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Becoming new urbanites: residents' self-identification and sense of community in 'village-turned-community'

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Abstract

In the process of rapid urbanization, the Chinese have seen the disappearance of a large number of villages and the emergence of 'village-turned-community'. Many peasants move into newly built communities and become new urbanites. Based on fieldwork and a questionnaire survey, this research finds that these new urbanites are actually a new type of urban migrants, who must adjust to the transition in terms of self-identification and their community. Compared with migrant workers and landless peasants in the suburbs, residents in 'village-turned-community' are slower to accept the label of 'new urbanites'.

Keywords: Urbanization, Relocation, Identification, 'Village-turned-community'

Introduction

Over the past three decades, China has experienced rapid urbanization. One significant phenomenon has been the expansion of urban areas and the disappearance of a large number of villages. According to data from the National Bureau of Statistics, the number of townships decreased from 40,828 in 2008 to 39,890 in 2017, and meanwhile, the number of sub-districts increased from 6524 to 8243. Especially after 2000, urbanization has been pursued as a national development strategy, and during this time, the speed of urban expansion accelerated and the demand for urban construction land was huge. In 2004, the State Council promulgated 'The State Council's Decision on Deepening Reform and Intensifying Land Management' to propose 'linking increases and decreases in land for construction use' (*zengjian guagou*), which provided a feasible way to promote more urban construction land while still protecting farmland. One effective strategy has been to consolidate rural construction land and reclaim this land as arable land, in order to meet the quota set for construction land.¹ As a result, countless villages have been dismantled and consolidated.

After a village is demolished, villagers are relocated to new communities built with large government subsidies. These newly built communities are typically called 'village-turned-community' (*cungaiju*). As the result of urbanization, the operation of 'village-turned-community' differs from city to city. Li, Chen, and Liu identified four types of spatial growth strategies in Chinese urbanization: internal reconstruction, constant development, outskirt development, and in-place development (Li et al. 2012).

'Village-turned-community' also has diversified modes of operation as a result of different urban development plans. We classify them into four types: urban expansion model, new town development model, industrial upgrading model,² and land circulation model. The characteristics of each type will be discussed in the following part. For the first three community types, villagers not only lose their land, but also must change their household registration. Accordingly, the administrative sub-unit changes from the original town to an urban street office (Jiedao Banshichu). A set of urban grassroots governance system units, including Residents' Committee, Homeowners' Committee, and Property Management Company, are introduced into the village-turned-community. So, residents face the challenge of how to become urban residents—to re-identify themselves and to adapt a new set of regulations and community expectations. For the land circulation type, there are no fundamental changes in the nature of land, the mode of production, or peasant identity, and as a result, peasants do not face an identity transformation. In order to make the comparisons clear, all four types of village-turned-community will be discussed in this research.

Concerning village demolition and the emergence of the village-turned-community, the academic discussion has focused on the transformation of the grassroots governance structure (Yang 2014; Wu 2014), the public services and administration (Lin and Yan 2011; Gu et al. 2014), the infringement of peasant rights (Zheng and Fu 2007; Shi 2011), and the cultural adaption of relocated villagers to urban life (Meng and Hua 2008; Ye 2013). Since relocated peasants face tremendous changes in their living environment, mode of production, and social relationships, they are also deemed to be urban 'new migrants'. But compared with migrant workers and suburban peasants who have lost their land, relocated peasants have some unique characteristics.

Firstly, relocating to high-rise buildings does not mean that they necessarily completely break away from agriculture. Neither migrant workers nor landless peasants in suburbs engage in agricultural production because they either are far from their land or have lost their land. But in the new town development model and the industrial upgrading model of village-turned-communities, relocated peasants may still engage in agricultural production (by renting others' land) when there is an inadequate supply of non-agricultural jobs. Similarly, sometimes, only part of the farmland has been requisitioned, and peasants can still cultivate the remaining farmland on their own or lease the land to modern agricultural companies (Zhou and Wang 2015; Jiao and Zhou 2016). Therefore, urban identification based on career transformation may not work for these relocated peasants.

Secondly, household registration is not the main obstacle for the relocated peasants' urban integration. The lack of urban household registration has always been believed to be the primary barrier to migrant workers' full citizenship in the urban environment (Zhu 2002). But for relocated peasants, their new urban household registration is a form of compensation for their requisitioned land.³ Thus, many relocated peasants are urbanites in terms of household registration. However, the co-existence of two sets of grassroots governance systems (urban governance system which is represented by Residents' Committee and rural governance system which is represented by Villagers' Committee) in village-turned-community may cause relocated peasants' confusion on grassroots authority and organizational dependency (Wu 2014).

Thirdly, relocated peasants must confirm the boundaries of their 'own group'. Migrant workers, who can neither acquire full urban citizenship nor return to being

peasants, become 'marginal men' in both city and countryside (Tang 2002). Relocated peasants must reorient their collective identification following the breakup of their original village. In the village-turned-community, on the one hand, there are residents from other villages, as well as renters and new homeowners due to the sale and rental of housing. A bigger 'community' seems to be forming. On the other hand, the stockholding system reform of the collective village assets, dividends, and all kinds of welfare based on village membership strengthens the original village community (Li 2015). But what is their 'own group' for relocated peasants? What status do they hold as a member of the new community?

This paper describes the changes that have taken place in the self-identification of relocated peasants and their sense of community after moving into village-turned-community. Since relocated peasants are the object of state management in urban neighbourhoods as well as the subject of residents' self-governance in neighbourhoods, their self-identification and sense of community are important to the governance of village-turned-community and long-term development. In the transition from an agricultural society to an industrial society, village communities inevitably face possible disintegration. As the division of labour and large-scale population migration break the boundaries and homogeneity of the countryside, the dismantling of villages and land consolidation further accelerates the process. How society is possible is the recurrent question of sociology. In this scene, this question can be further refined: when an original village is dismantled and peasants relocated as a result of a village-turned-community transition, is it possible for a new community to form?

