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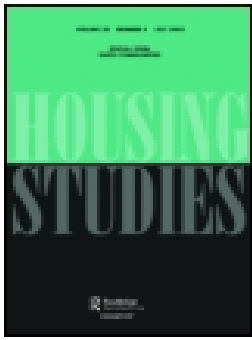
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Embracing market and civic actor participation in public rental housing governance: new insights about power distribution

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ABSTRACT

In recent decades, government intervention in welfare states has witnessed a shift from 'government' to 'governance': policy making shifted from hierarchical government steering to mixed forms involving government, market and civic actors. Such terminology has also entered Chinese policy language on public rental housing (PRH) provision. To unravel the perceived power distribution in the relationships between the involved actors, this article draws from in-depth interviews in two Chinese cities: Chongqing and Fuzhou. The article thereby contributes new insights to the perceived power relations in Chinese PRH provision on the ground. It also develops an analytical framework based on Billis by complementing it with Social Network Analysis to measure the power relations. Such a framework will allow the comparison of different governance systems across time and different jurisdictions within and beyond China. This study shows the structures and mechanisms for non-governmental actors to play a role, which they do not have in the 'government' period, in the governance of PRH.

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Public rental housing; governance; government; power distribution; social network analysis

Introduction

Globally, the transformation of welfare housing provision from the government to an expanding reliance on other non-governmental actors has received much academic attention (Czischke, 2007; Elsinga & Wassenberg, 2007). The concept of 'governance' in the literature is widely used to understand such changed form of steering the policy process, emphasizing the roles and interactions of actors who are involved (Rhodes, 1996; Duit & Galaz, 2008). Public Rental Housing (abbreviated hereafter as PRH) provision in China has also witnessed such a transformation from government to governance in the past decade.

Traditionally, 'government' means for the central government to be responsible for policy-making and establishing operational methods for the whole country of China, and local governments to be in charge of local policy formulation and implementation (Feng

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et al., 2007). This model of PRH provision to low- and middle-income households who cannot access housing on their own has been criticized in terms of the imbalanced responsibility distribution between different levels of government: the central government delegates responsibilities without providing adequate financial support for local authorities (Li *et al.*, 2016; Chen *et al.*, 2011). In response to this, in around 2011 the central government launched new schemes that aimed to encourage local governments to cooperate with non-governmental actors in providing PRH (MoF *et al.*, 2015; MOHURD, 2010).

Because of the involvement of non-governmental actors, western terms of ‘marketization’ and ‘civic participation’ emerged as key themes in Chinese policy language. ‘Marketization’ refers to the adoption of market mechanisms to provide PRH by involving the private actor to introduce competition and increase choice (Valkama *et al.*, 2018). ‘Civic participation’ means that, in addition to government, individuals, groups and organisations have the chance to participate in making decisions to influence PRH provision (Huber, 2011).

In turn, these developments gave rise to numerous studies discussing the increasing involvement of non-governmental actors. These studies of Chinese PRH describe political systems, fiscal structures and land schemes (Chen *et al.*, 2017; Huang, 2012), and argue that the Chinese central and local governments remain the actors with the most influence in the governance of PRH provision (Zhou & Ronald, 2017). Yet these studies are not underpinned by a theoretical foundation from a governance perspective, nor have they examined how the different actors are sharing power in practice. Sharing of power is a decisive dimension of the concept of ‘governance’ in comparison to the concept of ‘government’ (Sacchetti & Sugden, 2003).

Given the increasing involvement of non-governmental actors in the governance of PRH in recent years, the research question of this paper is: what are the roles of and relations among the different actors involved in Chinese PRH governance? To answer this question, we interviewed actors about the ways that they perceive to be involved in the provision of PRH in two Chinese cities which have been at the forefront of PRH policy implementation and innovation. Interview questions included those that allow for a Social Network Analysis (abbreviated hereafter as SNA) of the power distribution among governmental and non-governmental actors according to the perceptions of those actively involved in the provision of PRH.

In order to answer the research question, the next section develops the analytical framework of PRH governance focusing on ‘actors’ and their ‘interrelationships’ based on the work of Billis (2010). The framework is extended with SNA to measure the perceived power distribution across actors in practice. Next, the governance of PRH provision in China and the two selected cities (Chongqing and Fuzhou) are introduced. Subsequently, the methodology of the study is presented. Before drawing conclusions in the final section, the results of the SNA analysis are interpreted based on information from the interviews and literature in order to determine characteristics of PRH governance involving non-governmental actors in the provision of PRH in the two cities.

Actors and actor interrelationships as core concepts of governance

This section defines governance in terms of relevant actors and their interrelationships as they are the basic ingredients that distinguish governance from government in the literature.

'Governance' as a conceptual perspective

The term governance originated from Latin, meaning *'to rule or to steer'* (Ismail, 2011, p. 3). Recently, the concept has been widely discussed in association with governments worldwide cutting public expenditure and promoting efficiency (Elsinga, 2003; Van den Broeck et al., 2016). Governance implies a mode of steering based on or drawn from, but also going beyond, government to govern society in achieving societal goals (Stoker, 1998). In other words, governments are no longer the only relevant actor in 'hierarchically steering' or – using a more recent terminology 'managing' – societies (Hufty, 2011).

As Stoker (1998, p. 17) states in his most cited work in the governance field, governance refers to the development of steering and guiding styles 'in which boundaries between and within public and private sectors have become blurred'. This is the definition used in this paper: governance is perceived as cooperating governmental and non-governmental actors together steering the provision of PRH throughout the provision column involving the acquisition of land, the allocating and housing of households, and the management of the dwellings, as well as neighbourhood management. In its most basic definition, governance refers to actors and their interrelationships when cooperating to achieve goals (Hysing, 2009; Hufty, 2011).

Actors

The literature identifies four types of actor: 'state' actor, 'market' actor, 'community' actor, and 'hybrid' actor (Cole & Goodchild, 2000; Mullins & Pawson, 2010). The state actor (e.g. government department and public agency) will be relying on hierarchical steering and behave mainly as non-profit entity in contrast to the market actor (e.g. private enterprise and company) who will generally be motivated by profits. The community actor will be relying on the loyalty and common interests of a voluntary group of citizens to achieve their goals. A hybrid actor will exhibit traits of more than one actor type and thus combine different mechanisms of operation including the ways that authority is distributed within the organisation.

Although the descriptions of the four types of actor are laid out in the literature (Mullins & Pawson, 2010; Czischke, 2015), how to categorize them in the real world will not always be clear-cut; particularly as hybrid actors are assemblies of characteristics from state, market, and community. Billis' (2010, p. 50) work will be helpful as Billis provides a systematic classification of organisation types by applying five dimensions, as Table 1 shows: ownership (who owns the organisation?); management¹ (how does the organisation get its legitimacy?); operational priorities (how is the organisation motivated to operate?); human resources (what types of staff are running the organisation?); and other resources (how does the organisation acquire its funds for operation?). Billis (2010, p. 47) suggests that each type of actor will be characterized by its own set of structural features, called principles (Table 1).

Based on the possible combinations between the three other actors, Billis defines nine types of hybrid actor. In public housing provision, studies about hybrid actors are prevalent 'responses' to dynamic processes associated with the financial retreat of government, marketization, and broader societal developments in the form of

Table 1. Actor types characterized by five elements and 15 principles.

Core elements	Actors			
	State	Market	Community	Hybrids
	Principles			
Ownership	CPC and citizens*	Shareholders	Members	Mixing characteristics of two or three other actors (nine types of hybrid actor: 1. State /Community, 2. State/Market/Community, 3. State/Market, 4. Community/State, 5. Community/State/Market, 6. Community/Market, 7. Market/State, 8. Market/State/Community, 9. Market/ Community)
Management	Public elections	Share ownership size	Private elections	
Operational priorities	Public service and collective choice	Market forces and individual choice	Commitment about distinctive mission	
Human resources	Paid public servants	Paid employees	Members and volunteers	
Other resources	Taxes	Sales, fees	Dues, donations and legacies	

Adapted from (Billis, 2010, p. 55).

