



SCOPING REPORT

## Segregation Research on Urban China<sup>1</sup>

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## Executive Summary

At what point does a meaningful neighborhood, a community based on neighborly bonds, intimacy, proximity, informality and contact<sup>2</sup> become a segregated colony, enclave based on citizenship, economic status, vice and ethnicity? Park's 1915 essay on 'The City' invites urban scholars to look more closely at this question, to explore what constitutes a neighborhood, and neighborhood change, and in so doing also processes of segregation. On the basis of this invitation, this study seeks to provide a broad overview of segregation research in China. It is not a study of whether the concept of segregation, as utilized by Park in 1915, exists in China today. Rather, it takes Park's programmatic vision about segregation research and considers what research on segregation is like in China today. This is not a study of "actual" segregation, but rather a survey of the types of research covering various forms of socio-spatial differentiation in urban China.

This report begins with 1) a problem definition to establish why segregation is a significant urban phenomenon worth studying. It lays out why Park thought it should be studied, and how. As part of the problem definition, and on the basis of the following literature review, segregation is established as an urban process in China that is worth studying, but on different grounds. 2) The modes of segregation research is based on a literature review of research on urban China predominantly focused on the past 20 years. The results of this review were clustered in three dominant modes of segregation research in urban China: material, legal and morphological. The empirical research design substantiating these claims and their methodologies are considered. 3) Key research areas are defined, based on empirical gaps identified and potential for urban theorization.

The scope of this report is delimited to segregation research as it pertains to urban spatial form and does not cover other forms of social group differentiation like labor market segmentation or demographic change. These processes are included to the extent that they are referenced in the segregation research (ie. Related to danwei or the middle class). It serves as a complement to the scoping study on association, sociability and agency, which deals similarly with sociospatial differentiation, but focused on research about concepts like "neighborhood" and "community." The goal of the report is to design a program of research on segregation in urban China, inspired by Park but informed by the rich breadth of work currently underway.

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<sup>2</sup> See scoping report on association, sociability and agency prepared for the same project, available: WEB INSERT.

### 1. The problem of problem definition: Why study segregation?

In contradistinction to the traditional neighborhood, Park characterizes the urban neighborhood in terms of racial colonies, segregated vice districts and occupational suburbs (580-582). The “normal neighborhood sentiment (580)” evident in “simpler and more primitive forms of society (582),” becomes less permanent and tied to variously constructed social groups rather than traditional kinship bonds. Whereas the traditional neighborhood was based on forms of intimacy, the residential segregation evident in urban neighborhoods correlates with racial antagonisms and class interests (582). The simultaneous experiences of social group formation, neighborhood settlements and social conflict is evident in his description of processes of segregation:

...where individuals of the same race or of the same vocation live together in segregated groups, neighborhood sentiment tends to fuse together with racial antagonisms and class interests. In this way physical and sentimental distances reinforce each other, and the influences of local distribution of the population participate with the influences of class and race in the evolution of the social organization. Every great city has its racial colonies, like the Chinatowns of San Francisco and New York, the Little Sicily of Chicago ... In addition to these, most cities have their segregated vice districts, like that which until recently existed in Chicago, and their rendez-vous for criminals of various sorts. Every large city has its occupational suburbs like the Stockyards in Chicago, and its residence suburbs like Brookline in Boston, each of which has the size and the character of a complete separate town, village, or city, except that its population is a selected one. (582)

Because of this assumed potential for antagonisms between groups, Park contends that it is important to understand the social makeup of these segregated city areas. Understanding the neighborhood as a kind of social group, what he seeks to understand about these segregated neighborhoods is what he would want to know about all social groups (583). His agenda largely focuses on understanding the social makeup of these neighborhoods.

Furthermore, rather than only using the improved understanding of these groups to propose solutions, Park rather suggests the need to study the already existing solutions as well. Alongside an improved understanding social groups, it is important to study the modes of intervention (playgrounds, municipal events) intended to “elevate the moral tone of the segregated populations” (582) or “stimulating and controlling” (581) local communities through which we learn about some aspects of what he considered to be essential human nature. Segregation is therefore not only a means to describe an urban phenomena tied to race and vocation, but also a normative ill, something to be

improved, reversed, or otherwise addressed. And because of this normative component, the implication is that understanding why and how people seek to improve it leads to a better understanding of human nature. While explicitly essentialist in its language, Park's approach of questioning urban intervention in this case touches on more contemporary literature about "the good life" (Tuan 1986) and "the just city" (Fainstein 2010). So, understanding segregation is not only about understanding what kinds of social group formation processes are underway, but also understanding what the city should be.

The institutional context in which Park drew up this agenda was based in an engaged sociology (Abbott 1999). While generally focused on social processes, it was very much grounded in Chicago – in a particular time and place. This would impact the way that concepts like the neighborhood as well as segregation would be researched by social scientists interested in studying the city for several generations. In defining and addressing a topic like segregation, the questions might pertain to various issues like poverty or moral transgression, but the main unit of study was the neighborhood. Moreover, through the overarching assumption of normative ills, an implicit idea about the good city would have a lasting impact on urban studies.

