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Migrant Intra-urban Residential Mobility in Urban China

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ABSTRACT *Migrant housing and mobility patterns are affected by both the unique institutional factors related to migration and a common set of socio-economic characteristics shared by urban residents. China's unprecedented waves of internal migration are accompanied by long-standing rural–urban and local–nonlocal divides that have been institutionalized through the household registration system. This paper empirically assesses intra-urban migrant mobility in two of China's largest cities, Beijing and Shanghai. It examines the range and determinants of migrant mobility behaviour and rates, tenure and spatial patterns of migrant intra-urban mobility, and key sources of information and assistance in migrant residential moves. The main findings are based on data drawn from city-wide migrant housing surveys, supplemented by in-depth interviews. Demographic factors such as age and education prove to be significant predictors of both actual moves and prospective mobility. Migrants who rent public housing as their initial housing choice are much less likely to make moves subsequently and experience a lower average mobility rate. Longer-term migrants seem to gain some degree of residential stability, making duration of residence the single most influential factor for mobility rate. However, the high rate of mobility is not necessarily driven by the need for tenure or even amenity as few migrants make the transition from renters to owners after years of living in the cities.*

KEY WORDS: Migration, housing, residential mobility, urban China

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Residential patterns and outcomes are particularly informative in the study of adaptation of migrants, as residence is linked to patterns of social interactions and socialization. Residential mobility, in particular, has a tendency to co-vary with socio-economic mobility. Given the shortage of affordable housing in developing cities, many migrants have no choice but to settle for substandard housing and become a permanent urban underclass. On the other hand, some migrants bring with them informal channels for the flow of social connections that can improve their housing opportunities and living experiences in cities.

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China's unprecedented waves of internal migration over the last two decades have attracted growing attention from both scholars and authorities. Largely recognized as temporary migrants, not permanent, and expected to return to the countryside in the long run, most migrants cannot obtain urban household registrations and have limited access to the housing distribution system.[1] Nevertheless, many of them stay in cities for a prolonged period of time and often have their families with them. It is important to explore whether settlement patterns of migrants in China's cities resemble those in other developing countries, which may help lead to a better understanding of the potential socio-economic outcomes of migration.

This paper will empirically assess migrant housing mobility in two of China's largest cities, Beijing and Shanghai. It will first review key theories of migrant settlement and residential mobility, and then outline the institutional barriers related to housing migrants encountered in urban China. The next two sections of the paper will examine the range and determinants of migrant mobility patterns and rates (including socio-economic and housing-related factors). The paper will then present the tenure and spatial patterns of migrant intra-urban mobility. The final section discusses the key sources of information and assistance in migrant residential moves. Highlighted here is the importance of kinship and friendship ties, as migrants often use them as social institutions in making settlement choices and overcoming mobility barriers.

The main findings of this paper are based on data drawn from city-wide migrant housing surveys in Shanghai and Beijing, supplemented by in-depth interviews. Multi-stage stratified cluster sampling procedures were used for selecting respondents in the surveys. Districts were first selected in three stratified geographic zones: central city, inner suburb and outer suburb. Within each selected district, one or two neighbourhoods were randomly selected.[2] Population-proportionate-to-size procedures were then used to determine the exact number of migrants to be surveyed in each neighbourhood. In addition, a small number of migrants were selected from representative work units in different economic sectors. The survey in Shanghai generated complete questionnaires for 1789 migrants and was conducted between December 1998 and March 1999 in 22 neighbourhoods of Shanghai's 17 districts/counties (out of a total of 20) and 11 enterprises/institutions. The survey in Beijing was carried out between May and July 2000 in 18 neighbourhoods of Beijing's 12 districts/counties (out of a total of 18) and 13 work units, with complete questionnaires for 931 migrants. After the surveys, a pool of longer-term migrants (77 in Shanghai and 59 in Beijing) were selected and visited again for in-depth interviews.

The basic demographic characteristics and geographic locations of the surveyed migrants closely resemble those of the larger floating population officially enumerated by both cities in 1997 (listed in parentheses below). For the Shanghai sample, the average age is 29.6 (versus 29.9 in the 1997 city survey), 62.1 per cent is male (versus 70.4), 68.5 per cent is married (versus 67.4), and 58.1 per cent has attended junior high schools (versus 57.1). For the Beijing sample, the average age is 28.6 (versus 28.2 in the 1997 city survey), 61.0 per cent is male (versus 66.9), 61.7 per cent is married (versus 57.0), and 50.1 per cent has attended junior high schools (versus 60.8). The geographic distribution across the central city, inner suburb and outer suburb for the Shanghai sample is 37.4: 44:6: 18:0 (versus 41:5: 40:3: 18.2) and for Beijing 20.8: 62.4: 16.8 (versus 16.0: 62.9: 21.1).

Understanding Migrant Residential Mobility

In spite of the temporary status of China's migrants, they show many socio-economic characteristics similar to those of migrants in other developing countries undergoing rapid urbanization. Coming primarily from rural origins, migrants tend to be concentrated among the most economically active group (particularly between the ages of 15 and 34). Overall, male migrants outnumber females and economic migrants outnumber those moving for social and cultural reasons. The majority of migrants move to urban areas to seek employment, and family migration is on the rise. Thus, mainstream theories of migrant housing and settlement are the most important, relevant references. The applicability of these theories, however, may be limited given that housing and land systems operate with a significant level of fluidity in China as its economy undergoes the transition from plan to market.

Turner (1968) suggests a two-stage process for rural–urban migrants in urbanizing countries: initial settlement in central city slum rental units and subsequent intra-urban relocation to peripheral self-help shanties or housing. The choice of housing represents a compromise among three housing needs: access, amenity and tenure. Inner-city slums are the major receiving areas for new migrants who view proximity to employment as the highest priority. As migrants improve their income level, they move to build peripheral informal shanties for residential stability or ownership and then upgrade shanty dwellings over time into more substantial houses to allow for amenity considerations. Turner's notion of upward housing mobility of migrants, from slum renters to squatter owners, concurs with the popular belief contrasting 'slum of despair' and 'shantytown of hope' (Conway, 1985; Eckstein, 1990; Ulack, 1978). Following Turner, a large number of studies have been conducted across Latin America and in some African and Asian countries. Many agree with Turner's notion of housing mobility in which most new migrants rent or share and are likely to move into an ownership of self-help housing later.