*Billis (2010, p. 50) defines ownership of the state actor as 'groups of people who have the "formal rights" to elect the board of directors and political representatives respectively known as shareholders and the electorate'. China, different from western countries, has a pyramidal election system and is ruled by a single party: The Communist Party of China (CPC) (Yongnian, 2009). The 'ownership' of the state actor in China is therefore described as 'CPC and citizens' in this study.

emerging civic participation. Research from, for instance, the Netherlands, Denmark and UK confirms that hybrid actors are exposed to a mixture of state, market and civil society mechanisms (Jensen, 1997; Gruis, 2005; Mullins *et al.*, 2012).

Interrelationships

Interrelationships, generating from frequent communications and complex interactions among the state and the other three types of actor, could determine the authoritative allocation of values in society - the focus of the governance debate (Hysing, 2009; Driessen *et al.*, 2012). Different interrelationships may contribute to diverse governance features and may also affect the decision-making, policy implementation and thereby the outcomes of policy (Driessen *et al.*, 2012). As Arnouts *et al.* (2012, p. 44) point out: "it is not enough to just look at the actors, it is also necessary to study the nature of their interrelationship".

One of the ways to investigate interrelationships will be to analyse how the power is distributed in the relations among the relevant actors (Chen & Hubbard, 2012). Different patterns of power distribution reflect the structural features of governance including how the actors link to each other, who is perceived to be in the core position, and how information is perceived to flow between actors (Sacchetti & Sugden, 2003). To explain these concepts, a governance type that will allow almost every actor the same access to resources and will allow every actor to be equally important in the process, will provide a lot of possibilities for cooperation. In contrast, a structure in

which the power and resources are in the hands of the state actor is more likely not to be based on cooperation of actors in housing provision.

Governance literature has highlighted the measurement of the power distribution in the recent two decades, but has been restricted to descriptions (Martínez *et al.*, 2003). SNA is a quantitative method backed by strong mathematical theories (Freeman, 2004). It allows measurement of the perceived strength of interactions in the relationships among actors and therefore has been applied throughout the governance literature (see, for example, Borg *et al.*, 2015; Lienert *et al.*, 2013). However, the application of SNA in combination with the work of Billis (to clarify different types of actor) to the study of PRH governance is novel.

PRH in China and in the two case study cities

This section provides a backdrop to the transition from PRH government to governance in China: the emerging involvement of market and civic actors, as well as to PRH provision in our case study cities Chongqing and Fuzhou.

PRH in China

In 2011, the Chinese central government announced PRH as the mainstream of China's new housing policy and declared to build 36 million units of public housing during the 12th Five-year Plan that was implemented from 2011 to 2015, including 18 million PRH units (MOHURD *et al.*, 2013).

To fulfil the ambitious plan, the central government set policies and mandates for the whole country's PRH provision, while local governments were put in charge of local policy formulation, specific methods of project development and implementation (Chen *et al.*, 2017).

On PRH finance, the central government was to pay for 10% of the total investment, while local authorities were to be responsible for the rest of the financing including the provision of PRH (Zou, 2014). However, local officials were reluctant to build the targeted number of PRH units from their own budget because of the impacts of fiscal decentralization and the existing land revenue regime.

Fiscal decentralization, as one of the most essential components of market reform in China, has ensured that the central government raised the ratio of its share in total tax revenue in comparison with the share of local government (Jin *et al.*, 2005). Local government has thus turned to generate revenues from land transactions and development (Zhang *et al.*, 2017). Since economic growth was, and still is, the main criterion for central government to evaluate local officials for promotion (Liu *et al.*, 2016), local governments are incentivized to promote land development (Zou, 2014). Local governments thus prefer to lease land to build commercial housing and attract investment from corporations (market actors), which can bring direct revenues, rather than to provide cheap or free land to PRH projects. Consequently, local authorities have turned to market resources for PRH provision. To cope with funding, they operated one of two PRH construction modes: *Tongjian* mode and *Peijian* mode (Huang & Du, 2015).

Table 2. Different construction modes of PRH in Chongqing and Fuzhou.

Construction mode	Chongqing	Fuzhou	
	<i>Tongjian</i>	<i>Tongjian</i>	<i>Peijian</i>
Main implementers	Local government and investment organisations		Local government and real estate companies
Land supply	Investment organisations	Local government	Real estate companies
Finance	Investment organisations mainly through bank loans	Local government	
PRH distribution	Local government		
Ownership of PRH	Investment organisations	Local government	
Management of PRH	Residents' Committee and property management companies		

In the *Tongjian* mode (since 2010), investment organisations² construct large-scale PRH projects, while in *Peijian* mode (widely adopted since 2015), local governments regulate market real estate companies to build a certain percentage (usually 5%-10%) of PRH in the course of their ordinary project development (MoF & MOHURD, 2015) (see the next section).

Furthermore, the central government has viewed PRH provision as an important way to ensure '*political consolidation and social stability*' (Shi et al., 2016, p. 224), which is consistent with the idea of a '*harmonious society*' proposed by former President Hu in 2006 and '*people-oriented development*' proposed by President Xi in 2012 (Mok & Hudson, 2014). Thus, the central government issued policies to stimulate the participation of tenants into PRH governance (MOHURD & MoF, 2018). Against this background, non-governmental organisations such as the Residents' Committees³ (*jumin weiyuanhui*, abbreviated as RCs hereafter) established by local authorities were in place to communicate face to face with tenants to manage PRH in an inclusive way, giving residents a voice.

PRH in Chongqing and Fuzhou

Chongqing and Fuzhou both have undergone rapid house price growth, creating inequalities in the access to market housing, and rapid urbanization during the last decade (National Bureau of Statistics of China, 2019a, 2019b). Booming house prices have caused an increasing Price-to-Income ratio: it amounted to 10.8 in Chongqing and 20.4 in Fuzhou in 2018 (Kai, 2019), resulting in the two cities providing large amounts of PRH.

Table 2 summarizes both modes of PRH construction in Chongqing and Fuzhou based on scholarly literature (see, for example, Zhou & Ronald, 2017; Zhou & Musterd, 2018) and local policy documents (see, for example, Chongqing Public Rental Housing Administration, 2018; The Bureau of the Housing Administration of Fuzhou, 2014a). The *Tongjian* mode is used in both Chongqing and Fuzhou, but with a slight difference as the investment organisations in the two cities conduct different tasks. Investment organisations in Chongqing's *Tongjian* mode invest, finance, provide land to, construct, and own PRH (Zhou & Ronald, 2017), while investment organisations in Fuzhou's *Tongjian* mode are responsible for PRH construction activities only (Department of Housing and Urban-Rural Development of Fujian Province, 2012).

The idea behind the difference is that the Chongqing investment organisations are *land storage and supply organisations*, which means they can raise funds by leasing and mortgaging the land they own (Zhou & Ronald, 2017). Investment organisations raise 70% of the funds from the capital market for PRH projects (Zhou & Ronald, 2017) and the municipality will finance the remaining 30%. Conversely, investment organisations in Fuzhou are not authorized to own land and they are fully subsidized by government. By empowering investment organisations, Chongqing municipal government made a plan to build 40 million square metres PRH (about 67000 units) to benefit 20% of families in the city by the end of 2020 (Li, 2010). As no other city in China has carried out such a large-scale PRH programme as Chongqing did, Chongqing became a pilot city for PRH provision (Zhou & Ronald, 2017).

In contrast to *Tongjian* mode, *Peijian* mode in Fuzhou makes real estate companies take charge of developing and constructing PRH units (The Bureau of the Housing Administration of Fuzhou, 2014a). After the completion of projects, real estate companies transfer PRH to Fuzhou municipality, and the latter pays the cost of construction to the real estate companies. Since PRH projects are not attractive for the real estate companies compared to commercial projects, as there are no opportunities to make returns, local government will need to incentivize these companies, and will offer low bank loan interest rates, tax deductions, and cheap or free land (Li *et al.*, 2016). This mode or a variation thereof is popular in cities, such as Beijing, Nanjing, and Shanghai.