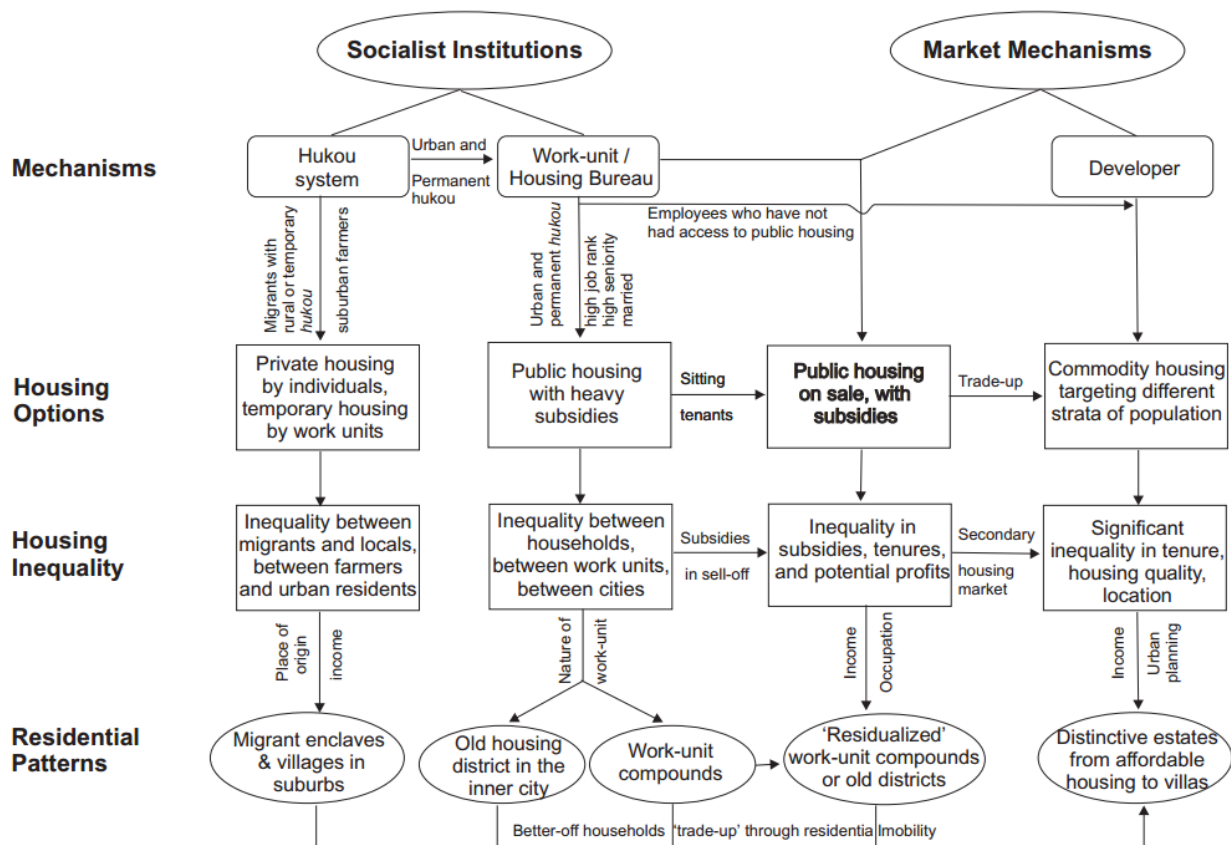
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Taking Park as inspiration, a broad review of empirical research on urban China related to various forms of socio-spatial striation was conducted. The goal was to seek out the predominant types of research that could be defined as segregation research, as well as the main methods underpinning this research in order to develop an agenda (analogous to Park) about what kind of research should be done. The focus was on research being published within the past 20 years, accessible through academic journals and volumes. It is worth restating that the present study is about research being done on segregation, and not a comprehensive study of segregation itself.

Although indebted to Madrazo and van Kempen's overview of "urban socio-spatial segregation" in China (2012), this study focuses more on the research of segregation rather than the various forces behind segregation. Through the present review, there are two popular approaches that this present study does not take: it does not present a "Western" model of segregation in order to compare and contrast the "Chinese case." Such an approach adopts an indicator for how something is measured in the "west" and invalidates it for the Chinese case. For instance Wu (2010) begins with "suburban residential development in the West" in order to show how it is inadequate to explain "Chinese suburban residential development." Therefore, beyond the literature review of existing publications,