Migrant settlement and mobility patterns may be affected by a number of individual-level factors, chief among which are proximity to employment, duration of residence, employment status, income level, gender and family status (Conway, 1985; Gilbert & Varley, 1990; Klak & Holtzclaw, 1993; Miraftab, 1997; Selier & Klare, 1991; Sudra, 1982; Turner, 1968; UNCHS, 1982). There appears to be a direct relationship between housing choices (e.g. renting versus ownership) and economic status of migrants. Often it is only after migrants reach the stage of a secure job with reasonable income that they are able to become owners of a dwelling. Proximity to existing or potential employment, measured in distance or travel time, is another major determinant of locational behaviour of migrants. Housing type also is directly linked to duration of residence in the city. Over time migrants tend to move from rented rooms to squatter dwellings and then to houses. Some researchers further point out the importance of kinship and friendship ties in housing decisions (Banerjee, 1983; Conway, 1985). Issues of land rights, land market structure and housing markets also are important factors (Collier, 1976; Gilbert & Ward, 1985; Selier, 1991; UNCHS, 1982). Tenure or amenity considerations are generally less important in driving migrants into peripheral settlements than the mere urge to escape continuously rising rents within the city.

Given the unique socio-economic characteristics of migrants in developing countries, this body of literature on migrant housing patterns has not been an integral part of the general literature on residential mobility. However, a close scrutiny reveals substantial

sharing of theoretical insight, particularly with regard to some of the most important factors underlying mobility. Residential mobility research has focused on three broad themes: the decision to move, tenure choice, and the interlinked nature of moving and tenure choice (summarized in Clark & Huang, 2003). The first theme is most relevant to studying migrant intra-urban mobility in urban China since most migrants are yet to have any tenure choice, as discussed in the next section.

To understand the decision to move, demand variables such as family size, education, age, life course events and income are emphasized (Cadwallader, 1992; Clark & Dieleman, 1996; Li & Siu, 2001). The most recent mobility research has been set within the context of the life course. There are significant connections among the decision to move and changes in the life cycle, although it is less clear how they apply to minority or ethnic households (Clark & Dieleman, 1996; Clark & Ledwith, 2005). Age, marital status, the presence of children, income, housing tenure and space, and the previous history of moves all affect the likelihood of moving. Marriage, childbirth and divorce are particularly significant triggers. However, opinions differ about the strength of the relationship between intention to move and actual mobility behaviour (Cadwallader, 1992).

Recently, more attention has been given to supply-side variables, including availability of housing opportunities, constraints on housing choices and housing market tightness (summarized in Li & Siu, 2001; Li, 2003, Huang & Clark, 2002). These variables also play an important role in the relationship between prospective mobility and actual moves, because the availability of suitable alternatives to current housing is crucial (Cadwallader, 1992). Supply-side factors are particularly relevant to understanding migrant housing behaviour in urban China. As illustrated in the next section, the gradual commercialization of urban housing offers only limited choices for migrants. Institutional factors still very strongly condition housing opportunities available to migrants.

Institutional Context: Migrants in China's Urban Housing System

There are two layers of institutional barriers that most migrants encounter in their search for housing in the cities, as a result of being from rural China (rural–urban divide) and being outsiders (local-nonlocal divide). The rural–urban divide dates back to at least the early 20th century when the old Western cliché of urban superiority became a new trend in Chinese society (Rudolph & Lu, 2004). Despite efforts to reduce the distinction between city and countryside after the Communist Party took power in 1949, rural–urban distinction continued to widen. This can be attributed to the pursuit of a development strategy that promoted heavy industries, enforced through a trinity of institutions—the unified procurement and sale of agricultural products, the commune system, and a household registration system or *hukou* (Yang & Cai, 2000). Implemented since the mid-1950s, the *hukou* system requires each citizen to register in one, and only one, place of regular residence. It contains two related parts (Chan, 1996): place of registration and type of registration (urban versus rural). Bound to collective farming, peasants were completely cut off from many urban privileges.

The rural–urban divide in housing provision dated back to the same early socialist period as housing had long been a form of social welfare to urban residents until recent reforms. The dominant route to obtain housing, prior to 1999, was through low-rent housing distributed by either work units or municipal governments. However, this benefit did not apply to local residents with rural *hukou* or peasants in the countryside, who did not

have access to either municipal or work-unit public housing. Traditional family houses and private housing constructed on land allotted by production brigades were the norm for them, even in rural pockets within cities (Wu, 2002a). With recent reforms, these residents still do not have access to the housing provident funds established in cities and related low-interest mortgages.

The local–nonlocal divide also has historical roots, as migrants throughout China's history have encountered various forms of mistreatment. One of the best-known examples is the low socio-economic status in Shanghai held by migrants from northern Jiangsu in the Republican period (Honig, 1992). Disdained by local residents, they were given a common depreciating nickname and confined to undesirable jobs and overcrowded shanty settlements. Discrimination against migrants was not limited to urban areas, as shown in the case of the Hakkas people throughout southeastern China. A migrant group distinguished primarily by dialect, they were often the object of prejudice, described as uncivilized and poor (Honig, 1992).

The system of *hukou* has institutionalized this local–nonlocal divide and exerted a profound impact on China's current migrants. A local urban *hukou* continues to be an important qualification for accessing several types of urban housing, particularly those that are more affordable and in better condition (see Table 1). Migrants cannot acquire ownership of municipal and work-unit public housing directly because only sitting tenants (local urban residents) can do so. Both the Economic and Comfortable Housing and affordable rental units also are reserved for local urban residents only. On the secondary housing market where older housing units are traded, participation generally requires

Table 1. Types of urban housing and their availability to migrants

		Availability to migrants	
Type of housing	Qualification	Own	Rent
Commodity housing	Anyone, but only those with local urban *hukou* can qualify for housing provident funds and related mortgage loans	Yes	Yes
Economic and comfortable housing	Local urban residents with low or medium income can purchase at subsidized price		Yes
Municipal public housing	Sitting local urban tenants can purchase and trade units on secondary housing market		Yes
Work-unit public housing	Sitting local urban tenants can purchase and transfer on secondary housing market		Yes
Low-rent housing	For rental to local urban residents with the lowest income		
Resettlement housing	For local urban residents relocated from areas undergoing redevelopment		Yes
Private housing	Pre-1949 urban housing units passed on within family and housing in rural areas	Yes	Yes
Dormitory housing	Housing managed by local enterprises or institutions		Yes
Migrant housing complex	Housing managed by local government agencies for migrants		Yes

Note: Rental is directly from sitting residents with rental permits in all types of housing except dormitory housing and migrant housing complex.
Source: Based on Wu (2004).