To answer these questions, we carried out fieldwork from 2012 to 2015, examining seven townships and eight sub-districts, including 13 dismantled villages and 17 relocated communities (the so-called village-turned-communities) in four cities (Beijing, Linyi in Shandong Province, Wuhan in Hubei Province, and Kunming in Yunnan Province). We chose these four cities based on their representativeness and differences. Firstly, the four cities are located in different regions (eastern, central, and western China) and their levels of urbanization and community construction of village-turned-communities embody regional characteristics. Secondly, the four cities have different administrative characteristics (the Capital, a provincial capital, and important provincial cities), reflecting urban policy implementation at different levels. Thirdly, the four cities differ by urban scale (mega-city, big cities, and medium-sized city), reflecting the influence of different economic and social development levels on the construction and governance of village-turned-communities.

Among the cities we investigated, eight typical village-turned-communities will be discussed in detail in this paper. They belong to different types of village-turned-communities and have significant differences in construction and governance modes, which is helpful for our comparative study. To give a clearer picture, the type, location, number of relocated villages, number of households, total population, household registration status, and grassroots governance system of these communities are listed in Table 1.

The collected materials include archives, statistics from local yearbooks, governance documents, interview records, and photos. Based on fieldwork, this paper finds that village relocation has a significant impact on the sense of community and villagers' self-identification.

Table 1 General information for investigated village-turned-communities

	Beijing		Linyi		Wuhan		Kunming	
	FX	JH	DG	YH	FZ	HC	BLM	ZH
Type ¹	I	II	I	IV	III	III	II	IV
Location ²	a	a	a	c	b	b	b	c
Relocated village number	1	7	5	6	9	7	3	35
Household number	1250	5998	2352	3361	6864	5452	1867	1674
Total population	1790	16,795	7062	7143	18,000	16,000	4972	4350
Household registration ³	Y	Y	Y	N	Y	Y	Y	N
Governance system ⁴	R + U	R + U	U	R + U	U	U	R + U	R + U

¹I urban expansion model, II new town development model, III industrial upgrading model, IV land circulation model

²a outskirts, b near suburban, c far suburban (near suburban refers to the area next to outskirts and far suburban refers to the area far away from outskirts)

³Y non-agricultural, N agricultural

⁴R rural governance system, mainly Village Party Committee and Village Committee; U urban governance system, including Residents' Committee, Homeowners' Committee, and Property Management Company; R + U both systems co-exist

The village as a community and members' sense of community

A classic debate in sociology questions whether a village is a community. Scott argues that rural society is a 'moral economy' with a strong collective identity. The existence of patron-client relations serves as an institution to provide security to weak peasants (Scott 1976). The village community has a risk control mechanism that distributes local resources to protect society from disruption. But on the other side of the formalist and substantivist debate, Popkin proposes the model of 'the rational peasant' and shows that the village is a loosely connected society. Self-interested peasants go their own way and compete with each other to seek maximum benefit (Popkin 1979). But Guo believes there is a midpoint position in the debate since conflict and cooperation, as well as power struggles and common welfare, are all intrinsic features of the allocation model and collective action in rural society (Guo 2002).

The same debate emerges in academic debates about Chinese villages. Skinner points out that the basic unit of organization in the Chinese countryside is the market town. The market town serves as a culture-bearing unit. Adjacent villages share similar cultural characteristics, and social interactions occur within the market town. Therefore, the social boundary for peasants is the boundary of the market system rather than that of their own village (Skinner 1964). Some Japanese researchers who have studied China's village communities argue that Chinese villages have strong community features, while others think China's rural society shows little solidarity and that the connection between peasants and village is very weak. The village is an interest society rather than a community (Duara 1988). However, most researchers admit that a village community has value beyond the individuals. Common interests and unified norms are useful to integrate society and establish order.

Since village is a community, how do villagers build up their sense of community? Or in other words, what are the factors that help build a sense of community? According to practice and research, four factors are critical for villagers' sense of community: a set of accepted norms and regulations, the bond of ties of kinship and region, the reciprocal cooperation among villagers, and the subjective identification by villagers.

First of all, the village community has a set of accepted norms and regulations. In the analysis of the rural land system in Northern China, Li emphasizes that a village

community is shaped by a set of endogenous conventions and institutions that cause individuals to work for collective aims, and a set of concepts and norms that define the relationship among village members (Li 2005). Rural society is a 'field' in which village members obey conventions and norms, are bound by obligations, and dwell in existing social networks and power relationships. According to their respective roles, they interact with each other and pursue collective interests. Duara also emphasizes the importance of symbols and norms for social integration in rural society (Duara 1988). When infiltrating into rural grassroots systems, the state uses these symbols to legitimate their authority. Religious values, relationships, and the moral system contained in local symbols and norms are key factors determining individuals' responsibilities and their sense of belonging to the community. For Fei, these codes of conduct, faith, and social sanctions are 'the morality for connecting individuals with each other' and 'the order of etiquette' (Fei 1998). Zhou argues the village institutional environment, which consists of informal 'habitus' and formal rules and regulations, provides common values shared by villagers. Even though villagers can be differentiated by income and stratum identification, the village still maintains itself as a community (Zhou 2005).

Secondly, the bond of ties of kinship and region forms the basis of the village community and these ties are consolidated over time. For the village community, the tie of kinship is the elementary factor that defines interpersonal rights and obligations. In the stagnant society, the tie of region is the projection of kinship (Fei 1998). That is to say, because there is no population flow, the tie of region actually reflects the kinship in the past long time. However, long-term residence does not automatically lead to community membership identity. Fei provides the example of how some people live in a village for many years but are still deemed to be 'foreigners' rather than 'villagers'. Duara points out that in villages consisting of peasants, kinship ties are tight and the qualifications for village membership are strict. Residents must own land and familial graves and have lived in the village for at least three generations before being qualified as 'villagers'. Those villagers who have left the village but still have an ancestral grave in the village and worship there periodically are still considered to be members of the village (Duara 1988). This shows the importance of the clan. After three generations, one's kinship and social relationships become well developed, which is helpful for village residents to connect with existing clans and administrative organizations. He or she can receive all kinds of necessary resources in the village. Therefore, kinship and region ties serve as the organizational framework for the formation of a village community.