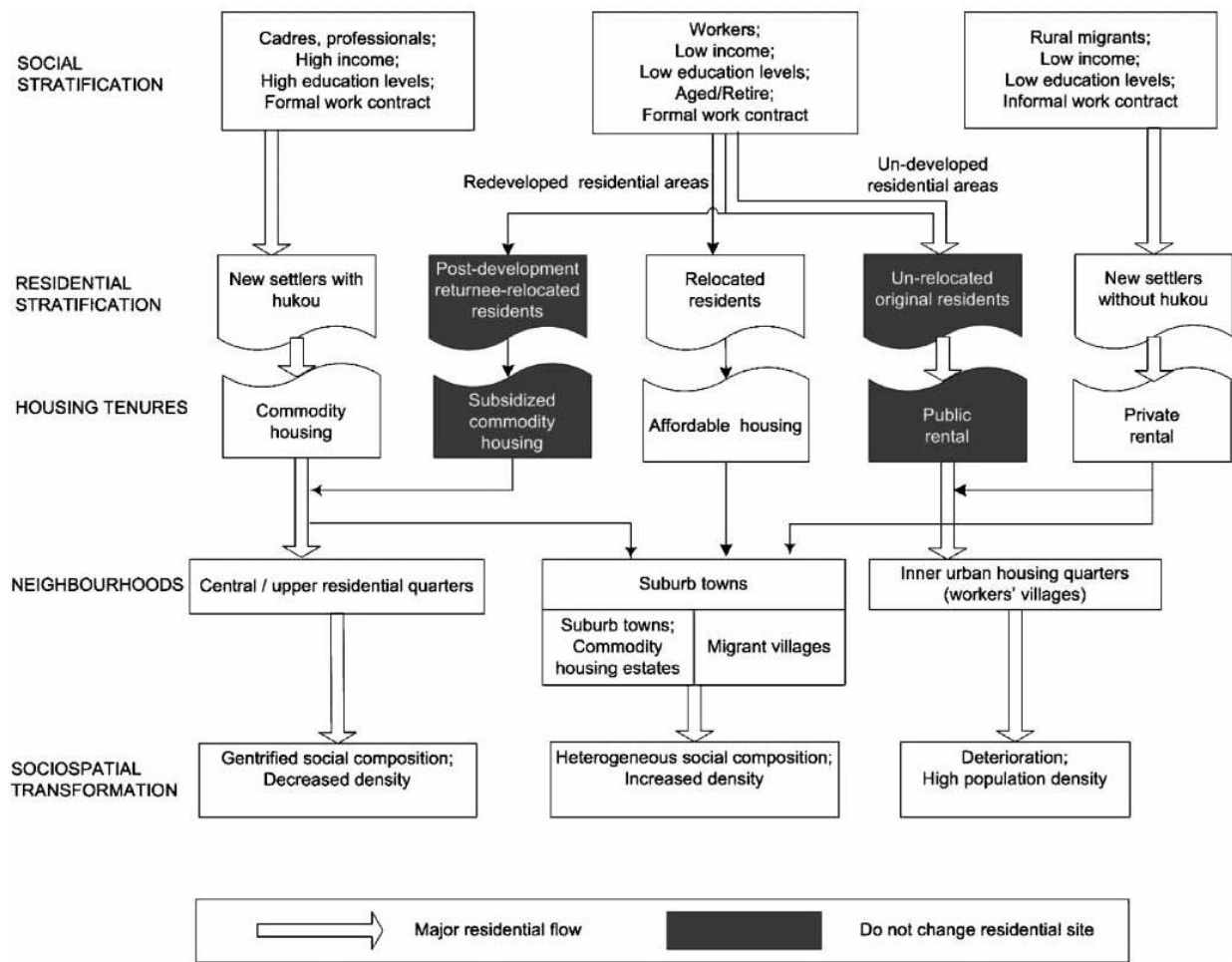
these empirical works design their research around the “Western” case. While it takes Park’s essay as inspiration, this report focuses on segregation research as it is being done in urban China.

Secondly, it does not present an overview of the economic/urban transition in China. In addition to the “Western literature review,” the goal of this study is not to provide a history lesson. There is some divergence among scholars about the function of context. To some extent, it is just about the intelligibility of the empirical research, but often this context is presented as explanation. The research becomes a descriptive part of some historical trajectory, or an illustration of one aspect. Because of the complexity of attempting to present decades of Chinese urban history, scholars have resorted to intricate diagrams to help aid in this. Especially in studies about housing segregation in urban China, some variation of the historical transition such as depicted in Figure 1 is usually included as context (Huang and Jiang 2009: 938):



**Figure 1** Housing inequality and residential segregation in transitional Chinese cities

An alternative offering of a similar story by Li and Wu (2006: 700):



**Figure 1.** Residential restructuring in post-reform urban China

Given the plethora of introductions on China’s urban transformation available by scholars like Fulong Wu, Shenjing He, George C.S. Lin, Lawrence Ma and others, rather than again providing historical context for the various transitions characterizing the changing urban landscape in China following 1949, this study will focus more on a contemporary view about how segregation research is being conducted. It therefore favors an epistemological over an ontological approach towards reviewing segregation.

One of the clear political dimensions behind segregation research in general is that segregation poses some kind of normative ill. Its problem definition in the research on urban China can be further circumscribed: it is seen as a problem to the extent that it is reflective of greater macro-level processes of inequality. Segregation in and of itself is perhaps not necessarily a social ill – it is in its connection to other forms of choice, experience and structural inequalities that it represents a “problem.” For instance, it is “not necessarily perceived as a detrimental urban form by urbanites who are besieged in various forms of enclaves involuntarily owing to their limited socio-economic resources, or are

voluntarily seeking privacy and alternative lifestyles” (He 2013: 3, citing Forrest and Yip 2007; Kim 2003; Pow 2007). In embarking on the review of empirical research in urban China, the ambivalence of segregation as a necessarily “ill” was taken into consideration. Subsuming the various forms of research under segregation does not imply that they share the same problem analysis or political position.

Furthermore, in a review of research on segregation published in Chinese, “differentiation” (分异) is more often the preferred terminology. For instance, “differentiation of social space seems to have become the daily experience of urban residents today” state Li, Wu and Lu (2004: 61).<sup>3</sup> The underlying question is figuring out the nature of the social differentiation and whether it is simply polarization that results in two opposite extremes of isolation, or more complex forms of differentiation between multiple groups (Wu 2011). Indeed, some researchers situate differentiation alongside segregation as distinct forms of spatial structure (Jiang and Li 2012: 41).<sup>4</sup> In looking at the semantic use of “differentiation,” it is in and of itself not necessarily “detrimental” (See Annex A and Cf. He 2013 above).