Table 2. Mean values and mobility patterns

	Mean value	Average mobility[a] rate per annum (%)	Percentage of movers	Percentage plan to move
Age (years)	29.24	75.7	60.3	9.0
Gender				
Female	0.38	63.5	56.5	9.3
Male	0.62	83.7	62.7	9.0
Education (years)	8.23			
Marital status				
Married with family in city	0.44	55.9	66.0	10.5
Married without family in city	0.22	78.4	55.7	8.0
Not married	0.34	95.1	55.7	8.2
Employment status				
Currently employed	0.93	73.9	60.4	8.9
No employment	0.07	120.9	59.4	11.4
Duration of residence in city (years)	4.03			
Type of *hukou*				
Rural	0.87	79.8	60.8	8.8
Urban	0.13	56.8	57.3	10.8
Initial housing type				
Renting private housing	0.40	78.0	63.3	n.a.
Renting public housing	0.08	35.7	42.3	n.a.
Dorm/workshed	0.39	80.7	61.7	n.a.
Staying with local residents	0.06	52.6	57.9	n.a.
Other housing[b]	0.07	107.4	58.2	n.a.
Initial housing location				
Central city	0.36	68.7	60.7	n.a.
Inner suburb	0.50	75.0	61.3	n.a.
Outer suburb	0.14	96.9	57.9	n.a.
Initial housing size (per capita housing area m^2)	6.82			

Current housing type				
Renting private housing	0.43	n.a.	66.0	11.2
Renting public housing	0.14	n.a.	65.8	11.3
Dorm/workshed	0.33	n.a.	54.5	5.5
Staying with local residents	0.04	n.a.	40.0	5.9
Other housing[b]	0.06	n.a.	52.4	11.8
Current housing location				
Central city	0.37	n.a.	61.0	9.9
Inner suburb	0.49	n.a.	60.2	8.6
Outer suburb	0.14	n.a.	59.5	7.7
Current housing size (per capita housing area m^2)	7.79			
Current housing qualitative index[c]	0.51			
Years of residence in current housing	2.13			

[a] Average mobility applies to migrants in Beijing only.
[b] 'Other housing' includes commercial housing, and living in self-built shed, on the street or other temporary space.
[c] Housing qualitative index is a composite of seven aspects of housing (Index = $\sum$Xi/9). These aspects use a single scale: electricity (0 = none, 1 = yes), water (0 = none, 1 = yes), piped gas or propane (0 = none, 1 = yes), kitchen (0 = none, 1 = shared, 2 = private), bathroom (0 = public only, 1 = shared, 2 = private), type of structure (0 = temporary, 1 = permanent), and purpose of dwelling (0 = residential and working or other purpose, 1 = solely residential).

a local *hukou* although theoretically migrants can purchase this type of housing after completing a lengthy process of official approval (Bi, 2000; Wu, 2004). Commodity housing, the only real property sector open for migrant ownership, is unaffordable for most migrants. A new type of housing has become available to migrants—a migrant housing complex managed by local government agencies. Such housing is generally available for rental to migrants working in nearby enterprises or engaged in small businesses for a sustained period of time.

Given this larger context, migrants display different housing choices not only from local residents but also migrants in other developing countries. Currently, homeownership is yet to become an attainable goal, and therefore the security offered by housing tenure is less relevant as a motivation for migrants in making housing decisions. In Shanghai and Beijing, home ownership is minimal (about 1 per cent) for migrants. Renting represents the best choice for migrants and more than half of them in both cities are renters. Private rental housing accommodates the largest number of migrants (approximately 43 per cent), especially in suburban areas that used to be or still are agricultural. Another 14 per cent of migrants rent public housing. In addition, when migrants find jobs in state and some collective enterprises, many of them (33 per cent) also obtain the access to dormitory housing provided by the enterprises (Wu, 2004).

Generally, the division between local and non-local associated with the *hukou* system is the single most prominent predictor of migrant housing choice and conditions. There is a general disadvantage to all migrants in access to urban housing because of their non-local status even when housing reforms have significantly widened the choices for local urban residents (Wu, 2004). Housing sectors open to migrants, especially commodity housing and rental housing, tend to be more subject to market forces. Market-related factors such as income and education appear to affect migrants more significantly than local residents, many of whom are still subject to institutional factors inherited from the pre-reform era (e.g. work-unit size and rank). In addition, a lack of regulatory oversight plagues the rental housing sector and increases residential instability for many migrants. Protection of rental rights is often secondary to public security concerns even when regulations have taken effect in some cities.

Migrant Mobility Behaviour and Triggers

The majority of migrants in both Beijing and Shanghai continue to move after their arrival in the cities. More than 60 per cent (60.3) of migrants surveyed have made at least one residential move (see Table 2), while almost one-third (31 per cent) have moved twice or more. A sizeable group of them (about 20 per cent in Beijing) have moved multiple times (up to 10 moves) within an average duration of residence of about four years in the cities. However, such mobility behaviour may not be the result of voluntary or predictive actions as most migrants express little willingness to move again when asked. In fact, only about 9.1 per cent have definite plans to move in the near future (6.2 per cent have made previous moves while 2.9 per cent are non-movers). This gap between prospective mobility and actual moves is quite striking even given that there is generally some discrepancy under ordinary circumstances.

Migrants between the ages of 25 and 35 are the most mobile group (see Table 3), a finding consistent with the general trend worldwide. However, the percentage of movers in this age group (about 65 per cent) is much higher than that observed in, say, the US in 1990 (about 30

Table 3. Percentage of movers by age and education groups

	Male	Female	Total	*N*
Age group				
Younger than 25	59.0	54.8	57.1	982
25 to younger than 35	65.2	59.3	63.0	1113
35 to younger than 45	63.1	57.4	61.3	408
45 and older	63.6	47.6	59.0	217
Educational level				
Little or no education	55.6	53.6	54.4	228
Elementary school	63.8	54.5	59.6	520
Junior high school	61.9	56.3	59.9	1505
Senior high/vocational school	67.4	59.3	65.0	408
Associate degree or above	53.8	89.5	65.5	58

per cent), where the level of mobility is considered high among industrialized countries (see Clark & Dieleman, 1996). Residential moves during this period of the life cycle are often spurred by family formation and expansion. The effect of such events as marriage and childbirth, however, cannot be verified in this study as the large scale of the migrant housing surveys did not allow for more detailed life-course information. Male migrants are more likely to move than women at all age levels. Also conforming to the general trend, the higher the level of education the greater the likelihood of moving (with a slight exception in the group of male migrants with associate degrees or above, see Table 3).