As concerns the nationwide trend to promote non-governmental actors' involvement, both cities also involved other organisations: state-owned banks to provide loans to finance PRH projects; property management companies hired by municipal governments to offer housing management services; RCs to provide a way for PRH tenants to consult with management and to get government information and services. Given the non-governmental actors' increasing involvement and their different characteristics (e.g. state-owned, government-established, privately-operated), concerns have been raised about how to best classify them (Chen & Hubbard, 2012). This classification will be important when analysing actors' power relations and help practitioners to set out their strategies in response to changes (Johnston, 2015; Yan *et al.*, 2018). Billis' work thus is highly relevant for this context.

Methodology

This section presents the argumentation for the case study selection and the data collection for the later study of actors and interrelationships based on Billis' work and the SNA.

Case study selection

The selection of the two cities - Chongqing and Fuzhou - was based on three criteria. The first and foremost criterion was that the two cities cover *Tongjian* and *Peijian*, the two most widespread modes of PRH construction modes. Therefore, the results from this study may have wider implications beyond the two case study cities.

However, as China is such a large country and the actual operation of the two provision modes can vary across municipalities, the paper's aim remains explorative in the sense that it analyses the power distribution based on the perceptions of practitioners in the two cities.

As second, and pragmatic, reason for selecting both cities was the accessibility of data. This first-hand data is relatively unique as interviews with those that work in practice in the realization of PRH are generally difficult to organise; especially from government officials in China.

The last selection criterion was the number of PRH units realised in combination with the relatively extensive role of non-governmental actors providing valuable new data. During the 12th Five-year Plan period, Chongqing has built 460 000 PRH units (Mengyin Zhou, 2016) and Fuzhou has accomplished about 35 000 units (own calculation based on the annual numbers published on the government website) (The Bureau of the Housing Administration of Fuzhou, 2014b). The national policies are reflected in local governance practice of PRH involving market resources and encourage tenants' participation (see, for example, Municipal Land Resources and Housing Authority of Chongqing, 2011; Department of Housing and Urban-Rural Development of Fujian Province, 2012).

Data collection

Both interviews and a document study were the methods used for collecting data. Interviews were used as the main research method in this paper, while analysing newspapers and policy documents supply background and complementary information. Actors of interest (so-called study boundary, see for detailed information, Coles *et al.*, 2016; Freeman, 2017) for collecting interview data were government and non-governmental actors engaged in PRH governance (e.g. development, allocation, construction and management).

Following the boundary specification, snowball sampling was utilized as a method in which the respondent from a key initial organisation reports on other actors (Weiss *et al.*, 2012). The informants from these referred actors are also required to name actors working with them until all the relevant actors in the research framework study boundary are accessed and identified (Carpenter *et al.*, 2012). This snowball sampling method is a popular method extensively used in governance studies applying SNA (see, for example, Ibarra, 1993; Kumar *et al.*, 1993; Imperial, 2001).

In Chongqing and Fuzhou, the first organisations to be approached were the authorities responsible for providing PRH. These were elicited through a review of the literature, government websites, and news sources. Considering that the snowball sampling method was employed at the actor level, there might be a chance that on the level of actors with only small personal connections could be missed (Carpenter *et al.*, 2012). To deal with this possible misspecification, the results of snowballing were checked from the interviewees at the beginning of every interview. In total, 30 entities (15 from Chongqing and 15 from Fuzhou) were identified (for detailed information, see Appendix 1). As many of these entities are very large and complex, when

conducting interviews, the specific branches and/or the sub-departments in the 30 entities responsible for PRH projects were our main focus.

Semi-structured in-person and phone interviews were conducted with representatives from the 30 entities in Chongqing and Fuzhou, respectively. Interviewees were asked to answer the questions in accordance with the on-going PRH projects they were handling at the moment of the interview. Each interview took 60 to 90 minutes and all were recorded digitally. The recorded interviews were transcribed into Word Files. Then the documents were analysed in *Atlas.ti*, a computer program that extracts and codes the important sentences (Friese, 2014).

Although we initiated the fieldwork to interview people at all levels of each organisation, the final 30 interviews were held with some mid- and lower-level staff. Some higher-level managers were not willing to cooperate. Although these staff are practitioners from the frontline of the implementation of PRH, the aim was to prevent influence on the findings by the position of the interviewees; for example, the difference between the bureau managers and subordinate staff. To minimize such bias, all the interviewees were asked to answer the questions as much as possible on behalf of the respective organisation, not as individuals. And we also observed that sub-departments (in the government or non-governmental organisations) responsible for PRH projects in each entity were not big (e.g. one sub-department in the Bureau of Public Rental Housing of Chongqing usually has around 10 staff), suggesting that the managers and staff work closely with each other and thus are both familiar with the organisation's tasks.

Data analysis

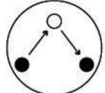
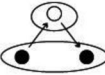
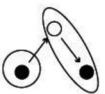
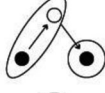
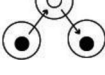
Billis' framework was applied to classify the 30 entities in PRH governance in Chongqing and Fuzhou into the types: 'state', 'market', 'community' and 'hybrids.' A series of targeted questions based on the five elements (see Table 1) were asked based on interviewees' daily work. Open-ended questions about organisation mandate and goals, and the general implementation were addressed as follow-ups to help define the organisation background and responsibility more precisely.

SNA was used to analyse the interrelationships between different actors in the two cities. The level of measurement of SNA can range from the traits of an actor within the governance to the general description of the entire network (a network refers to a physical pattern of ties amongst the actors) (Freeman, 2004). Along with this, SNA also offers tools to visualize the interrelationships among actors. In line with the research question suitable SNA analysis metrics allow us to investigate:

- How non-governmental actors link to the government
- Who the most powerful actor in the PRH governance network of actors is
- How the non-governmental actors impact other actors' behaviours, or are being impacted.

Based on Gould & Fernandez (1989) and Van der Hulst (2009), Table 3 provides information on the interpretation of the two measures selected here: *Degree*

Table 3. Implication and effect on governance networks of two SNA measures.

SNA measure	Implication	Effect on network
Degree centralization	The extent to which only a few actors have a large number of ties.	<p>A high degree centralization value indicates a high level of network cohesion, implying that a few actors hold the majority of ties linking the network together. Actors in or outside the network only need to reach these well-connected few actors to reach the entire network.</p> <p>A network with a high value of degree centralization relying on few actors might lack resilience or long-term problem-solving ability.</p>
Brokerage roles	<p>Brokerage is a state or situation in which intermediary actors facilitate connections between other actors lacking access to one another. The graphs in the right column show the five types of role (the white dots) according to the direction of the arrows and the groups actors belong to (as showed in the right column). For instance, when the actor in question and both the source and destination actors are all from the same group, the actor act as a "coordinator".</p>	<p>Coordinator </p> <p>Consultant </p> <p>Gatekeeper </p> <p>Representative </p> <p>Liaison </p>

centralization describes the governance network structure (Freeman, 1978); **Brokerage roles** define the actors who as brokers connect otherwise unconnected actors to share information and resources (Burt, 2009). **Brokerage roles** also define the exact role of the five options a brokerage actor plays (Table 3). These five brokerage roles can help detect how actors, particularly the powerful ones that are information mediators, perform in the network and the impacts they have on other actors.

During the interview, each respondent was provided with a list containing the city’s entities involved in PRH governance taking the provision mode into account. They were asked to mark how often the members of their organisation interacted with each of the other actors (e.g., meet to communicate, telephone, or fax) using a five-point scale ranging from ‘Never’ to ‘Very Frequently’. In case of different perceptions, we averaged the frequency between any two participants. The data was modified to be binary⁴ for measuring the Degree of centralization in SNA. Thus, the frequency indicating there is an interaction between two actors which equals or is larger than one was translated into ‘1’.