Still, the empirical research on urban China more often than not retains an implicit affinity to Park’s agenda on segregation as reflective of social processes that require intervention. Indeed, perhaps one commonality in the agenda set out by Park in his essay 100 years ago, and much of the empirical work on urban China of the past 20 years is the lack of a clear problem definition. Why is segregation an issue requiring research, and in need of remedy? How exactly is it tied to resources, poverty and inequality? Park relied on the potential conflict between different groups, but left unexplored the context in which these groups come to be. In this way, the shallow analysis of segregation as a problem continues in the empirical research on urban China.

Contemporaries dealing with various forms of socio-spatial striation in China have taken the view that segregation or differentiation is connected to processes that represent something undesirable or unjust, and that its various forms should be critically investigated, not dismissed as an inevitable outcome. For instance, in discussing gated communities, Pow argues that it is neither an inevitable transplantation of western neoliberalism, nor a natural element of traditional Chinese culture/cities:

To explain away the modern gating phenomenon in contemporary Chinese cities as the product of immutable cultural tradition or social norm is clearly to ignore

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<sup>3</sup> “社会空间的分化似乎已经成为今天城市居民的日常体验” (Jiang and Li 2012: 41).

<sup>4</sup> Jiang and Li identify three forms of spatial structures that emerge from the development of residential areas: differentiation, segregation and symbiosis (2012). “从居住空间的发展来看，在以侵入和演替为主的动态过程中，会逐渐形成分异、隔离、共生三种空间结构形态。”

the complexities of urban change and its underlying social-cultural processes. (Pow 2009: 5)

This sentiment is echoed to some extent a few years later again by Shenjing He in her discussion of enclaves (2013), which cannot be explained away as part of a universal phenomenon of some common condition. However, Pow and He's two positions about gating and enclaves represent an important tension inherent in much of the research on segregation in urban China: While He seeks to explain the complexity of the contemporary condition of enclaves through a presentation of historical trajectory, tradition and urban forms, Pow views this kind of explanation as "culturalist" justifications for "gating up" (2009: 5). Both scholars seek to offer an explanation for the complexity of enclaves and gated communities, their multiplicities and meanings for different social groups, but are rooted in fundamentally different understandings about the origins of the urban changes underway. This tension originates from the issues of more explicit "problem definitions" and deserves greater attention, often missing in the empirical research.

To begin exploring the issue of problem definition, it's useful begin with the common ground shared by both the research focused on "differentiation," as well as in papers explicitly using "segregation"; Research on urban China involves some implicit understanding that segregation serves as a reflection of new or growing forms of resource disparity and social differentiation, especially as it is connected to residential differentiation (See e.g. Xie and Jiang 2011; Jiang and Li 2012; Cf. See Annex A and reference list). It is based on a recognition that neighborhood forms are changing. Though it might not be in the form of the "racial colony" or the "vice district" as Park identified, the materialization of segregation is significant because it represents what is happening in Chinese society at a broader scale. Wu, He and Webster describe this transition in terms of the "the structure of opportunities" that households face:

Where a household lives is not just a function of its 'residential preference' but also is shaped by the structure of opportunities that it faces.

The structure of opportunities facing the poor in Chinese cities was for most created a long time ago, and in a way the reform has the effect of amplifying some of those structural effects. Urban poverty in China is very much rooted in the institution of hierarchical resource allocation in the centrally planned era. The entitlements including rights to housing, location, employment, and welfare services inherited from the prereform era are the new starting line from which the unequalising tendencies of market-based exchange (and market-shaped cities) will grow. (2010: 149-150)



Indeed, the starting point for understanding segregation in urban China is often based in a structural analysis of larger processes rather than based in the social groups that define a neighborhood. If segregation is evidenced through indicators along lines of class, ethnicity, citizenship status, work/sector/labor, then it is often through the discussion of the macro-level changes that have an impact on economic class, migration, legal hukou reform or the transition economy. If segregation is evidenced in the built environment through the materiality of buildings, walls and infrastructures, then it serves as a reflection of the social group formations on a macro level. Unlike Park's agenda to understand the nature of the population and investigate its permanence/stability and modes of social mobility to establish both history and trajectory (583), the research on urban China is (to grossly overgeneralize) less concerned about the agencies of these group members.<sup>5</sup>

There is a general concern about poverty, inequality and basic access to housing and services for various social groups in urban China. Rather than the focus on social conflict as the reason to understand the different social groups/neighborhoods, segregation research in China appears to be based on an emergent idea about the just city. Park's assessment that studying urban interventions as a means to understand this begins to serve as inspiration for how this area of research could be expanded. Indeed, research about segregation in China can prove a rich site of theorization for what might constitute a good city.