The housing choice migrants have made upon initial arrival in the cities also seems to lead to a varying range of mobility behaviour (see Table 2). Those who rent public housing tend to be much less likely to move and have the lowest average annual mobility rate as well. This may be related to how the rental of public housing is arranged. As low-rent housing was distributed by either work units or municipal governments until 1999, public housing had only been accessible by local urban residents, excluding even local residents with rural *hukou*. After housing reforms, urban residents who have purchased the ownership right of public housing can rent out their units. Shanghai has actually permitted the rental of public housing of which the sitting tenants have only a use right. In Beijing such housing is still theoretically prohibited from being rented out unless it has the approval of municipal housing authorities or relevant work units (Wu, 2004). However, a substantial quantity of such public housing has been rented out to migrants, often through personal or work-related connections.[3] Such rental arrangements are likely to involve longer terms and more stability.

To better understand the complex relationships between the decision to move and characteristics of migrant households and housing, a multivariate logistic model has been used to analyse triggers and their effects. The dependent variable is the mover status (move/no move), while independent variables include those that measure age, gender, education, family status, employment status, *hukou* status, initial housing choice and location, and initial housing space (see Table 4).[4] The inclusion of residential location is intended to reveal whether there are any spatial variations in mover status across the city, as studies elsewhere (especially on Latin American cities) suggest that migrants initially living in the central city are more likely to move. The explanatory power of the model is limited, but a number of triggers clearly have significant effects on mobility behaviour. Among them, family status is the foremost predictor of mover status; married migrants

Table 4. Regression estimates for mover status

Independent variable	Coefficient	Odds ratio
Socioeconomic factors		
Age (years)	0.074	1.077**
Age squared	−0.001	0.999*
Gender (female = 1)†	−0.229	0.795*
Education (years)	0.062	1.064***
Marital status (reference: not married)†		
Married with family in city	0.349	1.417**
Married without family in city	−0.285	0.752*
Employment status (currently employed = 1)†	−0.016	0.984
Type of *hukou* (rural = 1)†	0.223	1.249
Initial housing type (reference: other housing[a])†		
Renting private housing	0.236	1.266
Renting public housing	−0.647	0.524**
Dorm/workshed	0.270	1.310
Staying with local residents	0.291	1.337
Initial housing location (reference: outer suburb)†		
Central city	0.189	1.208
Inner suburb	0.132	1.141
Initial housing size (per capita housing area m^2)	−0.021	0.979**
−2 Log likelihood of model		3382.979
Model chi-square		5.755
Degree of freedom		8
Number of cases		2609
Percent correct		61.9

Significance levels: * < 0.05, ** < 0.01, *** < 0.001.
† Dummy variable.
[a] 'Other housing' includes commercial housing, and living in self-built shed, on the street or other temporary space.

with family in the cities are more likely to have made intra-urban moves. Age has a positive effect on the likelihood of moving, although such likelihood drops after a certain age as indicated by the negative coefficient for the age-squared. Results shown in Table 3 suggest that for both man and woman, the percentage of migrants who move declines for the 35–45 and older segments. Migrants with more education are more likely to move and so are male migrants.

The significant effect of one housing choice, renting public housing, indicates that migrants initially living in such housing are much less likely to be movers throughout their residence in the cities. In addition, mobility patterns seem to be linked to space, measured by the proxy of initial per capita housing area. The larger the initial housing space, the less likely a move will be made subsequently. This conforms to the general trend in residential mobility in that the search for more housing space often plays an important role. In fact, most intra-urban residential moves are prompted by housing considerations when housing markets are largely unrestricted (Clark & Huang, 2003).

Despite such an active mobility pattern, most migrants express little intention to move again in the near future (see Table 2). In the model for planned mobility, a similar set of socio-economic and housing factors are used as independent variables (Table 5). Only a few of them prove to be predictive. Again, age and education have significant positive effects on prospective moves. Older migrants are more likely to plan a move, although this

Table 5. Regression estimates for planned mobility

Independent variable	Coefficient	Odds ratio
Socioeconomic factors		
Age (years)	0.153	1.165**
Age squared	−0.002	0.998*
Gender (female = 1)†	0.157	1.170
Education (years)	0.071	1.074**
Marital status (reference: not married)†		
Married with family in city	−0.405	0.667
Married without family in city	−0.494	0.610*
Employment status (currently employed = 1)†	−0.154	0.858
Type of *hukou* (rural = 1)†	−0.123	0.884
Current housing type (reference: other housing[a])†		
Renting private housing	−0.031	0.969
Renting public housing	−0.057	0.944
Dorm/workshed	−0.838	0.433**
Staying with local residents	−0.646	0.524
Current housing location (reference: outer suburb)†		
Central city	0.407	1.502
Inner suburb	0.132	1.141
Current housing size (per capita housing area m^2)	0.010	1.010
Current housing qualitative index	−0.059	0.942
Years of residence in current housing	−0.003	0.997
−2 Log likelihood of model		1544.536
Model chi-square		6.457
Degree of freedom		8
Number of cases		2628
Percent correct		90.9

Significance levels: * < 0.05, ** < 0.01, *** < 0.001.
† Dummy variable.
[a] 'Other housing' includes commercial housing, and living in self-built shed, on the street or other temporary space.

positive relationship tapers off for those in the 35–45 and older segments, as in the case of actual mobility. Migrants living in dormitory housing as well as married migrants without family all tend to express less intention to move in the near future. A more important finding is that none of the indicators of current housing consumption appears critical in predicting the probability of future mobility. The duration of stay factor also does not have any significant effect. This diverges from the general trend; housing consumption is the driving force that generates expectations for moving as equally as it does for actual mobility (Clark & Ledwith, 2005). An explanation may be that most migrants come to cities to find work to augment their income, rather than to settle down because of official restrictions. As a result, they make housing decisions primarily based on convenience to work or business, as demonstrated by over 65 per cent of responses in both cities' migrant housing surveys.

Mobility Rates and Determinants

Migrants tend to experience a much higher level of residential mobility, especially when compared to local residents. The 884 valid respondents in the Beijing sample reported a total of 1830 moves during the 22-year period since 1978.[5] Given that these migrants

entered the city at different times, individual mobility rates were calculated first and then indicators of central tendency were obtained. The median mobility rate was 31.2 per cent per annum (average was 75.7 per cent), with a standard deviation of 123.5 per cent. This rate was significantly higher than that reported for local residents in Beijing during a comparable time period (1980–2001), at 4.26 per cent (Li, 2004).