Meanwhile, a village is also an economic community with reciprocal cooperation among villagers. The village sets up not only boundaries of living, but also to some extent boundaries of production and consumption (Huang 1985). Although the unit of production and consumption is the household in the small-scale peasant economy, most members in a village are connected by kinship or affinity. The production mode of Household Contract Responsibility System introduced in the 1980s by the national government also strengthened mutual aid and labour exchange between households. After the disintegration of the people's communes, the cooperative purchase of production goods and mutual fund assistance for relief or investment between the families in a village have been even more frequent than before (Ying 2014). Even the rise of township and village enterprises (TVEs) can be partly attributed to kinship and social

networks in villages, as they provide credit guarantees and capital. The success of TVEs has also strengthened in turn the internal unity and relevance of villages.

Last but not least, the subjective identification of villagers is also necessary for a village community. In a discussion about community and society, Tannies argues that the key features of a community are subjectivity, value consistency, or imagination about community, rather than simply being an entity. From village to nation, the concept of community first refers to collective cognitive, and according to social psychology, community is a 'social fact' (Anderson 1983). Generally accepted norms, long-term ties of kinship and region, and reciprocal cooperation in production constitute for individual villagers' belongingness to the village community and self-identification, interpersonal rights and obligations, and interaction mode.

The development of industrialization and urbanization brings about industrial structure upgrades and increases the migration of the rural labour force to cities. If it is a spontaneous process, the disintegration or transformation of the village community will be a gradual process. However, village demolition and land consolidation cause the appearance of the countryside to change dramatically in a short period of time, and this also structurally compromises the basis of the village's sense of community.

'Village-turned-community': relocation mode and challenge to identification

As the result of different urbanization models, village-turned-community also shows differences according to construction plans, requisition of farmland, and homesteads, as well as the change of peasants' household registration. This section of the paper uses four cases to illustrate four types of village-turned-community and their respective challenges to identification.

The urban expansive model refers to the 'village-turned-community' that is built in the process of urban expansion. In urban expansion, farmland and residential land of villages on the outskirts of a city may be requisitioned; those displaced peasants move to high-rise apartment buildings, and their household registration (*hukou*) is changed to non-agricultural. Because of its proximity to the city, this kind of 'village-turned-community' has a comparatively higher level of economic development. Most residents have non-agricultural income before relocating, and agriculture was not their major income source even prior to relocation. The villagers are already used to an urban lifestyle. Therefore, relocating to a village-turned-community merely changes their residential area, while having limited impact on either production mode or lifestyle (see Case One).

Case One: Village FX is located in the central area of RH Town in northeast Beijing. Since the percentage of the population engaged in non-agricultural roles of RH Town was over 80 per cent even in early 1990s, the municipal government planed it as a new urban district of Beijing. As a result, Village FX was dismantled in 1993. At that time, this village had 1790 persons but only 34 hectares of farmland. Most villagers in the town had non-agricultural jobs. After the village was demolished, these villagers were relocated to a new community built on the original site of the village and their household registration was changed to urban. In the procedure of demolition and relocation, the Village Committee of Village FX started their own real estate company and property management company, which brought great profits to the village in the years that followed. The Village Committee has continued until

now. All original villagers, even those working and living as urbanites and registered as urban residents, can get welfare from the Village Committee and so identify themselves as 'members of Village FX'.

From this case, we can see that even though the village was dismantled as early as 1993, the Village Committee and other rural governance organizations of Village FX were all maintained. Its proximity to the city enabled the village to be generously compensated, which helped them establish their own companies and provide dividends to villagers. Concerning identification, it is easy for relocated villagers to adapt to urban life due to their long-term non-agricultural employment. But the existence of a rural governance system and benefits provided by village companies sustain villagers' close ties with the village community and strengthen their identification to village membership.

The new town development model refers to a village-turned-community that is constructed in a new urban area outside the outskirts of a city. Although these new towns generally have some location advantages, they are still lagging behind in non-agricultural industry development compared with that of suburban areas. Therefore, after losing their land, it is more challenging for residents in this kind of village-turned-community to transfer their production mode, way of life, and identification as they become urbanites (see Case Two).

Case Two: BLM Community, located in the centre of District C, was an agricultural county in a suburb of Kunming, where the primary agriculture was planting vegetables and flowers. After the new Kunming urban planning was put forward in 2008, District C was planned as a new urban district, and the municipal government moved here. There were 14 resettlement communities for landless peasants in District C. BLM Community was one of them, and it contained 1867 households from three villages -- B, L and M. Although it was designed and constructed as one community, the three original Village Committees remained and three new Residents' Committees were also set up, one for each village. After relocating, the household registration of peasants was identified as non-agricultural. However, nearly half of the labour remained engaged in vegetable and flower planting by renting land from nearby towns. They said, "We are in town, but we are different from city dwellers."

Although the residents in BLM Community lost their land, just as residents in Village FX did, the secondary and tertiary industries in the new urban area were underdeveloped. So these landless farmers not only changed their place of living, but also needed to struggle to find re-employment. Making a living from agriculture is many people's choice when no better option exists. The unchanged production mode, coupled with the original grassroots governance system, made it difficult for these relocated peasants to quickly adapt to a new urban life.

Due to the construction of various types of development zones, some villages were demolished. These landless peasants were resettled in a type of community known as the industrial upgrading model village-turned-community. Compared with the development of completely new towns, the construction of development zones pays more attention to industrial planning, presentation, and regional competitiveness and less attention to the economic development status of local villages. In fact, in order to reduce the cost of land use, many of these development zones are located far from cities. So, agriculture may still dominate the economy in dismantled villages (see Case Three).

Case Three: Village HS is in Wuhan, Hubei Province, and most of the villagers cultivate vegetables and rice for their living. After being planned as an economic development zone in 2008, Village HS was dismantled and relocated to Community HC, a 'village-turned-community' consisting of seven dismantled villages. All the villagers were reclassified as urban residents and the local government bought social insurance for females who were over 50 years old and males over 60 years old. While the original Village Committee and Village Party Branch continued to run, an urban grassroots governance system was also established. Diversified organizations, including Residents' Committee, Homeowners' Association, Property Management Company and some social organizations, were introduced in Community HC.

Relocating to a high-rise building means a thorough change in the mode of production and lifestyle. Similar to the new town development, the industrial upgrading model of village-turned-community also faces the challenge of transformation from agricultural to non-agricultural production, and the difficulty is even more challenging. Because factories and enterprises in development zones usually have specific requirements of employees, the educational background and technical abilities of landless farmers barely meet minimal requirements. Therefore, the village-turned-community located in a development zone faces greater challenges in terms of re-employment and social security.