Brokerage roles can be measured for directed data, which demonstrates the input/output flow of information between each actor (Borgatti, 2002). This calls for detailed information of: 1) from whom the interviewed actor received information; and 2) to whom they delivered information. Questions were thus addressed to the respondents

Table 4. Actors involved in PRH provision in Chongqing and Fuzhou.

Actor type	Cities	
	Chongqing	Fuzhou
State	All government departments in two cities	
Hybrid actor (type 1: State /Community)	Residents' committees in two cities	
Hybrid actor (type 2: State/Market/Community)	The Hongguanjia Property Management Alliance	
Hybrid actor (type 3: State/Market)	The investment organisation, the property management company, the construction company, and the bank	The investment organisation and the construction company
Hybrid actor (type 7: Market/State)		The real estate company and the property management company

as follows: What information does your organisation need from others? Under what scenario does your organisation need such information?

The resulting data were then analysed with the computer program UCINET 6 and visualized in NetDraw (Borgatti, 2002). Additionally, the following questions were asked to help explain the results generated from SNA and to cross-check the findings:

- For what reasons do you need to contact other actors?
- What do you think are the key resources and which organisations do you think has the access to these?
- Which actor do you think has the biggest influence? And how do you think does or can this actor influence other actors?

PRH governance on the ground

State actors and hybrid actors

The replies of the interviewees show that there are two types of actor in Chongqing and Fuzhou: state actors and hybrid ones (Table 4), indicating that no participant in our study area can be identified as a community actor or market actor in PRH governance. The majority of actors are government departments engaged in the whole provision process in both cities. The hybrid actors are classified into three types due to their combination of principles from state, market and community in a decreasing order⁵. They perform many tasks in PRH provision (see Appendix 1).

Established by sub-district offices (the lowest level of urban administration in China), RCs have existed for almost 30 years and worked very close with local governments; hence, they are regarded as part of local government (Cai, 2005; Mok, 1988). The interviewees indicated that most of RCs' work is associated with sub-district offices in the two cities, and they are financed by the sub-district offices. The two entities share working places, information and even staff from our observations. However, in the PRH governance, there are some volunteers working in RCs and they are defined in the Constitution of China as grassroots organisation, RCs are thus classified as type 1 hybrid actors (State/Community actors).

Hongguanxia Property Management Alliance is a State/Market/Community actor in Chongqing. It is a newly established organisation by Chongqing local government. The alliance, as stated by its staff, provides services to PRH tenants and manages the neighbourhood by building cooperation among the government, property management companies, tenants, etc.

Hybrid Actors of type 3 (State/Market) are usually known as state-owned enterprises, whose 'ownership', 'management', and 'operational priorities' are the same features as of the 'state', but which combine features of 'human resources' and 'other resources' from 'state' and 'market'. They are obliged to participate in the PRH provision, getting loans and social investment backed by government guarantees, and their activities require government approval.

Type 7 actors (Market/State) usually behave to maximize profits in commercial housing projects, but defined their 'operational priority' as 'public service and collective choice' during PRH provision. The informants said that they are asked by the government to contribute to the society without profits and they are constantly manipulated by the government:

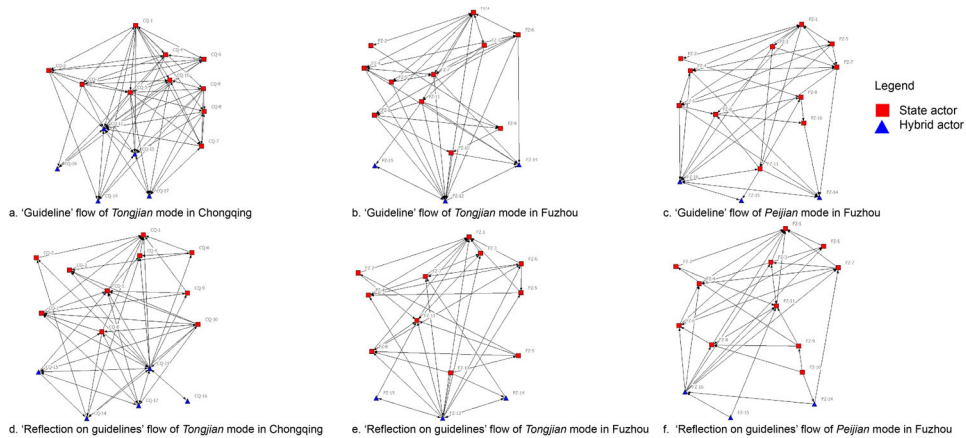
- *The property management fee is set by the government below the market price.* (Staff from Property Management Company of Chongqing, 11-01-2017)
- *Housing size and layout are stipulated.* (Staff from Real estate company of Fuzhou, 24-02-2017)
- *Compared to commercial housing projects, PRH is rather cumbersome in its development period. To go through PRH project needs more procedures and meet more requirements.* (Staff from Real estate company of Fuzhou, 24-02-2017)

For such Market/State actors, according to interviewees, they need to go through a strict open bidding to participate in PRH provision, however, PRH provision cannot bring them profits. Except for profiting from some government incentives (e.g., land, funding, tax), interviewees indicate that they need to accept PRH-project in order to be able to conduct their commercial projects:

To construct PRH is a precondition for us to successfully bidding for land. (Staff from Real estate company of Fuzhou, 24-02-2017)

All the hybrid actors operate partly as the 'state' and thus are influenced by the government, but their way of the combination of 'state' principle is different. Type 7 hybrid actors (Market/State) are the so-called '*shallow hybrid*' actors defined by Billis (2010), and only exist in the *Peijian* mode in Fuzhou. The activities of such actors in PRH governance are regulated tightly by the government, but this does not necessarily change their basic market identity when engaged in commercial projects.

Type 1, 2 and 3 hybrid actors are examples of Billis' (2010) so-called '*entrenched hybridity*', implying that they are established from day one to be hybrid. As such, the staff from these entrenched actors regarded their operational priority naturally as 'Public service and collective choice'. They comprise the majority of the hybrid actors in PRH governance in the two cities and their management methods, human resources, and resources of finance are largely influenced by the government.



Note: IDs with a start of CQ refer to entities in Chongqing while IDs with FZ stand for entities in Fuzhou. CQ-1 (Competent authority), CQ-2, CQ-3, CQ-4, CQ-5, CQ-6, CQ-7, CQ-9, CQ-10, FZ-1 (Competent authority), FZ-2, FZ-3, FZ-4, FZ-5, FZ-6, FZ-7, FZ-8, FZ-9, FZ-10, FZ-11 are government departments; CQ-8 is Residents' committee; CQ-11 and FZ-12 are investment organizations; CQ-14 and FZ-14 is Constructors; CQ-15 and FZ-15 are Property Management Companies; CQ-17 is Hongguanqia Property Management Alliance; FZ-16 is Real estate company. (see Appendix 1 for more detailed information of these entities)

Figure 1. SNA of PRH governance in Chongqing and Fuzhou (the nodes in the figure refer to the analysed entities, the node labels are the IDs of these entities and the lines connecting two nodes are the so-called ties in the SNA).

Interrelationships

The results of the SNA derived from the interviews are presented in [Figure 1](#).

Characteristics of the whole network - degree centralization

From [Figure 1](#), it seems that there is no isolated actor. Many interactions among state and hybrid actors exist in the network structures. Getting the highest score (47.34%) of the degree centralization measurement, the *Tongjian* mode in Fuzhou is more likely to make its involved actors bound by the most central actor. This could lead to more compliance within a system but less flexibility to deal with uncertainties, which could result in rigid governance and shut out access to the actor network of less well-connected actors (Freeman, 2004).