## **2. Modes of segregation research in urban China**

### **Objects and topics**

Segregation as an analytical concept encompasses a wide scope of applications, from division of labor to gender segregation. The purpose of this section is to delineate the dominant modes of segregation research related to neighborhoods in urban China. This might include both residential and non-residential modes of neighborhood differentiation or spatial divergence and integrates research on neighborhoods or urban space not explicitly utilizing "segregation" as a concept. For the present purposes, these modes of research will be integrated under "segregation" as defined by separated spaces of lived experience. In Madrazo and van Kempen's broad definition, "*Segregation* refers to the processes of social differentiation and the resulting unequal distribution of population groups across

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<sup>5</sup> To contradict this general claim, see Wu, et al (2002) in which they argue the urban residential differentiation is the result of the interweaving impact of both the spatialization of social or class differentiation as well as the changes in individual residential behavior.

space” (2012: 159). What forms of neighborhood segregation are being researched and how are they being empirically substantiated?

In reviewing the modes of segregation research, they are clustered here along material, legal and morphological forms. The material and legal research are grouped together because they provide starting points for understanding the sources and characteristics of segregation. The segregation research that is more morphological in nature offers interpretations for the consequences of segregation for urban space. While not comprehensive, and certainly overlapping, this structure is presented as one mode of scoping out the dominant modes of segregation research in urban China.

### *Material*

As defined by the built environment, and predominantly through residential construction, gated communities and infrastructure development, this mode of segregation research largely focuses on the emergent middle classes or the extremely wealthy, though new-built environments for displacement of urban residents deserves some attention. The clear differentiation of these forms of material segregation recall Marcuse’s typological differentiation of the “black ghetto” the “immigrant enclave” or the “citadel” in American cities that were based on differences of ethnicity and class (Marcuse 1997). The following attempts to carefully differentiate, the mode of segregation as well as the material nature of this segregation research.

Though somewhat less prominent in the literature, the displacement of residents in urban China coincides with new residential constructions, often built on the urban periphery for middle- and low-income residents as compensation (Feng and Long 2006; Shin 2015). These residential areas for the displaced have been researched in terms of their governance, planning, services and environment, often concluding that they are constructed without adequate access to basic public services like schools (Wang 2013; Chen and Zhang 2015). The resettlement of these income groups is further polarizing insofar as they are living in higher density housing with a more homogenous residential makeup. Public services become especially important in these peripheral settlekejts because of the “high walls” and “iron windows” characterizing these residential areas (Chen and Zhang 2015: 24). Of course this is also reflective of public housing developments more generally in China, which are mostly newly constructed buildings built in specific urban areas that therefore serve to increase the spatial concentration of low-income residents (Jiao 2007).

For the most part, the built environment research focuses on the wealthy. It is important to note, however, that the connotations of the gated community in urban China are distinct from the literature from elsewhere, which focuses on the gated community as an isolationist, bunkered and security-focused structure (See e.g. Caldeira 2001; Juergens and Gnad 2002; Atkinson 2006). This research is

based on empirical material from a diversity of cities in the U.S., Latin America and Africa, and often considers issues of safety under a critical light, in terms of its impact on protecting wealthy resources or criminalizing the poor.

Investigations into the material structures in urban China construe the built environment as a reflection of social group differentiation (Huang 2006), which is itself in flux, having dramatically changed over time (Pow 2009). When focused on the gated community or residential construction, much of the research is about their manifestation and how they come to be. For instance, the aesthetic documentation of the “magnificent gate” serves as a means of packaging and branding specific aesthetic, material forms (Wu 2010). Most of this work focuses on the question of why they exist, which can be grouped around supply side and demand side explanations.

Supply side explanations about the built environment tend to focus on the privatization of housing and simultaneous tax reform forcing the commercialization of land as the only means of revenues for local governments to meet demands of social provision (Liu and Lin 2014), the transition away from the danwei system (Huang 2005), representing larger macroeconomic shifts and the consequences of a transition economy (Wu 2004a). These often cite changing policies and market influences, which are intertwined in terms of state involvement in land commodification and real estate development (Wang and Murie 2000; Wu 2004c; Li and Wu 2006b; He and Wu 2007; Huang and Jiang 2009; He et al., 2010a, 2010b). For example, the commodification of land areas on the periphery by the state has had a direct impact on housing construction and suburbanization (Zhou and Ma 2000).

Demand side explanations often begin with the emergence of the new choices available that came with the commodification of housing (See e.g. Huang and Clark 2002) as well as differences of income and lifestyle that are reflected in housing choice (Liu and Li 2009). The dismantling of danwei/work-unit living with the emergence of market-based housing has led to a great deal of interest in the behaviors of housing or residential choices. These preference and demand-based explanations coincide sometimes with the study of an emergent middle class (Zhang 2010) and demography-based analyses of life course and mobility (See e.g. Li 2004). These studies deal far more with the positions, tastes and purchasing power of new social groups (Hu and Kaplan 2001; Wu 2003, 2004c; Wang and Lau 2009). The symbolic value of certain neighborhoods, like gated areas, increasingly seems to outweigh functional characteristics for newly affluent (Pow 2007; Wang and Lau 2009).

The materiality of the built environment is therefore connected in these explanations with the commodification of housing as well as the emergence of new social and economic groups. The functional aspects of these environments are enhanced through the exclusive provision of social services and public facilities (Liu and Li 2009). Indeed, commodity housing estates like xiaoqu

increasingly serve to supplement the provision of services from infrastructural support like motorway exits and bridges to social services like schools and hospitals (Wu 2005). The built environment goes beyond utility, however, representing new forms of symbolic value.