The land circulation model of village-turned-community means that the village homestead land is reclaimed to meet the urban construction land quota, peasants move into concentrated community, and farmland is contracted to large enterprises for modern agricultural production that requires high investment and offers high added value. Residential concentration and land concentration are key to such projects, while there is no significant change in the household registration of villagers or to the production mode in demolished villages. The relocated villagers in the community own the land, and if choose not to lease it, they will still engage in agricultural production (see Case Four).

Case Four: District G, located to the north of Linyi City, Shandong Province, is a typical agricultural town. It covers 49 administrative villages, 17000 households, 47000 people and 100000 mu of farmland. In April 2010, a comprehensive land management project was launched in District G. For rural land consolidation and reclaiming abandoned land, many villages were dismantled and village-turned-communities were constructed. YH Community is located in the southeast part of District G and is composed of six demolished villages. Most of these villages were economically weak and the living conditions were poor. After moving into a village-turned-community, relocated peasants enjoyed many public services, such as kindergartens and primary schools, health clinics, convenience stores and supermarkets, and a comprehensive community service centre. Since land consolidation in District G only involved homesteads, villagers retained their rural household registration and continued their previous mode of production. In terms of governance framework, YH Community established Residents' Committees and Community Party Branch; and grid management was also implemented as in local urban communities.

Obviously, for this type of village-turned-community, the only change is the form of residence. After their homesteads were reclaimed, peasants moved into modern communities with a strong infrastructure and did not need to change their household registration and mode of production. However, in order to improve management, grassroots organizations and a management mechanism for urban communities were also introduced. Therefore, this kind of a village-turned-community is essentially a rural community that takes the form and management mode of an urban community.

Although following different modes of operation, village demolition and relocation change the countryside's spatial characteristics and social relation networks, thus challenging villagers' collective identity. The following part will explore the characteristics of 'village-turned-community' in terms of spatial arrangement, social interaction, economic ties, and community organization, as well as the impact of these changes on the relocated peasants' identification with the community.

Changes in space, organization, and collective economy

In the process of relocation, villagers experience comprehensive changes in living space, system of grassroots governance, and management of the collective economy, as well as challenges to their original sense of community. Firstly, the accepted norms and regulations, as well as the bonds of kinship and region to the village, are diluted in a 'village-turned-community' because it is large in scale and consists of heterogeneous residents. To improve the efficiency of land use, a 'village-turned-community' usually combines several villages, and recognition of local acquaintances is destroyed. Secondly, after land expropriation, villagers seek work outside the village, and thus, the economic connection based on agricultural cooperation and mutual assistance ends. However, a joint-stock company based on the collective assets of villagers may create another economic community. Thirdly, the co-existence of two sets of grassroots governance systems, represented by Villagers' Committee and Residents' Committee, respectively, also bring a hazy sense of community belonging. On one hand, the Villagers' Committee provides all kinds of welfare supports; on the other hand, the Residents' Committee is responsible for administrative management and public services for citizens. Both play an important role in the community.

The disappearance of village boundaries and dysfunction of conventions

The main impetus to promote village demolition and peasant relocation is to reduce per capita living space and displace rural homesteads with urban construction land. Therefore, usually, several dismantled villages are relocated into one 'village-turned-community'. From Table 1, we can see that most 'village-turned-communities' consist of more than three villages and the total number of households far exceeds 1000. In an extreme example, Community ZH in Kunming, Yunnan Province, has 1674 relocated households from 35 villages from six nearby townships.

The outcome of such concentration and mixed resettlement is that the boundaries of the original villages are destroyed. Since most of these relocated villages are resettled in their entirety, the original social relationships and connections are still preserved when villagers move into new communities. Therefore, the village-turned-community is actually a community of strangers with many internal blocks of societies of 'semi-acquaintances'.

The 'acquaintance society' only exists in villagers' groups or natural villages that have cooperative production and mutual life. Usually, a so-called village in today's China is an administrative village composed of several natural villages. These administrative villages are 'semi-acquaintance societies' that exist beyond the rural society unit (He 2000). The conventions and regulations that work well in the acquaintance society encounter some problems in semi-acquaintance societies. However, 'village-turned-communities' are more heterogeneous. Geographic boundaries, administrative boundaries, and acquaintance relationships are all broken to differing extents during the relocation process, resulting in the disintegration of local common sense and the reorganization of interpersonal networks. The result is that conventions and regulations do not work well and formal rules and statutes emerge as important. Even though personal relationships (*guanxi*) are still used in grassroots governance, the village-turned-community is more of an administrative unit defined by a formal institution rather than a conscious community based on local knowledge and common will.

Spatial change and decrease in social interaction

Space contains sociality, reflecting the relations of production and social context, the process of the reorganization of social relations, and the formation of social order. Space is a dynamic practice. Producing urban space necessarily involves reproducing the social relations that are bound up in it (Lefebvre 1976). The change of space layout and landscape design in the relocated community has an important impact on reshaping villagers' lives and production practices and serves as the new basis of their social interaction and sense of community.

On the one hand, in a village-turned-community, public space that bears the collective memory and a sense of community disappears. The abstract collective consciousness about religion, kinship, and norms is usually expressed by specific architectural forms or spaces, such as a village's ancestral hall and temple and a variety of public spaces (including theatre stage, wells, riverside, farmyard, and even the place around a stone mill). Villagers communicate with each other, share their feelings, and exchange news (Zhou and Long 2003). This is where and how the collective memory is produced and the sense of community is constructed. Due to relocation, most of these original public spaces are dismantled, but it is not possible to replace the special collective memory or social meaning.