Conversely, the *Tongjian* mode in Chongqing (39.80%) and the *Peijian* mode in Fuzhou (39.05%) might have a relatively low degree of network cohesion and more opportunities for cooperation to mitigate information asymmetries, and reduce the monopoly power of well-connected actors (Weiss *et al.*, 2012). The difference in degree centralization might be explained by PRH provisions conducted under the *Tongjian* mode in Chongqing and the *Peijian* mode in Fuzhou reflecting the market logic, while the *Tongjian* mode in Fuzhou does not reflect the market logic. In Chongqing, 70% of the investment for PRH projects is from the capital markets. As to the *Peijian* mode in Fuzhou, the real estate company has to raise the finance, build PRH on their own land, hire and pay the constructor, transfer the dwellings to the government after the project completion, and get all the expenditure back from the government afterwards.

The construction process of a PRH project is almost no difference from conducting a commercial one. (The staff from Real estate company of Fuzhou, 24-02-2017).

However, these approaches were not discovered in the *Tongjian* mode in Fuzhou through which the finance is provided by the government, and the main implementer (the investment organisation) performs like a government agent:

We are acting like investors or companies representing governments... We work as an enterprise body but do things that governments used to do... (Staff from Fuzhou Urban and Rural Construction & Development (Group) Co., Ltd., Fuzhou, 22-02-2017)

Traits of actors - brokerage roles

The interaction among actors are two types in both cities: ‘Guideline’, and ‘Reflection on Guidelines’ based on interview data. ‘Guideline’ consists of policies, regulations, and instructions from any actor to guide PRH provision, while ‘Reflection on Guidelines’ refers to feedbacks or reactions any actor has towards PRH implementation. Based on the two types of interaction, the Brokerage roles analysis first identifies who are the powerful actors based on their ability of connecting actors as information mediators and defines the specific roles (‘Coordinator’, ‘Consultant’, ‘Gatekeeper’, ‘Representative’, and ‘Liaison’) such powerful actors play in the governance.

As to the ‘Guideline’ flow, as [Figure 1 \(a, b, c\)](#) shows, the state actors are generally more active than the hybrid actors as the average out-degree⁶ of the state actors of each mode is higher than that of hybrid actors, respectively. The result indicates that the guidelines for PRH projects are usually initiated from the government and transferred through a top-down approach. The interview data confirm that state actors in Chongqing and Fuzhou occupy the crucial positions to be influential by making other actors aware of their views.

[Figure 1 \(a, b, c\)](#) also depicts that, apart from the government, the investment organisations and the real estate company are also powerful actors active in delivering ‘guideline’ messages. They are the main implementers carrying out many tasks (see [Appendix 1](#)), and their combination of state actor’s principles have influenced their performance and meanwhile empowered them. The Brokerage roles measurement describes these hybrid actors as ‘Gatekeepers’ for all non-governmental actors in these ‘guideline’ flows to determine whether or not to grant access to the state actors. Other hybrid actors in PRH governance depend largely on investment organisations and the real estate company to get access to government policies and guidelines.

In contrast, the ‘Reflection’ flows displayed in [Figure 1 \(d, e, f\)](#) show that state actors in two cities are quite passive in giving out feedback. As the respondent from the Bureau of Public Rental Housing of Chongqing stated, *we need the responses from them (non-governmental sectors) to help revise our policies*. In other words, feedbacks from the non-governmental side are usually in favour of governments’ requests. As illustration may function that a certain government department frequently asked reports from its associated non-government actor(s). For example, the flow of information is from the constructor (FZ-14) to the Urban and Rural Construction Committee of Fuzhou (FZ-7), a government department in charge of projects construction, in [Figure 1 \(e, f\)](#). As one interviewee expressed,

If the government requires us to contact other organisations, we will do that. We will do what we should do to meet the needs of the government. (Staff from Fuzhou Yongxinshun Property Management Company, Fuzhou, 16-03-2017)

Taken together, the ‘bottom-up’ reflection approach is triggered by the government instead of introduced by the hybrid actors (non-governmental entities), which is different from the idea of civil society in western countries. In addition, how the government revises the policies and what the result is of such revision, remain unclear to the non-governmental actors according to the interview results.

The Brokerage analysis defines the roles of CQ-1 (Municipal Land Resources and Housing Authority of Chongqing) and FZ-1 (The Bureau of the Housing Administration of Fuzhou) (the competent authorities⁷) as ‘None’ in both cities as they only receive feedbacks from but do not reflect to any others in their network. Moreover, investment organisations in both cities and the real estate company in Fuzhou are defined as ‘Representatives’ for the non-governmental group through the ‘Reflection’ flows. It is due to other non-governmental actors giving direct responses to the investment organisations and the real estate company, who later help to convey their feedbacks to the government. This might help enhance the efficiency of communication among governments and other actors. However, there could also be a risk that these ‘Representatives’ actors do not treat the responses of other non-government actors properly as investment organisations are established by and thus are rooted in government and the activities of the real estate company are strictly regulated by the government.

It is expected that the sub-district offices, Residents’ committees and Hongguanxia Property Management Alliance, which are entities responsible for managing neighbourhood and face-to-face interactions with PRH tenants, should play some important roles in the information transferring process in PRH governance. However, the Brokerage roles measure shows that such actors applying principles from the community sector do not have any strong ability of connectivity. This implies that although the Chinese government has promoted public participation in PRH governance, it is not matching with actual practice in Chongqing and Fuzhou.

To sum up, the SNA results show that the Fuzhou *Tongjian* mode has the highest degree centralization among the three governance modes. While the relatively high degree centralization implies a high level of network cohesion, the adoption of non-governmental resources in the other two modes could create a more resilient structure to quickly adapt to rapidly changing environments. The real estate company (Market/State hybrid actor) of the *Peijian* mode in Fuzhou, the two competent authorities and the investment organisations (State/Market hybrid actor) in both cities are powerful actors. Hybrid actors with the characteristics of the community sector are not perceived as powerful. In addition, the government is perceived as active in ‘Guideline’ delivery, but passive in ‘Reflection’ in both cities. It seems like hybrid actors could change or shape the PRH governance by giving feedback. However, from our investigation, hybrid actors are indeed passive in all the information transformation processes, as they can neither generate guidelines nor spontaneously provide feedback.

Summary and conclusions

Within the phenomenal transformation of Chinese society and economy after 1978, when the housing market became homeowner dominated (Chen *et al.*, 2013), the increased delegation of government tasks to other actors has become one of the most

frequently discussed issues in China. This can also be seen in the provision of PRH as the Chinese government has moved towards promoting the involvement of market and civic actors in PRH. Many policy documents and speeches of government officials have used ‘marketization’ and ‘civic participation’ in their discourse, while actual practice remains unstudied.

In this paper, we have moved beyond abstract discussions to investigating the practices of PRH governance in two Chinese cities: Chongqing and Fuzhou. The aim of the paper was to explore the roles of and power relations among the different actors involved in Chinese PRH governance. To fulfil the aim, we conducted interviews in two Chinese cities (Chongqing and Fuzhou) and developed a framework of analysis.

As scientific added value, the study combines the analytical framework of Billis (2010) and SNA to create a better understanding of the shift in Chinese PRH from government to governance. The SNA allowed for exploring qualitatively and quantitatively results about the strength of power relations between actors perceived by actors involved in PRH governance. This framework therefore gives the abstract application of theories an empirical basis.

The framework will be useful in other types of analyses as well, as it entails two further dimensions. The time dimension means it can be utilized when conducting longitudinal studies to know how governance changes over time in the eyes of the actors involved. The space dimension stresses that the framework can be applied to other cities or regions in or outside China for comparative purposes.

As second contribution of this paper to the governance literature, the results reveal the structures and mechanisms underlying the role of government in PRH governance by specifying empirically the role of non-governmental actors in a context of the well-recognized dominant role of governments in many studies.

