gives Ms Gao a discount when she does her hair. In her case, the strategy is fail-proof. Similarly, 136 respondents not only preserve their contacts with former neighbours but also make new contacts in the destination neighbourhood. This strategy is particularly meaningful to women, as females take more responsibility for household tasks like the care of children. Indeed, being female is significantly positive to predict a high level of help from new neighbours (see Table 4).

However, given the limitation on time to spend on social networks, do more contacts with the former neighbour result in fewer contacts with the new neighbour? The answer is reflected by the bivariate correlation test comparing the frequency of contact with the former neighbour and the frequency of contact with the new neighbour for those 136 respondents who maintain and develop social networks. The Pearson correlation statistic equals 0.675, being significant at the 0.001 level (two-tailed). This indicates that for this group of migrants, the current contact with former neighbours has a significantly positive correlation with the contact with new neighbours because the respondents contact both old and new neighbours for the same purpose, as in the case of Lijie. For her, the mobile phone facilitates contact among three persons. It is unnecessary for Lijie to visit Ms Yang or Ms Gao personally to organize the required assistance. It saves her a lot of time, which is important to all migrants given that their work schedules leave them with little spare time for social activities. Thus, comparing this group with the 288 respondents who turn to their new neighbours and totally ignore their former neighbours, the contact with the former neighbour is not significant to predict a lower level of the contact frequency with the new neighbour.

The outreach programme of the resident's committee worked well in Lijie's case. But without a doubt, it has an obvious bias against certain migrants such as a household without a child or not living with an elderly person. The assistance offered to households with children and elderly parents explains the positive effect of household structure on participation in public activities in the models (see Table 4). As 30-year-old Xiaohuang said, 'We do not have kids, so we cannot participate in those activities … we will participate in more public activities, if we have a child'.

The second bias inherent to the programme is against migrants who live in the neighbourhood for a short time. Residing in the destination neighbourhood for at least one year is significantly positive to increase the participation frequency and the level of help from the residents' committee (see Table 4). That difference is particularly clear between renters and homeowners. The score on participation frequency for homeowners is 3.0, much higher than the 2.5 for renters. Consider the story of 35-year-old Xiajie. She moved from *Guadong* village to the *Jinshan huayuan* neighbourhood.

> The residents' committee invited my mother to take part in the team of line dancing in *Jinshan huayuan* [every year the Yangzhou municipal government will hold a competition of line dancing between neighborhoods] … Their team has more than twenty members, and most are old ladies. They practice almost every week. (Xiajie, female, 35 years old, snack shopkeeper)

After her mother's participation, Xiajie got to know the reason for the invitation. To win the line-dance competition, the residents' committee needs people who can take part in the activity for a long time. Therefore, they invited individuals from homeowners' families instead of renters. Xiajie also encouraged her mother to participate, reflecting the stronger stake of homeowners in their community. That motivates them to participate in public activities (Li & Li, 2013). Living in the neighbourhood for a long time corresponds to more contact with the residents' committee and knowing more neighbours. Of course, it is usually the case that other family members instead of migrants participate in public activities. Migrants are simply too busy. Most of them need to work more than eight hours per day for the whole week to increase their income, as most interviewees stated, 'I am too busy or too tired to participate in these activities'. That is why a higher income level has a negative

effect on participation in activities organized by the residents' committee, and the level of its help is also relatively low (see Table 4).

The third bias in the outreach programme is against migrants with a low educational level, while having a higher educational level is significantly positive to predict a high participation frequency and a high level of help from the residents' committee (see Table 4). That effect of education level is related to the contents of public activities. Following the guidance of the Yangzhou municipal government, the residents' committee usually organizes cultural activities such as book clubs, line dancing and film shows (Yangzhou Municipal Government, 2012a). Yet the lower educated interviewees felt rather bored when participating; they preferred to attend entertainment activities such as games of poker. Poker is very popular among rural migrants in Yangzhou – 63 per cent of the respondents listed it as their preferred social activity with neighbours. It is especially prevalent among the lower educated ones (75 per cent). But the residents' committee does not approve of card games because there is always a link to illegal gambling behaviour.

The fourth bias is that migrants obviously benefit from having a Yangzhou *hukou* status. It is positive to predict a higher level of the help from the residents' committee (see Table 4). The benefit results from the basic services provided by the residents' committee (Derleth & Koldyk, 2004). Migrants need the residents' committee to provide all kinds of referral letters. The references are required to apply for public services, including *hukou* transfer, entering public school, urban insurance and marriage registration (Heberer, 2009). Access to public services is usually based on a Yangzhou *hukou* status, so these respondents have more reasons to ask for help from the residents' committee than residents with a different *hukou*.

In view of the evidence presented in Table 4 and the stories cited above, our second hypothesis seems plausible: that migrants who voluntarily move to a gated neighbourhood are more likely than forced migrants to participate in public activities organized by the residents' committee and have more contacts with new neighbours, and thereby get more help from the residents' committee and new neighbours. However, because the emphasis of the programmes run by the committee is on migrant children and the elderly, on higher educated migrants and on migrants with a Yangzhou *hukou* status, the programmes are obviously biased against lower educated migrants, migrants without a Yangzhou *hukou*, without a child and not living with elderly parents.