For example, TS Village in Kunming City, Yunnan Province, organizes a ceremony for Tianguan in Thean Hou Temple every year. Every eighth day of January in the lunar calendar, villagers gather at the temple to pray for the safety of the village. Each household assigns a member to participate in the ceremony and to help prepare sacrificial offerings, culminating in a dinner. It can be said that Thean Hou Temple not only is a place for the villagers' religious activity, but also plays an important role in social integration. But after moving into the ZH Community, no such temple exists. As Mr. Zhang in TS village said:

All the houses are dismantled, the temple, the Village Committee office, and the ketang.⁴ All had been demolished and no new ones are built. There is no (public house). Our village had considered building a new public house. But we are afraid it might be dismantled again, so have not decided yet.⁵

On the other hand, scattered and independent courtyards are replaced by high-rises and enclosed buildings. The traditional layout in the countryside is many private courtyards scattered horizontally according to the terrain. However, when moving into a village-turned-community, villagers dwell in apartment buildings in a completely different style. These standardized and high-rise buildings are not an organic whole composed of natural and socially related houses but the combination of many enclosed flats. Meanwhile, one of the main purposes of relocating peasants to high-rise buildings is to improve land use efficiency and to meet the quota for more construction land for urban expansion. As a result, new village-turned-communities usually take up smaller space but contain a larger population.

Take Village DF in Beijing as an example. The office of the Village Committee is the original centre of Village DF, and several lanes diverge in different directions to form a horizontal network around the office. A small market, park, and square are located around the centre. After relocation, villagers from Village DF moved into Community JH, which contains 55 high-rise buildings with a construction area of 370,000 m². In addition to Village DF, three other dismantled villages were relocated to this community. The total population of Community JH reached 16,795. All paths in Community JH are north-south or east-west with a green belt on both sides. Residential buildings are located along these paths with an even distribution and face south to receive maximum sunlight. Meanwhile, there is a monitoring platform near every residential building to observe the neighbourhood situation at all times.

It is obvious that the physical characteristics of the new village-turned-community bring about challenges to social interaction. The high-rise buildings and enclosed flats decrease the villagers' interaction frequency compared with that in the village. According to Yan's observation in Xiajia, the lack of indoor space in traditional village residences helps promote social interaction among villagers. Therefore, all people regardless of age or gender in the village like to call in on their neighbours (Yan 2003). In contrast, flats in the village-turned-community have more indoor space and better domestic facilities and neighbours are strangers from other villages, so that the demand for social interaction is reduced. The original neighbourhood relationship and social communication network are destroyed, which easily leads to 'defamiliarization' and 'isolation' (Chen 2012).

Q: Do you visit your neighbours frequently?

A: I did in the past. As long as I finished my work, I went. But not now, everybody closes his door, so do you dare to knock at the door? And after moving, I cannot find those old neighbours.⁶

The emergence of two sets of grassroots governance systems

Meanwhile, relocation also brings about the co-existence of two sets of grassroots organizations. Legally speaking, different grassroots organizations exist in the city and countryside. Under the 'District/County Government–Township Government–Village Committee' framework, the Village Committee acts as the 'self-management, self-education, and self-serving' grassroots governance organization in the countryside. The

typical function of the Village Committee is to address public affairs and public welfare, to mediate civil disputes, to maintain public security, to reflect villagers' demands, and to propose suggestions to the local government. On the one hand, in the countryside, the Village Committee is an agent of the state, and on the other hand, the Village Committee is a broker for villagers when they negotiate with the government (Wu 2002). Under the 'District Government–Sub-district Office–Residents' Committee' framework, the Residents' Committee acts as the grassroots governance organization in urban neighbourhoods. Its main functions include publicizing laws and national policies; safeguarding the legitimate rights and interests of residents; carrying out the construction of spiritual civilization (*Jingshen wenmin jianshe*); mediating civil disputes; assisting the government in public health, family planning, and social security; and reflecting the opinions and demands of residents.

Although sharing some common functions, the two sets of grassroots governance organizations have different organizational frameworks and work priorities. As the agent of the state in the villages, the Village Committee carries out local government policies, assists villagers in adapting to the new way of production and urban life, and maintains social stability. The relevant work of the Village Committee for a dismantled village includes addressing land compensation, village relocation, labour re-employment, personnel resettlement, social security, housing quality, and even individual economic difficulties. Therefore, villagers must rely on the village organization and relationship network to resolve these problems. In the process of relocation, even if the villages are dismantled and peasants are reclassified as urbanites in terms of their *hukou* status, most Village Committees are preserved to help with the smooth transition of the dismantled villages.

At the same time, the newly built village-turned-community, as part of a city, also establishes a Residents' Committee. As the representative of the urban governance system, the Residents' Committee plays an increasingly important role in village-turned-community, especially in environmental management, public security, social welfare, public service, and management of the floating population. Take SX Community in Beijing as an example. The following lists some of the work completed by its Residents' Committee from 2013 to 2014:

- *Environmental management*: The Residents' Committee developed more than 30 instructors for garbage classification. During the Spring Festival in 2013, they organized the residents to clean the community public areas.
- *Express solidarity with poor households*: The staff of the Residents' Committee visited poor households during the Spring Festival in 2013 and provided 600 yuan to each household.
- *Volunteer cultivation*: The Residents' Committee cultivated 191 volunteers in SX Community and organized them to help organize cultural activities, patrol for public security, and participate in community welfare affairs and civil mediation.
- *Management of floating population*: On March 15, 2014, the Residents' Committee held a publicity campaign in the community square for the safety of the floating population and to protect consumer rights.
- *Organization of public cultural activities*: At the beginning of April 2014, the Residents' Committee invited the cardiovascular department of the nearby JS Hospital to give a lecture on diabetes and coronary heart disease.

Therefore, in most 'village-turned-communities', it is common that two sets of grass-roots governance organizations co-exist. The co-existence of the Village Committee and the Residents' Committee decentralizes the authority of the original power centre. The Village Committee is responsible for the distribution of the dividends of collective assets and the management of original village affairs, while the Residents' Committee organizes various cultural and recreational activities. They provide different public goods and welfare for villagers.

From agricultural production to collective asset operation

In the countryside, the management of the collective economy by the Village Committee is production oriented. Village Committees build water conservancy facilities, manage forest land, water, and other collective resources, promote agricultural production, and organize all kinds of economic cooperation among villagers. Land acquisition during urbanization took away village land but brought a large sum in land compensation and resettlement fees for the village collective, which changed the Village Committee's role in the collective economy. Due to the difference in land scale and pattern of requisition, compensation for land also differs among the villages. In addition to providing social security for relocated peasants, collective compensation is usually used for villagers' annual bonuses and the maintenance of the village-turned-community. In some villages, the Village Committee even uses it for commercial investments to generate more profit and increase the value of collective assets.