Based on the interviews, government departments, as state actors, set rules, frame policies, supervise construction, allocate PRH units, control key resources⁸ in the two studied cities. However, governments have also assigned hybrid actors (non-governmental actors) tasks including the PRH development, construction, and management. In Chongqing, the local government entrusts a hybrid investment organisation to finance PRH projects, making explicit the shift from government to governance (Chen *et al.*, 2013).

However, the privatization discourse of the central government has not (yet) changed the government-dominant PRH governance in our two case study cities (Fuzhou and Chongqing), as the following four findings show:

- Based on Billis’ work (2010), non-governmental actors in PRH governance in Chongqing and Fuzhou are reported to refer to hybrid actors combining state principles in a different way from a ‘pure’ state actor, to be classified ‘entrenched’ or ‘shallow’. A shallow actor is highly regulated by the government, but does not change its basic market identity, when it is engaged in commercial projects. On the other hand, an entrenched actor is established (by the government) from day one to be hybrid.
- In the process of information exchange, hybrid actors conducting the tasks of PRH development, construction, and service delivery are reported to be recipients of government ‘guidelines’ and requests of feedback; therefore, they operate reactively to government initiatives;

- Powerful hybrid actors (investment organisations in the two cities and the real estate company in Fuzhou), which the government entrusts as main implementers of PRH provision, have access to core resources (land and funds) in PRH provision. Such actors are effectively implanted in the government side or their activities are highly regulated by the local governments;
- Hybrid actors combining the community principles of governance are not perceived as powerful. This implies that PRH tenants are not able to influence the PRH governance in practice.

These findings help to point out that although terminology such as ‘marketization’ and ‘civic participation’ has been used increasingly in government language, the practice of moving from government to governance in the case study cities seems different from the shift in western cultures. The integration of non-state actors in public service delivery often led to the ‘retreat’ of state regulation and/or state finance in western cultures (Johnston, 2015; Desai & Imrie, 1998). Examples can be found in the Netherlands, when affordable homes are provided by non-profit private housing organisations (Czischke, 2015); in the UK when tenant-participation in many housing associations allow for community influence (Preece, 2019); and in the US where private companies and homeowners take control of public housing projects (Bockman, 2018).

In conclusion, central and local governments in China fulfil a leading role in the PRH governance, though some form of shift has taken place from government to governance. The ‘new’ governance discourse and style in the two case study cities allow for some forms of hybrid organisation to influence the governance of PRH. Given that the studied construction modes implemented in both cities have wider application in other cities in China, our conclusions may have wider application as well. Monitoring regularly the perceived changes in relationships between the actors in a governance network by interviews and by SNA ensures that the involved actors get insights in how structures and mechanisms in governance shift and can adapt their own strategies. For as long as privatization of PRH enjoys policy emphasis, such a monitoring system could assist in optimizing the working of complex governance networks in the eyes of those involved.

Notes

1. The original element proposed by Billis (2010) was governance of the organisation. To prevent confusion with governance on a societal level, such as PRH governance, this paper uses the term ‘management’ instead.
2. Investment organisations are also known as Local Government Financing Platforms, which are usually state-owned enterprises that develop, finance and implement public infrastructure projects (including PRH) (Jin and Rial, 2016).
3. The RC is a basic unit of urban governance in China and is originally defined as ‘mass organisation of self-management at the grassroots level’ in the Constitution of the People’s Republic of China (1993).
4. No consensus has been reached yet about whether it is scientifically valid to use non-binary data for network analysis (Wei *et al.*, 2011). According to some classic works in the SNA field, for instance, Freeman (1978), Martinez *et al.* (2003) and Opsahl *et al.* (2010),

the aforementioned measures are only designed for binary networks. Hence, we applied binary data here. The five-point scale data is helpful to provide [supplementary information](#) to the examination of the interrelationships and to draw our conclusion.

5. For instance, having two principles from the state sector and three from the community sector makes an actor a Community/State actor, indicating that the hybrid actor is embedded in community, but with some state actors' characteristics.
6. Out-degree of the node *A* in a directed network means the number of nodes originated at *A*. Correspondingly, in-degree means the number of nodes destined to node *A*.
7. The competent authority is the government department which is designated by the municipal government to administer all matters related to the PRH provision.
8. Although Chongqing government do not own the land (investment organisations do) and only finance 20% of the investment (10% from central government and 70% from investment organisations), the government is still considered to steer the allocation of key resources. This is due to the investment organisations are established by the local government and their work associated with PRH need to be approved by the government. The investment organisation in Chongqing is like the nationalised industries in many countries owned by government but operating in the market (Billis, 2010).

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References

- Arnouts, R., van der Zouwen, M. & Arts, B. (2012) Analysing governance modes and shifts—governance arrangements in Dutch nature policy, *Forest Policy and Economics*, 16, pp. 43–50.
- Billis, D. (2010) Towards a theory of hybrid organisations, in: D. Billis (Eds) *Hybrid Organizations and the Third Sector: Challenges for Practice, Theory and Policy*, pp. 46–69 (Basingstoke: Palgrave Macmillan).
- Bockman, J. (2018) Removing the public from public housing: public–private redevelopment of the Ellen Wilson Dwellings in Washington, DC, *Journal of Urban Affairs*, pp. 1–21.
- Borg, R., Toikka, A. & Primmer, E. (2015) Social capital and governance: A social network analysis of forest biodiversity collaboration in Central Finland, *Forest Policy and Economics*, 50, pp. 90–97.
- Borgatti, S.P. (2002) *NetDraw: Graph Visualization Software* (Harvard: Analytic Technologies).
- Burt, R.S. (2009) *Structural Holes: The Social Structure of Competition* (Cambridge: Harvard University Press).
- Cai, Y. (2005) China's moderate middle class: The case of homeowners' resistance, *Asian Survey*, 45, pp. 777–799.
- Carpenter, M.A., Li, M. & Jiang, H. (2012) Social network research in organizational contexts: A systematic review of methodological issues and choices, *Journal of Management*, 38, pp. 1328–1361.
- Chen, J., Guo, F. & Wu, Y. (2011) One decade of urban housing reform in China: Urban housing price dynamics and the role of migration and urbanization, 1995–2005, *Habitat International*, 35, pp. 1–8.
- Chen, C. & Hubbard, M. (2012) Power relations and risk allocation in the governance of public private partnerships: A case study from China, *Policy and Society*, 31, pp. 39–49.
- Chen, J., Jing, J. & Man, Y. (2013) Public housing in mainland china: History, ongoing trends, and future perspectives, in: Y. Man (Eds) *The Future of Public Housing*, pp. 13–35 (Berlin: Springer).
- Chen, J., Yao, L. & Wang, H. (2017) Development of Public Housing in Post-Reform China, *China & World Economy*, 25, pp. 60–77.
- Chongqing Public Rental Housing Administration. (2018) *Chongqing Public Rental Housing Administration held a briefing on the situation of "quality improvement year" inspection*. Available at http://gzf.zfcxjw.cq.gov.cn/gongzdt/201809/t20180930_4518.htm (accessed February 2019).
- Cole, I. & Goodchild, B. (2000) Social mix and the balanced community' in British housing policy—a tale of two epochs, *GeoJournal*, 51, pp. 351–360.
- Coles, A.-M., Piterou, A. & Genus, A. (2016) Sustainable energy projects and the community: Mapping single-building use of microgeneration technologies in London, *Urban Studies*, 53, pp. 1869–1884.
- Czischke, D. (2007) A policy network perspective on social housing provision in the European Union: The case of CECODHAS, *Housing, Theory and Society*, 24, pp. 63–87.
- Czischke, D. (2015) *Social Housing Organisations in England and The Netherlands: Between the State, Market and Community* (Delft: Technical University of Delft).
- Department of Housing and Urban-Rural Development of Fujian Province. (2012) *Administrative Measures for Public Rental Housing of Fuzhou*. Available at http://zjt.fujian.gov.cn/xyfw/fjjsxx/201210/t20121030_2863924.htm (accessed April 2019).
- Desai, V. & Imrie, R. (1998) The new managerialism in local governance: North-South dimensions, *Third World Quarterly*, 19, pp. 635–650.
- Driessen, P.P.J., Dieperink, C., Laerhoven, F., Runhaar, H.A.C. & Vermeulen, W.J.V. (2012) Towards a conceptual framework for the study of shifts in modes of environmental governance—experiences from The Netherlands, *Environmental Policy and Governance*, 22, pp. 143–160.