### *Legal*

The legal mode of segregation research predominantly relies on two interrelated areas of regulation: urban citizenship and real estate, connected to the supply-side argument in policy reform above. In terms of urban citizenship, the body of literature on hukou, hukou reform, and migrants in general has resulted in a body of work that holds the hukou responsible for segregation patterns and a fragmented urban experience of what is commonly known as the “floating population” (Fan 2002; Ma 2002; Liang and Ma 2004; Li and Wu 2006a).

These scholars have focused on segregation as an outcome of the

...inequalities based on residence status. China’s system of household registration (or hukou) and related policies designed to restrain population movement have become well known for their potential to divide the population into a favored sector with full citizenship rights (people with urban registration in the city where they live) and a marginal sector with fewer and more transient rights (especially people with rural registration from a different province) (Logan et al 2009: 914-915).

Predominantly, this implies unequal access to housing, which is more restrictive for rural migrants without hukou. Some literature implies that the hukou factors as much as cost in terms of access to housing in urban China (Ma and Xiang 1998; Gu and Shen 2003; Fan and Taubmann 2008). Usually this work is focused on “migrant” as the object of study or social group resulting from this legal status. Chen’s study applies a more differentiated comparative analysis of population groups and argues that people with hukou often do not reside in their hukou address or city of registration; segregation research should therefore look at the degree of permanency of those with and without hukou as this is more reflective of the actual spatial distribution of residents (2014). In other words, data based purely on hukou is an inadequate reflection of who is actually there; it is more valuable to investigate the permanent residents (with and without hukou) to understand the experience of segregation.<sup>6</sup> But

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<sup>6</sup> The problem, however, is that the data on permanent population is aggregated at the city scale, and not differentiated by districts, making the statistical analysis of these differentiated groups even more difficult. More on this in the following methodology section.

a closer look at the literature will reveal an even more differentiated approach towards researching this segregation experience.

For instance, much of the research focuses on the result of these barriers to renting or public housing. This research centers on “informal” (Li and Wu 2013) or illegal housing settlements (Tang and Chung 2002) often clustered together. Generally considered a temporary solution or transition housing, these settlements are a necessity for people without hukou (Song, Zenou and Ding 2008). These studies of rural migrants provide evidence that without hukou, they are unable to access the “urban housing market” and must rely on informal settlements (ibid.)

Yet the migrant encompasses a number of different kinds of statuses, including the “new generation migrant” and the “foreign migrant.” The new generation migrant holds a legal working status, higher education levels than other rural migrants and are seeking to permanently settle in the city (Liu, Li and Breitung 2011). While they still struggle with housing access, which results in them living in clustered residential areas, their experience is marked by a different economic status.

Foreigners in Chinese cities generally do not suffer from the hukou registration barrier. Rather, foreign residents are limited by building and commercializing permits whereby only certain areas or properties can be sold to foreigners, resulting in “foreign gated communities” (Wu and Webber 2004). Beyond the gated community restricted by building and commercializing regulation, however, foreign ethnic enclaves have emerged in the newly commodified rental market in many Chinese cities (Kim 2003; Zhang 2008; Li et al 2009).

It is often implied that the de-regulation or commodification of these markets has resulted in new foreign residential areas. These legal starting points have provided some inspiration for those researching questions of belonging (Li and Wu 2013), ideas of home and this is further differentiates the spatial segregation in temporal terms. For instance, the new generation of migrants who seek to more permanently relocate to the city is contrasted with the older generation which is more seasonal (ie. Yue, et al 2009).

These studies of migration-related forms of segregation are distinct from ethnic enclaves. Though far less research has been conducted here, the approach towards studying these forms of segregation also focuses on governance structures (Wang et al. 2002). For instance, Wang et. al.'s comparative study of Muslim Hui neighborhoods shows how different structural factors like administrative jurisdiction within the same city can result in different outcomes. The ethnic enclave as a form is not necessarily a victim of urban expansion, if the administrative jurisdiction of these areas are able to advocate on their behalf. Their conclusions suggest the persistent connection between governance and form.

### *Morphological*

The conceptualization of enclaves, villages and suburbs, often offers interpretations of the greater spatial significance of materiality and legal structures. This work renders the neighborhood as a significant scale for the Chinese context, beginning to typologize and differentiate areas within the city. The phenomena of these forms are uniquely related to the city. Related to the hukou-based work on rural migrants, informal or illegal settlements, the migrant enclave is broadly typologized often in relation to literature on ethnic communities in other contexts (from Ma and Xiang 1998 to Fan and Taubmann 2008). Enclave urbanism in China (Douglass, Wissink and van Kempen 2012; He 2013) and Chinese suburbanization (e.g. Zhou and Ma 2000; Zhang 2000; Wu and Cui 1999; Feng et al. 2008) further contextualize the emergence of socio-spatial segregation within greater trajectories of urban change. The empirical-theoretical work of these studies begin to extrapolate from research in urban China, drawing out insights for urbanism and urban theory more generally.

Some of these lessons are founded in the scalar dimension of researching the connection between segregation and poverty. For instance, in establishing the spatialization or clustering of poverty, many researchers have pointed towards the limitations of aggregate national data:

There is a significant discrepancy in surveyed and official poverty rates due to the different populations being surveyed: the general population versus specific social groups. Clearly, the general statistics hide clusters of poverty and there is a need to examine the poverty experience of particular vulnerable social groups (Wu, He and Webster 2010: 135).