Because many village-turned-communities are built in a short time, most of their higher government Sub-district Offices cannot provide financial allocations quickly enough to support community management. Therefore, most Village Committees must use their collective village funds for community operations. Take the BLM Community as an example. Table 2 lists expenditures for community maintenance paid by the collective funds of Village M in 2012. The collective economy needed to cover almost all the daily maintenance fees for the newly built village-turned-community until the local financial allocation was in place. For example, since 2007, when moving into this community, Village M had to buy medical insurance for villagers using collective funds. This continued until 2013, when the local government began to bear this cost.

In some places, the local government reserved or returned some land to the dismantled villages as a subsidy. Those resettled villages usually use the land for commercial real estate development or land lease, which brings considerable income each year. Because the villages lost the function of collective economy management after turning into a community, many of them carried out a joint-stock system reform and set up joint-stock companies based on collective assets. Villagers receive shares that are usually determined based on their age and receive dividends every year.

For example, HC township in Wuhan, Hubei Province, developed a lot of TVEs since the beginning of the 1980s, with the number of TVEs reaching 817 in 1995. The local villages accumulated considerable capital after three decades of development. Since 2010, a large number of villages have been relocated due to the construction of HC New Ecological City. These villages all established joint-stock companies. Table 3 shows the quantification for shareholding reform in three villages of HC township. We can see that although all based on age, each village has a different way to quantify their

Table 2 Main expenditures for BLM community by Village M in 2012

Item	Expenditure (thousand yuan)
Build office building	2000
Surveillance equipment	500
Build basketball court	85
Water fee for greening	70
Solar water pipe maintenance	36
Cultural and recreational activities	13
Village cadres' wages	500
Build toilet	210
Buy medical insurance for villagers	80
Electric charge	42
Education expenditure (to sponsor local kindergarten and school)	15
Total	3551

equity. At present, all the relocated villages have built their joint-stock companies and some of them have begun to make a profit.

Economic ties are an important link for the village as a community. In the countryside, the economic relationship is more strongly reflected in cooperation in agricultural production and mutual benefit in life. In the process of demolition and relocation, villages lose their land but gain a number of new collective assets, including land compensation, resettlement fees, and reserved land. Therefore, the economic ties oriented around production have disappeared, but the villagers are still economically linked by their common collective assets. Thus, the management of the collective economy of the village actually transformed from 'real economy', which mainly manages land, enterprises, and farms, to 'asset economy', which focuses on financial asset operations and returns on land development.

The identification of shareholders is mainly based on their membership in the villages. Thus, the operation of collective assets helps strengthen the original village

Table 3 Quantification table of three villages in HC township

			CH village	HS village	HG village
Net asset (thousand yuan)			92,123	89,955	90,407
Numbers of shareholders			2947	3395	2498
Collective shares			1842.4	1787.1	1808.2
Incentive shares			736.6	357.4	361.6
Individual shares	Juveniles (under 16 years old)	Number	478	568	379
		Shares per capita	1.2–1.4	1.6	1.9
		Total	647.2	927.8	722.0
	Adult (16–54 years old)	Number	1940	2287	1712
		Shares per capita	2.5–2.8	2.2	3.1
		Total	5311.4	4981.1	5218.6
	The elder (above 65 years old)	Number	500	540	407
		Shares per capita	1.4	1.6	2.3
		Total	672.0	882.1	930.4
Total			6632.6	6791.0	6871.0

membership, which further strengthens the feature mentioned earlier—a strangers' community with many internal blocks of 'semi-acquaintance society'. It can be said that the mixed relocation mode of village-turned-community destroyed village boundaries, but in practice, the operation of collective village assets strengthened the original village membership. Economically speaking, the village-turned-community is only an empty shell, and these resettled villages are independent and have inward solidarity.

Dual belongingness to village and 'village-turned-community'

Local traditional conventions, collective memory, and reciprocal economic relations constitute villagers' belongingness to the village community and self-identification. With the disappearance of the village boundary, the fade-out of collective memory, and the change in economic ties, villagers also show some new characteristics in terms of sense of community and self-identification.

On one hand, the relocated peasants have a strong sense of belonging to the original village. When asking 'who are you?', most relocated peasants still answered: 'I am a villager from X Village' rather than 'I am a resident from Y Community', even though they have lived in the village-turned-community for several years. In terms of interpersonal relationships, they also tend to interact with members from their original village. And due to the mixed resettlement of most village-turned-communities, the relocated peasants do not know their new neighbours and pay little attention to public affairs in the community.

Q: What do you think about the security of this community?

A: I do not know. We do not know each other, who knows whether it is safe?⁷

On the other hand, the relocated peasants also would like to emphasize themselves as 'the person (sacrificed) for X project'. For example, most residents in ZH Community relocated because of an environmental protection project in Kunming. Therefore, when they appealed to the government for re-employment assistance or anything else, they emphasize their community identification and sacrifice for the project. Of course, community identification at this moment is more a means of protest rather than a sense of community. However, the relocated peasants indeed show their affection for their community when participating in activities organized by the new community.

The community organized a waist drum team, a cheerleading team and a dance team. And they also organized Spring Festival Gala Evening, Lantern Festival Chu Opera Gala, Summer Film Week and other activities. This entertainment is provided for us, and there are many people participating.⁸

This shows that relocated peasants, while maintaining the sense of belonging to their original village, also have a positive attitude on integrating into the new community. The dual belongingness of the relocated villagers can also be partly attributed to the functional division between the Village Committee and Residents' Committee. After relocation, the Residents' Committee gained trust by doing good work in public affairs in the village-turned-community, especially in terms of housing, environment, and public security. When getting help from the Residents' Committee and participating in

activities organized by the Residents' Committee, villagers' belongingness to the village-turned-community also grew.

Discussion and conclusion

Based on the above discussion, we can see that the basic elements contributing to the villagers' sense of community have changed dramatically in the process of village demolition and relocation. As a kind of new group of urban migrants, relocated peasants leave their villages and move into a new community, change their household registration, and find non-agricultural jobs, all of which makes them face a transition in their identification. The new identification, about themselves and their neighbourhood, constitutes the basis of the transformation of grassroots governance in the village-turned-community.