- Duit, A. & Galaz, V. (2008) Governance and complexity—emerging issues for governance theory, *Governance*, 21, pp. 311–335.
- Elsinga, M. & Wassenberg, F. (2007) Social housing in The Netherlands, in: C. Whitehead & K. Scanlon (Eds) *Social Housing in Europe*, pp. 130–147 (London: London School Economics).
- Elsinga, M. (2003) Encouraging low income home ownership in the Netherlands; Policy aims, policy instruments and results. *Conference Paper: ENHR Conference*, 26–28 May, Tirana.
- Feng, N., Lu, J. & Zhu, Y. (2007) Research on the construction model of social housing, *Construction Economy*, 8, pp. 27–30.
- Freeman, L. (2004) *The Development of Social Network Analysis: A Study in the Sociology of Science* (Vancouver: Empirical Press, 2006).
- Freeman, L.C. (1978) Centrality in social networks conceptual clarification, *Social Networks*, 1, pp. 215–239.
- Freeman, L.C. (2017) *Research Methods in Social Network Analysis* (New York: Routledge).
- Friese, S. (2014) *Qualitative data analysis with ATLAS.ti* (London: Sage).
- Gould, R.V. & Fernandez, R.M. (1989) Structures of mediation: A formal approach to brokerage in transaction networks, *Sociological Methodology*, 19, pp. 89–126.
- Gruis, V. (2005) Financial and social returns in housing asset management: Theory and Dutch housing associations' practice, *Urban Studies*, 42, pp. 1771–1794.
- Huang, Y. (2012) Low-income housing in Chinese Cities: Policies and practices, *The China Quarterly*, 212, pp. 941–964.
- Huang, Z. & Du, X. (2015) Assessment and determinants of residential satisfaction with public housing in Hangzhou, China, *Habitat International*, 47, pp. 218–230.
- Huber, S. (2011) *Citizens Participation in Latvia: Still a Long Road to Go?* (Germany: Universitätsverlag Potsdam).
- Hufty, M. (2011) *Governance: Exploring Four Approaches and their Relevance to Research*, in: U. Wiesmann & H. Hurni (Eds) *Research for Sustainable Development: Foundations, Experiences, and Perspectives*, pp. 165–183 (Bern: Geographica Bernensia).
- Hysing, E. (2009) From government to governance? A comparison of environmental governing in Swedish forestry and transport, *Governance*, 22, pp. 647–672.
- Ibarra, H. (1993) Network centrality, power, and innovation involvement: Determinants of technical and administrative roles, *Academy of Management Journal*, 36, pp. 471–501.
- Imperial, M.T. (2001) *Collaboration as an Implementation Strategy: An Assessment of Six Watershed Management Programs* (Bloomington: Indiana University).
- Ismail, A.M. (2011) Director's integrity: An assessment of corporate integrity. *Conference Paper: Finance and Corporate Governance Conference*, April 28–29, Melbourne.
- Jensen, L. (1997) Stuck in the middle? Danish social housing associations between state, market and civil society, *Scandinavian Housing and Planning Research*, 14, pp. 117–131.
- Jin, H., Qian, Y. & Weingast, B.R. (2005) Regional decentralization and fiscal incentives: federalism, Chinese style, *Journal of Public Economics*, 89, pp. 1719–1742.
- Johnston, K. (2015) Public governance: The government of non-state actors in 'Partnerships', *Public Money & Management*, 35, pp. 15–22.
- Kai, F. (2019) *National House Price-to-Income Ratio in 2018*. Available at <http://finance.sina.com.cn/china/gncj/2019-03-26/doc-ihsxncvh5614636.shtml> (accessed May 2020).
- Kumar, N., Stern, L.W. & Anderson, J.C. (1993) Conducting interorganizational research using key informants, *Academy of Management Journal*, 36, pp. 1633–1651.
- Li. (2010). Chongqing is going to build 40 million square metres PRH. Available at <http://finance.sina.com.cn/stock/t/20100325/02367627303.shtml> (accessed May 2020).
- Li, D., Guo, K., You, J. & Hui, E.C.-M. (2016) Assessing investment value of privately-owned public rental housing projects with multiple options, *Habitat International*, 53, pp. 8–17.
- Lienert, J., Schnetzer, F. & Ingold, K. (2013) Stakeholder analysis combined with social network analysis provides fine-grained insights into water infrastructure planning processes, *Journal of Environmental Management*, 125, pp. 134–148.

- Liu, T., Cao, G., Yan, Y. & Wang, R.Y. (2016) Urban land marketization in China: Central policy, local initiative, and market mechanism, *Land Use Policy*, 57, pp. 265–276.
- Martínez, A., Dimitriadis, Y., Rubia, B., Gómez, E., & de la Fuente, P. (2003) Combining qualitative evaluation and social network analysis for the study of classroom social interactions, *Computers & Education*, 41, pp. 353–368.
- MOHURD [Ministry of Housing and Urban and Rural Development], NDRC [National Development and Reform Commission] and MoF [Ministry of Finance of the People's Republic of China]. (2013) Announcement on Unify Low-rent Housing and Public Rental Housing Provision. Beijing.
- MoF & MOHURD. (2015) Notice about the Interim Measures for the Administration of Financial Fund for Public Housing. Available at http://www.mof.gov.cn/zhengwuxinxi/caizhengwengao/wg201504/201509/t20150916_1458706.html (accessed July 2019).
- MoF, MLR, and MOHURD. . (2015) *Notice of the Ministry of Finance, the Ministry of Land Resources, the Ministry of Housing and Urban-Rural Development and Other Departments on Adopting the PPP Mode to Promote the Investment, Construction and Operation Management of Public Rental Housing*. Available at http://www.mohurd.gov.cn/wjfb/201506/t20150605_221098.html (accessed July 2019).
- MOHURD & MoF. (2018) Notice on implementing pilot programs for government's purchase operations management service of public rental housing projects No. 92 . Available at http://www.mohurd.gov.cn/wjfb/201810/t20181016_237917.html (accessed March 2020).
- MOHURD. (2010) *Accelerating the development of public rental housing*. Available at http://www.mohurd.gov.cn/wjfb/201006/t20100612_201308.html (accessed July 2019).
- Mok, B-H. (1988) Grassroots Organizing in China: The Residents' Committee as a Linking Mechanism between the Bureaucracy and the Community, *Community Development Journal*, 23, pp. 164–169.
- Mok, K.H. & Hudson, J. (2014) Managing Social Change and Social Policy in Greater China: Welfare Regimes in Transition?, *Social Policy and Society*, 13, pp. 235–238.
- Mullins, D., Czischke, D. & van Bortel, G. (2012) *Exploring the Meaning of Hybridity and Social Enterprise in Housing Organisations*, *Housing Studies*, 27(4), pp. 418–437.
- Mullins, D. & Pawson, H. (2010) Housing Associations: Agents of Policy or Profits in Disguise?, *Hybrid Organizations and the Third Sector: Challenges for Practice, Theory and Policy*, in D. Billis (Eds) *Hybrid Organizations and the Third Sector: Challenges for Practice, Theory and Policy*, pp. 197–218 (Basingstoke: Palgrave Macmillan).
- Municipal Land Resources and Housing Authority of Chongqing. (2011) *Detailed Rules for the Implementation of Public Rental Housing in Chongqing*. Available at <http://chongqing.cha-shebao.com/ziliao/17652.html> (accessed March 2020).
- National Bureau of Statistics of China. (2019a) Statistical data for average sales price of commercial housing. Available at <https://data.stats.gov.cn/easyquery.htm?cn=C01&zb=A051L&sj=2018> (accessed March 2020).
- National Bureau of Statistics of China. (2019b) Statistical data for urbanization rate. Available at <https://data.stats.gov.cn/search.htm?s=城镇化> (accessed March 2020).
- Preece, J. (2019) Understanding approaches to tenant participation in social housing (Sheffield: University of Sheffield).
- Rhodes, R.A.W. (1996) The New Governance: governing without Government, *Political Studies*, 44, pp. 652–667.
- Sacchetti, S. & Sugden, R. (2003) The governance of networks and economic power: The nature and impact of subcontracting relationships, *Journal of Economic Surveys*, 17, pp. 669–692.
- Shi, W., Chen, J. & Wang, H. (2016) Affordable housing policy in China: New developments and new challenges, *Habitat International*, 54, pp. 224–233.
- Stoker, G. (1998) Governance as theory: Five propositions, *International Social Science Journal*, 50, pp. 17–28.
- The Bureau of the Housing Administration of Fuzhou. (2014a) *Notice on Implementation opinions on the construction of public rental housing in the public transfer of residential*