Mobility rates for migrants change steadily by duration of residence in the city. As migrants stay longer in Beijing, their average annual mobility rate declines by a significant degree (see Figure 1).[6] The frequency of moves in the first year is particularly high (averaging about 112 per cent), with multiple moves for many migrants. Figure 1 thus appears to indicate a process of settlement for migrants, even though longer-term migrants still experience much higher mobility rates than local residents.

The high rates of mobility for migrants are probably the result of housing tenure choices. The overwhelming majority of migrants in urban China are renters, a general disadvantage experienced by all migrants in access to urban housing because of their non-local *hukou* status. The majority of them are unable to gain ownership to affordable housing in cities. Research shows that renters in general are more mobile than owners, often about three to four times more so (Cadwallader, 1992; Clark & Dieleman, 1996; Li, 2003). However, because the number of migrant homeowners in Beijing is extremely small (less than 1 per cent), it is impossible to empirically test the influence of tenure on mobility rate.

To understand other determinants of mobility rate, two general groups of independent variables are used in a regression analysis. The dependent variable is the average mobility rate per annum. Among the independent variables, socio-economic factors include age, education, gender, family status, duration of residence in the city, employment status and type of *hukou*. Housing-related factors are the tenure type of initial housing and its

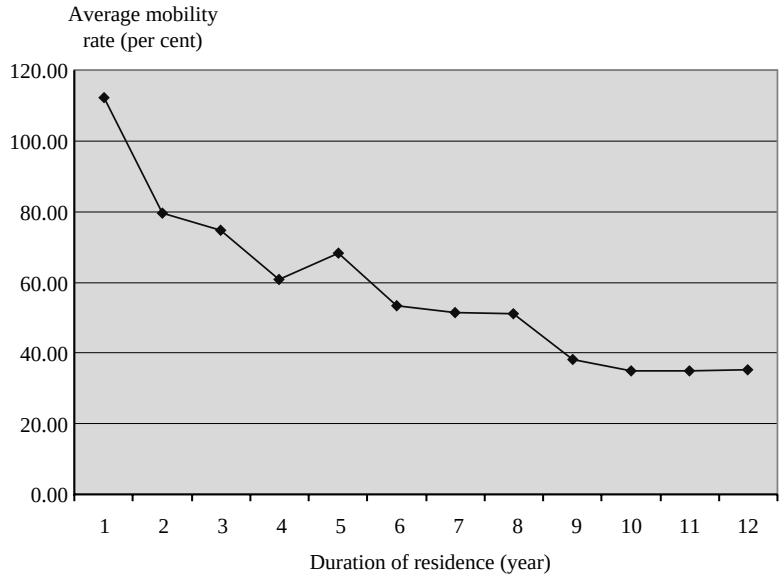

Figure 1. Average annual mobility rates over duration of residence for migrants in Beijing

geographic location (see Table 6).[7] The overall effect of the independent variables on mobility rate is rather moderate. The most important predictor is duration of residence in the city, which bears a negative relationship with mobility rate. This confirms the results from the bivariate analysis presented in Figure 1 that short-term migrants tend to be significantly more mobile than long-term ones. Although the survey data are not longitudinal and therefore cannot show individual mobility patterns over time, this seems to suggest that as migrants stay longer in the city they are more likely to gain some degree of residential stability.

Migrants with current employment tend to experience a lower level of mobility. This implies that residential move decisions may be linked to job-related events, given that the majority of migrants come to the city to seek employment to augment income. In-depth interviews with 59 longer-term migrants in Beijing show that 40 out of 90 reported residential moves are related to work, triggered by such events as job change, change in business location and completion of work projects. For migrants in the construction sector, they live and move with work. The mobility rate of many self-employed migrants, such as those operating food stalls and convenience stores, also is primarily determined by their work location and how profitable that location is for business.

Hukou status appears to have some effect on the rate of residential moves, as migrants with rural *hukou* experience a much higher level of mobility than their urban counterparts (see Table 2). One possible explanation may be that migrants with urban *hukou* do better in

Table 6. Regression on mobility rate for migrants in Beijing

Independent variable	Standardized coefficient	*t*-value
Socioeconomic factors		
Age (years)	−0.058	−1.537
Age squared	−0.051	−1.409
Gender (female = 1)†	−0.081*	−2.290
Education (years)	0.059	1.567
Marital status (reference: not married)†		
Married with family in city	−0.091*	−2.477
Married without family in city	−0.042	−1.087
Employment status (currently employed = 1)†	−0.097**	−2.832
Duration of residence in city (years)	−0.157***	−4.481
Type of *hukou* (rural = 1)†	0.089**	2.620
Initial housing type (reference: other housing[a])†		
Renting private housing	0.014	0.358
Renting public housing	−0.091**	−2.628
Dorm/workshed	−0.037	−0.921
Staying with local residents	−0.045	−1.298
Initial housing location (reference: outer suburb)†		
Central city	−0.009	−0.266
Inner suburb	−0.031	−0.919
Initial housing size (per capita housing area m^2)	−0.039	−1.161
R^2	0.067	

Significance levels: * < 0.05, ** < 0.01, *** < 0.001.
† Dummy variable.
[a] 'Other housing' includes commercial housing, and living in self-built shed, on the street or other temporary space.

their housing situation in terms of housing size and conditions (Wu, 2004), and thus have less incentive to move.[8] Two other socio-economic factors also have some influence on mobility rate. Married migrants with family tend to move less, and this effect of marital and family status is in line with most findings in the literature (Li, 2004). Unmarried migrants without families have the highest mobility rate (95 per cent), and even married migrants move frequently (78 per cent) when their families are not with them in the cities. Having families in town substantially reduces the average annual mobility rate to about 56 per cent (Table 2). Female migrants also move less, probably because more of them are married with family and/or not currently employed. Both age and education do not seem to assert significant influence on mobility rate.

Migrants who initially rent public housing report lower mobility rates than those in all other housing types, as discussed in some detail in the last section. To some extent, migrants staying with local residents (another housing type) share similarly low mobility rates (see Table 2), although the effect is much less significant. Most migrants in this housing arrangement are either relatives of, personally connected to, or employed by the urban households. This finding is in line with previous research in which housing choice is found to have a significant impact on migrant housing conditions. When migrants gain some access (indirectly) to housing sectors that are officially open to local urban residents only, they tend to enjoy better housing conditions in the form of larger housing space and better household facilities (Wu, 2004). Now it is clear that such access also offers them a higher level of residential stability.