The basic factors affecting the sense of community changed to a different extent in the process of relocation. Firstly, the interpersonal relationship network rooted in the ties of kinship and region of a natural village is damaged in the village-turned-community, because it has a large population from many different villages. In the single-village community, interactions and reciprocal care may be maintained or even strengthened between neighbours. In a multi-village community, however, the relocated peasants begin to build new relationships and focus on entertainment activities. The argument that relocation to village-turned-community will cause interpersonal isolation and reduce the frequency of neighbourhood interactions is not supported by the survey. Relocated peasants still maintain frequent social activities, which shows that breaking village boundaries and changing the mode of residence do not necessarily damage social interactions. But it is worth noting that when maintaining interactions with their original village members, relocated peasants also tried to make friends with their new neighbours and extend their social networks beyond the original village. So, they showed their fondness towards the new community that offers better living conditions and environment and actively participated in various community activities and organizations.

Secondly, in terms of organizational attachment, the rural grassroots governance organization system continued to function while the new urban governance system was developed and gradually gained the acceptance of residents. However, the Village Committee still plays a key role in the management of the village-turned-community. Although agricultural production is no longer the main task of the Village Committee, it has to take responsibility for the smooth demolition and relocation of the village, the adaptation of the villagers to urban life, and the management of collective assets after relocation. In particular, operation of the joint-stock company built on their collective assets provides a reason for the existence of the Village Committee in village-turned-community and may ultimately become its most important function.

Thirdly, relocated peasants showed dual belongingness to both village and village-turned-community. Most relocated peasants still identify as members of the original village, as well as acknowledging the authority of their Village Committee and appealing to it for individual interests and rights. Even after the change of household registration, the relocated villages are still economically linked by the joint-stock company, which is built on the collective assets of the village. Some relocated peasants continue to engage in agriculture because they only lost part of their farmland or have been

unable to find non-agricultural jobs. Therefore, compared with migrant workers and landless peasants in the suburbs, relocated peasants will take longer to accept the tagline of 'new urbanites'.

Returning to the original question: when the original village is dismantled and people move into a new urban neighbourhood, is a community possible? We can see that the village community showed strong persistence; it transformed but still exists in cities. While relying on the village community, the relocated villagers gradually adapted an urban management system and lifestyle. Therefore, a new community is emerging in the urban neighbourhood.

In the process of urban expansion, the government shapes itself as an almighty actor and relocated peasants believe that they are the vulnerable group, resulting in the logic of 'administrative polity' (Wang 2013). Peasants think that to relocate to the village-turned-community is a choice that has been foisted on them, so that all the problems arising from relocation should be settled by the government. On one hand, they insist that their membership in a certain village means that they should benefit from its collective assets; on the other hand, they also require the rights of citizens and the public services of urbanites. In the end, to rely on the government becomes a preferred choice by the relocated peasants. The dual belongingness to the original village and to the new urban neighbourhood means dual dependency, which works against the cultivation of grassroots self-governance. The nature of urbanization is neither the expansion of the urban area, nor the increase of the urban population, but the urbanization of human beings. Urbanism means industrialization, capital flow, refinement of governance, and collective consumption of public goods and services, as well as a life of heterogeneity, anonymity, and diversity (Wu 2006). All of these characteristics are far from the countryside acquaintance society based on blood and region ties. Therefore, after becoming accustomed to the changes in employment pattern, household registration, and urban life, relocated peasants must also accept the 'village-turned-community' identification and its self-governance model as an urban cell.

Endnotes

¹The construction land quota is a means of control adopted by the state to protect cultivated land. According to general land use planning in each city, a maximum area to be used for construction land is established annually by the government and that maximum cannot be exceeded.

²To promote industrial upgrading, some cities build new technology development zone, which needs much land. It also causes the demolition of some villages and farmers going upstairs.

³For both the urban expansion model and new town development model of village-turned-communities, villages are integrated as one part of the city and relocated peasants are usually reclassified as urban residents according to household registration. For industrial upgrading model of village-turned-communities, it depends on whether all farmland has been requisitioned and also varies according to the specific project. And for land circulation model of village-turned-communities, peasants merely move into a concentrated community with no change in household registration.

⁴A ketang is a public house for public activities, such as weddings, funerals, and banquets.

⁵Data source: Interview record, Mr. Zhang in TS Village, Kunming, Yunnan, 10 April 2013.

⁶Data source: Interview record, residents in ZH Community, Kunming, Yunnan, 7 April 2013.

⁷Data source: Interview record, resident in ZH Community, Kunming, Yunnan, 7 April 2013.

⁸Data source: Interview record, resident in FZ Community, Wuhan, Hubei, 9 September 2013.

Abbreviation

TVEs: Township and village enterprises

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Author's contributions

YW is the one who design the study, collect and analyse data, and write the paper. The author read and approved the final manuscript.

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References

- Anderson, Benedict. 1983. *Imagined communities: Reflections on the origin and spread of nationalism*. London: Verso.
- Chen, X. 2012. The effect of "relocation of peasants to highrise buildings" on rural society transformation – Case study on Y City' (nongmin shanglou dui nongcun shehui zhuanxing de yingxiang yanjiu: jiyu Y shi fangtan ziliao de fenxi). *Journal of Hangzhou Communist Party School (Zhonggong Hangzhou shiwei dangxiao xuebao)* 5: 55–61.
- Duara, Prasenjit. 1988. *Culture, power, and the state: Rural North China, 1900–1942*. Stanford: Stanford University Press.
- Fei, Xiaotong. 1998. *From the soil (Xiangtu Zhongguo Shenyu Zhidu)*. Beijing: Peking University Press.
- Gu, Y., D. Xiang, and Z. Hu. 2014. Village-turned-community: Governance difficulties, goal and countermeasures' (Cungaiju shequ: Zhilikunjing, mubiao quxiang yu duice). *Socialism Studies (Shehui zhuyi yanjiu)* 3: 107–112.
- Guo, Y. 2002. "Moral economy" or "rational peasants": Rereading the classic topic of peasant research' (Daoyi jingji haishi lixing xiaonong: Chongdu nongminxue jingdian lunti). *Dushu* 5: 104–110.
- He, X. 2000. 'A semi-acquaintance society: A perspective of understanding the election of village committee' (Lun Banshuren shehui: Lijie cunweihui xuanju de yige shijiao). *Cass Journal of Political Science (Zhengzhixue Yanjiu)* 4: 61–69.
- Huang, Philip. 1985. *The peasant economy and social change in North China*. Stanford: Stanford University Press.
- Jiao, Changquan, and Feizhou Zhou. 2016. Capital to the countryside' and remaking of the village. *China Social Sciences* (1): 100–116.
- Lefebvre, Henri. 1976. *The survival of capitalism: Reproduction of the relations of production*. New York: St Martin's Press.
- Li, Huaiyin. 2005. *Village governance in North China, 1875–1936*. California: Stanford University Press.
- Li, K. 2015. Village membership with the collective reconstruction: A case study of the member database of the village collective economic organization in Nantong City' (Jiti chonggou zhongde chengyuanquan: Yi Jiangsu nantong nongcun jiti jingji zuzhi chengyuan shujuku weili). *Journal of Social Development (Shehui fazhan yanjiu)* 4: 183–208.
- Li, Q., Y. Chen, and J. Liu. 2012. Promotion mode of Chinese urbanization' (Zhongguo chengzhenhua tuijin Moshi yanjiu). *Social Sciences in China (Zhongguo Shehui Kexue)* 7: 82–100.
- Lin, J., and H. Yan. 2011. The management innovation of the relocation rural community' (Chaicun bingju xiade nongcun shequ guanli chuangxin). *People's Forum (Renmin Luntan)* 340: 46–47.