Conclusions and discussion

This study explored the effects of residential relocation on rural migrants' social networks; these effects result from their strategies to compensate for the potential damage to existing networks caused by the move and to build new contacts. The empirical material from Yangzhou in Jiangsu province highlighted two strategies. In one, migrants used mobile phones and the Internet to preserve their contacts with former neighbours. In the other, migrants participated in public activities organized by the residents' committee to make contact with their new neighbours in their destination neighbourhood. The empirical material showed that the frequency of using each of these strategies depended on the type of move, the type of destination neighbourhood and the migrants' socio-demographic characteristics. A voluntary move and the intention to move prior to the demolition-led redevelopment, and having a child or living with elderly parents proved to have a stronger effect on preserving networks with former neighbours. Under those conditions, communication

technology was used more often and the contact frequency was maintained at the previous level. These conditions, as well as a number of other characteristics – including moving to a gated neighbourhood, being female, having a higher education level and having a Yangzhou *hukou* status – also had a greater impact on building new networks. These migrants were more likely to participate in public activities organized by the residents' committee and have more contacts with their new neighbours. Thereby, they could get more help from the residents' committee and their new neighbours.

This exploration of migrants' social network strategies furthers our understanding of the impact of residential relocation. It is especially enlightening in the situation of a forced move caused by the demolition of an urban village. An unintended process of clustering occurs where the government builds resettlement housing for displaced villagers (the previous landlords of migrants) from the same village in one neighbourhood. When these landlords, who are homeowners, stick to their habit of subletting their property to migrants, some migrants move with them to that new neighbourhood. That clustering allows them to preserve existing contacts without having to use communication technology. But at the same time, these migrants do not actively construct new social contacts. Moreover, even if their destination areas are newly constructed, they remain socio-economically disadvantaged neighbourhoods where most residents are poor migrants, which limits their chances to improve their social networks. In this sense, the demolition-led redevelopment does not promote the integration of migrants in the city. Furthermore, without a local *hukou*, migrants get little help from the residents' committee to deal with the effects of forced relocation. The lack of access to the services offered by the committees explains the migrants' negative attitude towards these and their lack of social participation in the destination neighbourhood. That lack of participation further impedes their integration. Hence, the negative effect of 'forced' relocation is rooted in the institutional disadvantages of migrants. Those disadvantages are inherent in the *hukou* system. It ensures that only 'natives' get ahead in demolition-led redevelopment.

The findings also further our understanding of how rural migrants adjust to living in a new 'formal' urban residential environment. Some of the vignettes illustrate the challenges they face if they move from an urban village characterized by informality to a commercially developed gated neighbourhood. Because of the lack of informal contacts between neighbours there, migrants have to participate in formally arranged social activities. These are organized by the residents' committee to help newcomers build connections with their new neighbours. That outreach is particularly important for migrant households that have a child or are living with elderly parents. It is they who need most help from the residents' committee and new neighbours to take care of the children and the elderly. However, their own participation remains limited. First, migrant households usually choose to take part only in activities from which they get real benefits, such as the programme on 'neighboring care for migrant children and elderly'. Secondly, participation is mostly limited to the migrant children and elderly parents. The migrant workers themselves seldom join in because of their busy work schedules. Thirdly, a majority of the migrants have a low level of education and are not interested in most cultural activities. Additionally, they may have difficulty making arrangements to participate. However, limited its impact, the residents' committee does play a positive role and those public activities do benefit the migrants in the gated neighbourhoods.

This paper emphasizes migrants' social networks in a medium-sized city, with a built-up area of less than 100 km^2. That means that the distance the migrants move – hence the distance to their former neighbours – is usually less than 10 km. They can meet each other in less than half an hour by bike. If they want, they can still help out, taking care of the children and the elderly in the family. In this sense, whether people meet each other or not is primarily related to migrants' choices; it is less a question of the constraints caused by geographic separation. However, in metropolitan areas like Beijing and Shanghai, one can imagine that the moving distance and the distance to the former neighbours would be much longer, especially in the situation of forced relocation. Because of the large scale of demolition-led redevelopment and the large population that is being displaced, the local governments are less likely to relocate all villagers to a few newly built neighbourhoods, as Yangzhou once did. Therefore, migrants might be less likely to live close to their former neighbours after relocation. In that case, the question can be raised which social network strategies they will develop after relocation in metropolitan areas, and what the consequences would be. Questions like these will be taken up in our future research.

In terms of its social relevance, this study has explored some directions for further improvement in the work of the residents' committees in order to increase the benefits for displaced migrants. Basically, their services should be not only provided to residents with the local *hukou* status, but also to migrants without it. In that light, the residents' committees could do their support work. An alternative option is to allow the *hukou* reform to offer a temporary registration for migrants with access to public services (c.f. Lu and Jiao, 2010). In that case, migrants can be registered by the residents' committees and thereby gain access to their consultation services. First, as every private-rental contract needs to be recorded, the residents' committee can help involuntarily relocated residents with information on new accommodation – no matter whether or not they have a local *hukou* status. Based on the outcomes of the interviews, we are confident that such support would promote trust between involuntarily relocated migrants and the residents' committee. Secondly, our interviewees living in urban villages expressed a strong willingness to participate in public activities, but these were rarely on offer there. The municipal government could support the residents' committee there by, for instance, funding the programme 'neighboring care for migrant children and elderly' in the urban villages. Thirdly, the interviews showed that lower educated migrants were more willing to participate in leisure activities than in cultural activities. If the residents' committee could organize entertainment, games and sporting competitions, the participation of lower educated migrants would increase. Greater participation, in turn, could promote their integration in the destination neighbourhood.

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