Tenure and Spatial Patterns of Migrant Intra-urban Mobility

To what extent are such high mobility rates associated with change in housing tenure for migrants in urban China? What are the spatial implications of migrant intra-urban mobility? Answers to these questions, discussed in this section, not only allow for a better understanding of migrant residential behaviour but also an opportunity to place China's experience in a comparative context. Research on migrant housing in Latin American cities reveals that new migrants (labelled as 'bridgeheaders') initially seek deteriorating rental shelter, primarily in the central city but sometimes scattered across cities for good access to jobs. Over time, migrants generally occupy better housing, from rented rooms to self-built shanties or houses often closer to the urban periphery. Once this transition is made, migrants become consolidators (Klak & Holtzclaw, 1993; Turner, 1968).

To examine tenure mobility patterns of migrants in Beijing and Shanghai, the tenure status of current housing is compared with that of previous housing and initial housing upon first arrival in the cities (Table 7).[9] Columns indicate current housing types. The overall patterns are striking; the majority of migrants appear to be trapped in the two dominant housing types in spite of high mobility rates. These are renting private housing and living in dorm or workshed, in which overall housing conditions tend to be worse as shown by previous research (Wu, 2004). A very small proportion of migrants have switched to housing types that are more livable and stable. When migrants stay with local residents, thus gaining indirect access to the urban housing distribution system, their housing conditions improve markedly. For those migrants able to afford commodity housing, housing conditions are on par with the locals (Wu, 2004).

It seems that for the most part everyone remains a 'bridgeheader', not yet significantly moving into a consolidator 'phase', even though a large number of them have lived in the cities for several years. One possible explanation may be to maintain ties to places of origin, since many see migrating to cities as a seasonal pursuit to augment agricultural income. However, the main explanation would lie with local controls on migrant settlement, which force people (even those with families in tow) into more of a bridgeheader existence than they may otherwise prefer. Specifically, the system of granting only temporary urban residence permits to migrants steers them away from making the tenure transition into self-help housing or ownership. In addition, municipal authorities' intolerance of migrant congregation and squatting has made informal settlements a non-viable option for migrants.

Over time, migrants appear to gravitate towards private rental (see Table 7). This is particularly true for those who at one point rented public housing, because between 36 and 40 per cent of them have made the switch. Almost one-third of migrants who came to the cities with some personal connections and initially stayed with urban residents are now renting private housing, a move that may suggest a negative change in housing conditions. This switch also has happened to about one-third of migrants originally living in other housing arrangements and 30 per cent of those in dorm/work units. However, the comparison with previous housing types indicates a less clear pattern for this switch.

It is obvious that the rental sector represents the best opportunity for most migrants throughout their stay in the cities, which exposes them to a significantly higher level of instability and much poorer housing conditions. The rental market is still immature with countless intermediate rental agencies operating and regulations taking effect only recently. As cities scramble to develop effective rental regulations, an increasing amount of deleterious building and rental activity continues, largely in the form of unauthorized construction and leasing of unsafe dwellings. Even when regulations on rental housing take shape in some cities, concerns for adequate housing conditions and rental rights tend to be secondary (Wu, 2004).

Spatially, most migrants seem to remain fairly stable (see Table 8). Across all three zones and at least two housing changes, more than 75 per cent of migrants have stayed around the same general geographic location. This may suggest that migrants tend to make short-distance residential moves to minimize unfamiliarity with the environment. Almost equal percentages of migrants have moved between the central city and inner suburban area, making the two zones both important locations for housing migrants at different durations of residence. However, previous research does show that over time there is some change in the overall geographic location of migrants in Shanghai. During the mid-1980s, comparable amounts of migrants lived in the central city and inner suburb area. With continuing urban expansion and downtown redevelopment, Shanghai's inner suburb is now the primary receiving area for migrants (Wu, 2002b).

Sources of Information for Residential Moves

Given the high mobility rates and limited access to housing opportunities, where do migrants gather information and obtain assistance to facilitate their moving experience? It appears that the absence of a formal housing market available to migrants leaves them heavily reliant on informal social networks for information. Responses from in-depth interviews with migrants in both cities indicate that more than half of them have found

Table 7. Tenure mobility of migrants (by current housing)

	Renting private housing		Renting public housing		Dorm/workshed		Staying with local residents		Other housing[a]		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Initial housing												
Renting private housing	471	68.8	118	17.2	62	9.1	10	1.5	24	3.5	685	100.0
Renting public housing	39	40.6	42	43.8	9	9.4	2	2.1	4	4.2	96	100.0
Dorm/workshed	196	29.7	58	8.8	375	56.7	16	2.4	16	2.4	661	100.0
Staying w. local residents	32	32.3	12	12.1	27	27.3	16	16.2	12	12.1	99	100.0
Other housing[a]	34	35.4	19	19.8	19	19.8	4	4.2	20	20.8	96	100.0
Previous housing												
Renting private housing	309	72.2	67	15.7	33	7.7	3	0.7	16	3.7	428	100.0
Renting public housing	27	36.0	41	54.7	4	5.3	2	2.7	1	1.3	75	100.0
Dorm/workshed	40	14.8	8	3.0	214	79.0	5	1.8	4	1.5	271	100.0
Staying w. local residents	3	10.3	9	31.0	7	24.1	7	24.1	3	10.3	29	100.0
Other housing[a]	14	40.0	7	20.0	1	2.9	3	8.6	10	28.6	35	100.0

[a] 'Other housing' includes commercial housing, and living in self-built shed, on the street or other temporary space.

Table 8. Spatial mobility of migrants (by current housing)

	Central city		Inner suburb		Outer suburb		Total	
	Number	%	Number	%	Number	%	Number	%
Initial housing								
Central city	447	75.6	123	20.8	21	3.6	591	100.0
Inner suburb	147	18.2	617	76.3	45	5.6	809	100.0
Outer suburb	10	4.8	41	19.5	159	75.7	210	100.0
Previous housing								
Central city	238	80.4	53	17.9	5	1.7	296	100.0
Inner suburb	75	17.1	346	79.0	17	3.9	438	100.0
Outer suburb	2	2.1	9	9.6	83	88.3	94	100.0

their initial housing through the help of friends, relatives or co-villagers (see Table 9). The assistance of relatives is particularly important when migrants first arrive, a trend also seen elsewhere. Research in Latin America and Africa shows that migrants' first place of residence in the city is largely predetermined by the location of kin or friends (Abu-Lughod, 1961; Collier, 1976; Conway, 1985). Although this reliance on social networks by migrants in urban China declines gradually over the duration of residence stay, a substantial proportion of migrants continue to rely on them for the next few residential moves. Interestingly, as migrants stay longer in the city, they begin to make friends locally and rely less on relatives for housing-related information.