- Meng, X., and X. Hua. 2008. 'The adaptation and social identification of the passive urbanization: Research on the landless peasants in Jiangsu Huaian' (Beidong chengshihua qunti de zhuanxing shiying yu shehui rentong: Jiyu Jiangsu Huaian shidi nongmin de shizheng yanjiu). *Academia Bimestrie (Xuehai)* 2: 86–106.
- Popkin, Samuel L. 1979. *The rational peasant: The political economy of rural society in Vietnam*. Berkeley: University of California Press.
- Scott, James. 1976. *The moral economy of the peasant: Rebellion and subsistence in Southeast Asia*. New Haven and London: Yale University Press.
- Shi, C. 2011. "Relocation to upstairs" under the background of urbanization: The implementation and problems of the policy of "link the increase and decrease of the land for construction use" (Chengshihua beijingxia nongmin beishanglou xianxiang fenxi: Zengjian guagou zhengce shixing xianzhuang fenxi he wenti yanjiu). *Industry and Technology Forum (Chanye yu Keji Luntan)* 1: 7–8.
- Skinner, G.W. 1964. Marketing and social structure in rural China: Part I. *The Journal of Asian Studies* 24 (1): 3–43.
- Tang, B. 2002. Bi-marginal man: The formation of self-identification of migrant workers and the social impact' (Shuangchong bianyuanren: chengshi nongmingong ziwo renting de xingcheng ji shehui yingxiang). *Journal of South-Central University for Nationalities (Zhongnan Minzu Daxue Xuebao)* 8: 36–38.
- Wang, C. 2013. 'The withdraw of village during urbanization and the practical logic of the administrative polity' (Chengshihua zhongde chebing cunzhuang yu xingzheng shehui de shijian luoji). *Sociological Studies (Shehuixue Yanjiu)* 3: 15–28.
- Wu, F. 2006. China's urbanization and new urbanism' (Zhongguo de chengshihua yu xin chengshi zhuyi). *Planning Studies (Guihua Yanjiu)* 8: 19–23.
- Wu, Y. 2002. The dual marginalization: A typological analysis of the part played by and the behavior of village officials' (Shuangchong bianyuanhua: Cunganbu jueuse yu xingwei de leixingxue fenxi). *Management World (Guanli shijie)* 11: 78–85.
- Wu, Y. 2014. The transformation of villagers' committee: The construction of grassroots organization in relocated neighborhoods' (cunweihui bianxingji: noncun huiqian shequ de jiceng zuzhi jianshe yanjiu). *Journal of Social Development (Shehui fazhan yanjiu)* 3: 118–138.
- Yan, Yunxiang. 2003. *Private life under socialism: Love, intimacy, and family change in a Chinese Village, 1949–1999*. Stanford: Stanford University Press.
- Yang, Guihua. 2014. *Transformation and innovation: The construction of 'village-turned-community' organization (Zhuanxing yu Chuangsheng: cunajiu shequ zuzhi jianshe)*. Beijing: China Social Sciences Press.
- Ye, J. 2013. *The peasant concentrated residential areas and the cultural adaptation of the migrants: The survey in Jiangsu (Nongmin jizhong juzhu yu yimin wenhua shiying: Jiyu Jiangsu nongmin jizhong juzhuqu de diaocha)*. Beijing: China Social Sciences Press.
- Ying, Xing. 2014. *Farmers, collective and state: The relationship transition between state and farmers in sixty years (Nonghu, Jiti yu Guojia: Guojia yu Nongmin Guanxi de Liushinian Bianqian)*. Beijing: China Social Sciences Press.
- Zheng, F., and J. Fu. 2007. The centralized residence of the peasants: Current situation, problems and solutions' (Nongmin jizhong juzhu: Xianzhuang, wenti he duice). *Issues in Agricultural Economy (Nongye Jingji Wenti)* 9: 4–7.
- Zhou, F., and S. Wang. 2015. Farmers moving upstairs and capital going down to the countryside: A sociological study of urbanization' (Nongmin shanglou yu ziben xiixiang: Chengzhenhua de shehuixue yanjiu). *Social Sciences in China (Zhongguo Shehui Kexue)* 1: 66–83.
- Zhou, S., and J. Long. 2003. Rural public space and rural culture development: A case study in Tangshan' (Xiangcun gonggong kongjian yu xiangcun wenhua jianshe: Yi Hebei Tangshan xiangcun kongjian weilil). *Hebei Academic Journal (Hebei Xuekan)* 2: 72–78.
- Zhou, Y. 2005. 'Habitus and village customary law: The institutional environment of community integration – A case study of HX village' (Gongtongti zhenghe de zhidu huanjing :guanxi yu cunhui minyue – H cun gean yanjiu). *Sociological Studies (Shehuixue Yanjiu)* 6: 40–72.
- Zhu, L. 2002. The urban adaptation of the migrant workers' (Lun nongmingong jieceng de chengshi shiying). *Jiangsu Academic Journal (Jianghai Xuekan)* 6: 82–88.

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