In other words, aggregate poverty rates at the national level fail to account for variance within cities and between neighborhoods and groups (See also Li and Wu 2006a). Segregation research, because it focuses on the sub-urban scale, helps to account for a more nuanced understanding of how the experience of poverty is actually getting worse for some groups, concentrated in some areas.

Furthermore, studies of urban villages reveal how they function as highly differentiated spaces, with different statuses and roles within them (He et al 2010a). They are not a coherent bubble. Understanding segregation can help address how – while total poverty rates may be decreasing – some groups are disproportionately living in poverty. The investigations of issues like segregation at sub-urban scale help to uncover the differentiated drivers and spatializations of poverty (He et al 2010b). Thus, segregation research offers the potential for a more differentiated, less conflated view about the trajectory of Chinese economic development.

### **Methodologies/research design**

While hardly comprehensive, the main issues related to segregation research methodology are clustered here around data collection, boundary making and categories of difference. The way that researchers define these aspects is critically important to their findings, and, in turn, interpretations of segregation in urban China.

#### *Data collection*

Unlike the reliance on a national census in the U.S. and for Park's basis of investigation in Chicago, a lack of comparable national census in China greatly affects the kind of research being done about the Chinese cities. There have been six national population census surveys since the 1980s, which serve some of the studies as a source of data for demographic and social structures (Wu, et. al. 2014: 111). However, as noted above with the studies of poverty, these population censuses are not spatialized (beyond the provincial differentiation), but aggregated. The national census data furthermore is based on permanent population (常住人口) as established by residents with hukou that live at their assigned hukou address, and residents without hukou who have lived there for more than half a year. In order to conduct empirical analyses connected to spatiality, differentiated hukou status and demographic information, therefore, researchers must integrate data from the sub-district (街道) which includes information about education levels, employment, age, etc. as well as the neighborhood level data (居委会) from the national census, which only provides the hukou information (Chen 2014).<sup>7</sup> The complexity of integrating multiple data sets might be in part why there is almost no segregation research based on education level, employment and age (Chen and Hao 2014).

Indeed, the availability of census data available at the city level for some cities has resulted in extrapolations on issues like suburbanization in Beijing (Feng, Zhou and Wu 2010) or residential

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<sup>7</sup> The Six National Census statistics includes 230 streets and 5432 village committees, which is often integrated with other statistics from particular provinces, or, in this case, cities like Shanghai.

mobility and housing choices (Li 2004). To supplement the available government census information, many researchers conduct smaller-scale surveys for particular cities or city areas (See e.g. Wang (2005) in the cities Chongqing and Shenyang; Liu and Wu (2006a; 2006b) in Nanjing; and Wu (2007) on a neighborhood of the city of Nanjing, Yip on Shanghai (2012)).

In some cases, there are more cities included in a survey to collect data on particular issues like poverty (See e.g. Wu, He and Webster 2010 who included 6 cities across different regions) in order to extrapolate, or to make a generalizable statement about “Chinese cities.” In general, there is a tendency to want to cover some idea of “scope” in order to make studies representative. For example, Yip’s “clustered stratified sampling” strategy included both inner city and rural districts, but random sampling was employed for the selection of households for the survey (2012: 224).

An additional challenge to the data collection is that these census and survey-based studies rely on official registration, availability or willingness of respondents for the surveys. For instance, representation of the randomly sampled households in Yip’s (2012) study of gated communities remained biased because many of the high-end gated households did not want to be interviewed. This poses a general challenge for doing qualitative empirical research, which relies on informants. Li and Wu’s (2014) study additionally illustrates the difficulty of conducting surveys among migrant groups in “developing countries.” They echo the sentiment that national-level data on migrants and poverty fails to disaggregate at other scales.

Survey data being used in this research serves predominantly to establish residential forms of segregation. Whether this is the availability of the data or the research design – it results in an attention bias towards residency as the predominant basis for segregation. Other experiences of segregation connected to school and work tend to be included insofar as they are related to distances or access from certain residential areas.

One aspect almost completely missing in much of the empirical work that has been reviewed is the individual experience of segregation (Wong and Shaw 2011). This takes a different approach towards defining segregation, shifting from a proposed objective identification of segregation towards the experience of it at the individual level. For research on urban China, the basis for defining segregation seems to remain tied to survey data. Rather than individual experience, survey methodologies that seek to incorporate experience focus on aspects like “residential satisfaction” and “housing choice” (Cf. Li and Wu 2013; Du and Li 2010; Song, Zenou and Ding 2008).

Consider, for instance, the methodology employed for the survey by Du and Li (“Table 5” 2010: 103), which sought to “explore migrants’ subjective feelings about the urban village that they currently



reside in” (105). From their regression analysis (“Table 5”), they concluded that the “migrants’ assessment of community satisfaction and community attachment remain on the positive side, even though they are lower than those of the overall population” (105).