For a substantial number of migrants, residential move decisions are facilitated by people at work (see Table 9). This is especially true for migrants who find jobs in state and collective enterprises, as most of them also obtain access to institutionally provided dormitory housing, a legacy of the welfare housing system. Although the proportion remains small for migrants who are fully self-sufficient in housing searches, it increases significantly as migrants proceed in their residential career over time (from 12.3 to 22.8 per cent). This probably suggests a process of adaptation on their part. Given the long-standing rural–urban divide, there is a large gap in the cultural values and social relations between their areas of origin and destination. Therefore, the adaptation process of migrants in urban China may be quite similar to that encountered by transnational migrants.

The role of social networks is best exemplified in the ongoing, intense struggle over housing by the Wenzhou migrants in Beijing's Zhejiang Village, a migrant community formed on the basis of a shared origin. They first rented from local residents in this urban–rural transitional area. A group of migrants with more economic and social capital then invested in the development of large, private housing compounds. The latter gained access to land for housing construction and obtained limited infrastructure resources by paying off local village and township cadres and forming informal economic alliances with them. Built on extended kinship ties, clientilist networks with local cadres and voluntary gang-like groups, a shadow migrant community and leadership structure emerged (Xiang, 2000; Zhang, 2001, 2002). Within the community, allocation of housing, production and marketing space, and policing and social services proceeded through networks centred on the migrant bosses of housing compounds and market sites. This explosive growth outside party-state structures worried authorities and led them to order the demolition of many

Table 9. Key sources of assistance in housing search

	Initial housing		Previous housing		Current housing	
	Number	%	Number	%	Number	%
By self	**10**	**12.3**	**21**	**20.6**	**31**	**22.8**
Through work	**49**	**33.3**	**36**	**35.3**	**41**	**30.1**
With help from people at work	5	1.8	6	5.9	15	11.0
Assigned dorm or housing	44	28.1	30	29.4	26	19.1
Through informal network	**70**	**54.4**	**40**	**39.2**	**52**	**38.2**
Friends and acquaintances	8	7.0	20	19.6	26	19.1
Relatives	38	28.1	12	11.8	13	9.6
Covillagers	24	19.3	8	7.8	13	9.6
Inconclusive responses	1	0.8	5	4.9	12	8.8
Total valid interviewees	130	100.0	102	100.0	136	100.0

housing compounds several times in the last decade or so. The migrants, desperate to stay in the lucrative urban market at the centre of the national transportation network, continued to rebuild their community within months of each raid. This example of Zhejiang Village shows that rather than demanding specific welfare benefits from the state, migrant entrepreneurs aspire to urban citizen status mainly to gain a secure space of their own for business and living quarters.

Conclusions

It is no exaggeration to say that once in the cities, migrants continue to be on the move. The majority of them have moved at least once within an average span of four years. This mobility behaviour contrasts substantially with the level of expressed intention to move again; only about 9 per cent of migrants have such intentions. Similar to general trends elsewhere, age and education have significant positive effects on both actual and prospective mobility. Housing consumption, on the other hand, is a driving force for actual but not future moves. Migrants who initially have rented public housing are less likely to move subsequently during their stay in the cities, and on average experience a lower level of mobility rate. They appear to enjoy better residential stability through gaining indirect access to a housing sector officially restricted to local urban residents.

With substantially higher mobility rates than local residents, migrants experience much more residential instability. But such mobility is not necessarily driven by the need for tenure or even amenity. Few migrants make the transition from bridgeheaders to consolidators after years of living in the cities, a trend in migrant settlement seen elsewhere in other developing countries. Instead, most remain trapped in the private rental sector or staying in dormitory housing. Home ownership is yet to become attainable for migrants, and self-help housing is largely absent because of the intolerance of municipal authorities.

Individual socio-economic factors can only account for a small fraction of these trends. Longer-term migrants seem to gain some degree of residential stability, making duration of residence the single most influential factor. Most migrants do come to the cities to seek employment opportunities therefore work-related events underlie many residential moves. Migrants with prior urban experience and/or family in tow appear to make less moves than

their counterparts, as do female migrants. Renters with some personal or work-related connections with landlords are also less mobile, as seen in the case of migrants renting public housing and staying with urban residents. But over time, most migrants have gravitated towards private rental, which exposes them to a higher level of uncertainty and poorer housing conditions.

The main explanation would lie with institutional barriers migrants encounter in the urban housing sector. The double divide, rural versus urban and non-local versus local, leaves them with little choice but to settle in unstable and substandard housing. Therefore, there is a general disadvantage experienced by all migrants in the cities. Inevitably there are variations among them. The few with capital and skills have fared better and gained entry into the league of homeowners, but most cannot afford commodity housing, the common real property sector open for migrant ownership. A local urban *hukou* continues to be an important qualification for accessing many types of urban housing, particularly those that are more affordable.

The absence of a formal housing market available to migrants leaves them heavily reliant on informal social networks for information in their housing searches. For new migrants in particular, their first residence in the cities is often determined by the location of their relatives or friends who provide substantial assistance. As they gradually acculturate to the urban environment and social relations, some migrants become more self-sufficient and connected with the local population. This further underscores the potential linkage between migrant residential outcomes and socio-economic standing.

Notes

[1] Migration in China takes place in two forms: through permanent migration (*qianyi*) with formal changes of household registration (*hukou*) and through temporary movement (officially called 'floating population' or *liudong renkou*) without official changes of *hukou* from the origin to the destination. The focus of this paper is the second group, which makes up the bulk of internal migration and is simply referred to as 'migrants' here. Although restrictions on access to housing and education by migrants have been officially lifted in a number of cities since 2005, the findings in this paper still reflect the common experience of temporary migrants.

[2] Because of the large size of and migrant concentration in the inner suburb, two neighbourhoods were picked in each selected district there.

[3] Areas with concentrated private housing rentals are often inundated with advertising signs marking 'room for rent.' By contrast, such signs are almost always absent in public housing compounds. Even neighbourhood committee members have commented on how little they know about which units are rented out in their own neighbourhoods (personal interviews).

[4] Income is not included in the analysis as data from the migrant housing surveys are less than reliable.