- land. Available at <http://www.gyfcgl.com/show.aspx?cid=722752&tid=1133> (accessed May 2020)
- The Bureau of the Housing Administration of Fuzhou. (2014b) *The summary of the Fuzhou affordable housing project implementation in 2014*. Available at http://fgj.fuzhou.gov.cn/zz/ywzl/zfbztl/bzxajcjs/201403/t20140321_393926.htm (accessed May 2020)
- Valkama, P., Kankaanpää, J. & Anttiroiko, A.-V. (2018) Financial and Structural Impacts of Quasi-Marketization of the Helsinki Metropolitan Area's Bus Services, *Case Studies on Transport Policy*, 6, pp. 246–256.
- Van den Broeck, K., Haffner, M. & Winters, S. (2016) *An Evaluation Framework for Moving Towards More Cost-Effective Housing Policies* (Leuven: HIVA. Research Institute for Work and Society).
- Van der Hulst, R.C. (2009) Introduction to Social Network Analysis (SNA) as an investigative tool, *Trends in Organized Crime*, 12, pp. 101–121.
- Weiss, K., Hamann, M., Kinney, M. & Marsh, H. (2012) Knowledge exchange and policy influence in a marine resource governance network, *Global Environmental Change*, 22, pp. 178–188.
- Yan, J., Haffner, M. & Elsinga, M. (2018) Chinese social housing governance: Three levels of government and the creation of hybrid actors. *Conference Paper: ENHR Conference*, June 27–29, Uppsala.
- Yongnian, Z. (2009). *The Chinese Communist Party as Organizational Emperor: Culture, Reproduction, and Transformation* (New York: Routledge).
- Zhang, J., Fan, J. & Mo, J. (2017) Government intervention, land market, and urban development: Evidence from Chinese cities, *Economic Inquiry*, 55, pp. 115–136.
- Zhou, J. & Musterd, S. (2018) Housing preferences and access to public rental housing among migrants in Chongqing, *Habitat International*, 79, pp. 42–50.
- Zhou, J. & Ronald, R. (2017) The resurgence of public housing provision in China: The Chongqing Programme, *Housing Studies*, 32, pp. 428–448.
- Zhou, M. (2016) *During the 12th Five-Year Plan period, 634000 Public Rental Housing units will be built in Chongqing and these PRH can form 1358 new farmers' villages*.
- Zou, Y. (2014) Contradictions in China's affordable housing policy: Goals vs. structure, *Habitat International*, 41, pp. 8–16.

Appendix 1. The summary of the samples.

ID		Actors	Responsibilities and tasks
Chongqing			
CQ-1	Governmental department	Municipal Land Resources and Housing Authority of Chongqing (Competent authority)	Make policies Plan the land distribution and finance strategies
CQ-2		Urban and Rural Construction Committee of Chongqing	Supervise the whole process Supervise the construction process
CQ-3		The Bureau of Finance of Chongqing	Check the dwelling quality Formulate the finance plan and allocate the tax revenue for 30% of the investment for PRH projects
CQ-4		The Bureau of Urban Planning of Chongqing	Planning
CQ-5		The Bureau of Public Rental Housing of Chongqing	Subordinating to CQ-1 Allocate PRH units through an online lottery system
CQ-6		Development and Reform Commission of Chongqing	Select property management companies by bidding procedures Evaluate the feasibility of PRH projects (with special attention to the urban planning and financial plan)
CQ-7		Caijiagang Sub-district Office	Application approval and registration Manage the PRH neighbourhood by supervising CQ-8
CQ-9		Land Resources and Housing Authority of Chongqing at district level	Competent authority at district level
CQ-10		Public Housing management Centre in PRH project	Collect rents Manage the PRH neighbourhood
CQ-8	Residents' committee	Liangjiang Mingju Residents' committee	Collect and check applications Manage the PRH neighbourhood through face-to-face interactions with tenants
CQ-11	Investment organisation	Chongqing City Real Estate Group Co., Ltd.	Own PRH units Provide 70% of the investment Take charge of developing, hiring constructors, and maintaining dwellings
CQ-14	Constructor	In Colour twelve Metallurgical Construction Co., Ltd.	Construction
CQ-15	Property Management Company	Guomao Property Management Co., Ltd.	Manage the dwellings and the surrounding environment
CQ-16	Bank*		Provide loans to investment organisations during the construction
CQ-17	Hongguanxia Property Management Alliance		Provide services to tenants and manage the neighbourhood
Fuzhou			
FZ-1	Governmental department	The Bureau of the Housing Administration of Fuzhou (Competent authority)	Similar to CQ-1
FZ-2		Municipal Bureau of Civil Affairs of Fuzhou	Collect and check applicants' information for housing allocation (to see if they are suitable for applying PRH)

(continued)

Continued.

ID		Actors	Responsibilities and tasks
FZ-3		The Bureau of Finance of Fuzhou	Formulate the finance plan and invest in PRH projects
FZ-4		The Bureau of Urban Planning of Fuzhou	Urban planning
FZ-5		Development and Reform Commission of Fuzhou	Similar to CQ-6
FZ-6	Municipal Land Resources of Fuzhou	Land distribution	
FZ-7		Urban and Rural Construction Committee of Fuzhou	Similar to CQ-2
FZ-8		The bureau of the housing administration of Fuzhou at district level	Recheck the applications collected by FZ-10
FZ-9		Bureau of Civil Affairs of Fuzhou at district level	Check the financial status of applicants (to make sure they meet the criteria for applying PRH)
FZ-11		Operating Company in State-owned real estate management centre of Fuzhou	Own PRH units Inspect the housing quality Allocate housing through an online lottery system Select property management companies by bidding
FZ-10		Shangdu Sub-district Office**	Similar to CQ-8
FZ-12	Investment organisation	Fuzhou Construction and Development Co., Ltd.	Take charge of developing, hiring constructors, and maintaining dwellings
FZ-14	Constructor	Fujian Construction Engineering (Group) Co., Ltd.	Construction
FZ-15	Property Management Company	Fuzhou Yongxinshun Property Management Company	Similar to CQ-15
FZ-16	Real estate company*		Take charge of developing PRH units in their commercial projects and hiring constructors to construct PRH

*The interviewees do not want to include their organisation names in this study.

**The staff of Shangdu Sub-district Office and staff of Residents' committee in that area work closely with each other, and they share the same work place. Some staff even work for both entities: Sub-district Office and Residents' committee. Thus, in Fuzhou, we only conducted the interview with one representative from Shangdu Sub-district Office, as the other staff (from the two entities) refused to cooperate and said 'it is not useful to do the interview twice'. This can be also regarded as an evidence that Residents' committee is an entrenched hybrid actor.