[5] All but four of these migrants came to Beijing on or after 1978. Because of data limitation, mobility rates for the Shanghai sample cannot be obtained.

[6] Only 29 out of the 884 migrants in Beijing have lived there for more than 12 years, and each of the subsequent years has less than 10 respondents.

[7] A number of regression analyses have been conducted, incorporating different sets of independent variables. The results here focus on variables (or sub-categories) that show some effects on mobility rate.

[8] However, empirical results do not seem to suggest that initial housing size and conditions have a significant overall effect on mobility rate.

[9] The comparison between current housing and initial housing involves migrants who have moved at least once, with a total number of 1637. The comparison between current housing and previous housing involves migrants who have moved at least twice, with a total number of 838.

References

Abu-Lughod, J. (1961) Migrant adjustment to city life: the Egyptian case, *The American Journal of Sociology*, 67, pp. 22–32.

Banerjee, B. (1983) Social networks in the migration process: empirical evidence on Chain migration in India, *Journal of Developing Areas*, 17, pp. 185–196.

Bi, B. (2000) *Housing: Purchase, Sale, Transfer, Rental, and Use (zhufang: mai mai huan zu yong)* (Beijing: China Development Press).

Cadwallader, M. (1992) *Migration and Residential Mobility: Macro and Micro Approaches* (Madison, WI: University of Wisconsin Press).

Chan, K. W. (1996) Post-Mao China: a two-class urban society in the making, *International Journal of Urban and Regional*, 20, pp. 134–150.

Clark, W. A. V. & Dieleman, F. M. (1996) *Households and Housing: Choice and Outcomes in the Housing Market* (New Brunswick, NJ: Center for Urban Policy Research, Rutgers, the State University of New Jersey).

Clark, W. A. V. & Ledwith, V. (2005) Mobility, housing stress and neighborhood contexts: evidence from Los Angeles, *California Center for Population Research On-Line Working Paper Series CCPR-004-05* (Los Angeles: University of California).

Clark, W. A. V. & Huang, Y. (2003) The life course and residential mobility in British housing markets, *Environment and Planning A*, 35, pp. 323–339.

Collier, D. (1976) *Squatter Settlements and the Incorporation of Migrants into Urban Life: The Case of Lima* (Boston, MA: Center for International Studies, MIT).

Conway, D. (1985) Changing perspectives on squatter settlements, intraurban mobility, and constraints on housing choice of the Third World urban poor, *Urban Geography*, 6, pp. 170–192.

Eckstein, S. (1990) Urbanization revisited: inner-city slum of hope and squatter settlement of despair, *World Development*, 18, pp. 165–181.

Gilbert, A. & Varley, A. (1990) Renting a home in a Third World city: choice or constraint? *International Journal of Urban and Regional Research*, 14, pp. 89–108.

Gilbert, A. & Ward, P. M. (1985) *Housing, the State and the Poor* (Cambridge: Cambridge University Press).

Honig, E. (1992) *Creating Chinese Ethnicity: Subei People in Shanghai, 1850–1980* (New Haven: Yale University Press).

Huang, Y. & Clark, W. A. V. (2002) Housing tenure choice in transitional urban China: a multilevel analysis, *Urban Studies*, 39, pp. 7–32.

Klak, T. & Holtzclaw, M. (1993) The housing, geography, and mobility of Latin American urban poor: the prevailing model and the case of Quito, Ecuador, *Growth and Change*, 24, pp. 247–276.

Li, S. (2003) Housing tenure and residential mobility in urban China: a study of commodity housing development in Beijing and Guangzhou, *Urban Affairs Review*, 38, pp. 510–534.

Li, S. (2004) Life course and residential mobility in Beijing, China, *Environment and Planning A*, 36, pp. 27–43.

Li, S. & Siu, Y. (2001) Residential mobility and urban restructuring under market transition: a study of Guangzhou, China, *Professional Geographer*, 53, pp. 219–229.

Miraftab, F. (1997) Revisiting informal-sector home ownership: the relevance of household composition for housing options of the poor, *International Journal of Urban and Regional Research*, 21, pp. 303–322.

Rudolph, J. & Lu, H. (2004) The legacy of (semi-)colonialism: urban identity in Shanghai and Taipei. Paper presented at the Santa Monica workshop of the Urban China Research Network.

Selier, F. (1991) Family and rural-urban migration in Pakistan: the case of Karachi, in: J. van der Linden & F. Selier (Eds) *Karachi: Migrants, Housing and Housing Policy* (Lahore, Pakistan: Vanguard).

Selier, F. & Klare, I. (1991) Are thresholds of migrant-consolidation changing? Family and low-income housing in Karachi, in: J. van der Linden & F. Selier (Eds) *Karachi: Migrants, Housing and Housing Policy* (Lahore, Pakistan: Vanguard).

Sudra, T. (1982) Mexican shanty towns: costs, benefits, and policy options, *Habitat International*, 6, pp. 189–196.

Turner, J. F. C. (1968) Housing patterns, settlement patterns, and urban development in modernizing countries, *Journal of the American Planning Association*, 34, pp. 354–363.

Ulack, R. (1978) The role of urban squatter settlements, *Annals of the Association of American Geographers*, 68, pp. 535–550.

United Nations Center for Human Settlements (UNCHS) (1982) *Survey of Slum and Squatter Settlements* (Dublin: Tycooly International Publishing Limited).

Wu, W. (2002a) Migrant housing in Urban China: choices and constraints, *Urban Affairs Review*, 38, pp. 90–119.
Wu, W. (2002b) Temporary migrants in Shanghai: housing and settlement patterns, in J. Logan (Ed.) *The New Chinese City: Globalization and Market Reform*, pp. 212–226 (Oxford: Blackwell).
Wu, W. (2004) Sources of migrant housing disadvantage in urban China, *Environment and Planning A*, 36, pp. 1285–1304.
Xiang, B. (2000) *A Community that Crosses Boundaries: The Living History of Beijing's Zhejiang Village (kuayue bianjie de sheqiu: Beijing zhejiangcun de shenghuo shi)* (Beijing: Sanlian Publishing House).
Yang, D. T. & Cai, F. (2000) The political economy of China's rural–urban divide, Center for Research on Economic Development and Policy Reform, Working Paper No. 62: (Stanford University).
Zhang, L. (2001) *Strangers in the City: Space, Power, and Identity in China's Floating Population* (Stanford: Stanford University Press).
Zhang, L. (2002) Spatiality and urban citizenship in late Socialist China, *Public Culture*, 14, pp. 311–334.