**Table 5: Regression on Community Satisfaction and Community Attachment (Standardised Coefficients).**

	mean	Community satisfaction	community attachment
R <sup>2</sup>		0.562	0.499
<b>socio-demographic</b>			
age (years)	32.66	-0.049	-0.024
gender (male=1)	0.69	0.084	0.012
household type (non-single=1)	0.80	-0.140**	-0.003
household income (in 1000 RMB)	2.13	-0.054	0.072
urban hukou (yes=1)	0.23	-0.059	-0.081
educational level (below junior=0)			
Senior	0.38	-0.067	0.048
Tertiary	0.10	0.045	0.068
<b>community condition</b>			
per capita rent	178.5	-0.082	-0.116*
balcony (yes=1)	0.49	-0.099	0.018
kitchen (yes=1)	0.61	0.009	0.023
<b>community perception</b>			
neighbourhood quality (5-point scale)			
Security	2.98	0.144**	0.067
Environment	2.69	0.354***	0.058
Facilities	2.52	0.314***	0.020
neighbourly relation (7-point scale)			
Friendliness	5.00	-0.040	0.134*
mutual help	4.60	0.016	0.080
mutual trust	4.84	0.071	0.234***
Acquaintance	4.78	-0.025	0.100
<b>community involvement</b>			
neighbourly communication (5-point scale)	3.84	-0.127*	0.171**
public affairs (5-point scale)	2.76	0.122*	0.080
<b>migrant network</b>			
interprovincial move (yes=1)	0.43	0.044	0.027
change of residence in GZ (times)	1.91	0.060	-0.014
years at present residence	2.94	-0.011	-0.109*
kinship and friendship within the community (yes=1)	0.65	0.136**	0.050
N of cases	298	298	298

Source: Survey data

Notes: \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001.

Both regression equations are significant at p = 0.001.

In important ways, these studies seeking out the migrant experience have challenged assumptions about informal settlements/villages by providing some insights into the experience of these segregated spaces. For instance, Zhang and Wu’s study illustrates how migrants are not necessarily less satisfied living in informal settlements; rather, it is the feeling of exclusion that correlates with dissatisfaction (2013). These studies suggest that it is the subjective experience of exclusion, not

necessarily the conditions, that define dissatisfaction. In the accompanying scoping report on associations and sociability, this topic will be revisited, considering the distinction between when these spatializations represent a migrant enclave vs. migrant community.

### *Boundary-making*

The issue of clearly defined localities is critical for researching segregation. Wu, et. al. contend that the main challenge of China's national census data, despite its improvements in detail over time, is the lack of spatial information on community boundaries (2014: 111). This forces researchers to do much of the work in terms of determining borders and integrating quantitative data with spatial categories. For instance, Feng, Zhou and Wu's "Table 2" (2010: 91) sets the zones that would indicate suburbanization (highlighted). That these categorizations seem self-evident is problematized in other studies like Yip (2012) where a "dichotomized conception of gated/ungated" is rendered inapplicable (232).

*Table 2. The growth of permanently registered population and migrant population of different zones in Beijing, 1982–90 and 1990–2000*

	Core	Inner suburbs	Outer suburbs	Metropolitan area	City region total
<b>I. Number of permanently registered population (person)</b>					
1982	2 354 247	2 770 969	3 923 024	7 851 025	9 048 240
1990	2 210 751	3 647 503	4 310 173	8 852 842	10 168 427
2000	1 807 574	4 778 430	4 375 997	9 676 690	10 962 001
<b>II. Change of permanently registered population from 1982 to 1990</b>					
Number change (person)	-143 496	876 534	387 149	1 001 817	1 120 187
Change (%)	-6.1	31.63	9.87	12.76	12.38
Annual change (%)	-0.78	3.5	1.18	1.51	1.47
<b>III. Change of permanently registered population from 1990 to 2000</b>					
Number change (person)	-403 177	1 130 927	65 824	823 848	793 574
Change (%)	-18.24	31.01	1.53	9.31	7.8
Annual change (%)	-1.99	2.74	0.15	0.89	0.75
<b>IV. Number of migrant population (person)</b>					
1982	57 446	63 830	48 582	161 096	169 858
1990	107 447	312 002	182 682	569 201	602 131
2000	296 675	1 582 077	688 973	2 465 005	2 567 725
<b>V. Change of migrant population from 1982 to 1990</b>					
Number change (person)	50 001	248 172	134 100	408 105	432 273
Change (%)	87.04	388.8	276.03	253.33	254.49
Annual change (%)	8.14	21.94	18.01	17.09	17.14
<b>VI. Change of migrant population from 1990 to 2000</b>					
Number change (person)	189 228	1 270 075	506 291	1 895 804	1 965 594
Change (%)	176.11	407.07	277.14	333.06	326.44
Annual change (%)	10.69	17.63	14.2	15.79	15.61

Sources: Calculated from BEIJING'S CENSUS OFFICE (1982, 1990, 2000).

Feng et. al. supplement this data with information differentiating the type of residential areas (villas, affordable housing), as well as the development of infrastructure and amenities (roads and shopping centers), as well as the suburbanization of industry and retail (2010). They connect this to consumer data on home and car ownership-thus, drawing out some causal relationships between retail following

and consumer. But the rest is more relational and less causal. For instance, to what extent suburbanization is state-led, and driven by government interest in land use development, and to what extent suburbanization is “market-driven” and connected to the consumerist opportunities is unclear. Still, this particular study does an interesting multi-scalar and multi-method analysis of the available data in making claims about aggregate suburbanization (at the city level), about the different types of new-built suburbanization (based on buildings and infrastructure) and interpolating from available consumer data.

Studies that focus on informal settlements have ironically sought out the locations of these settlements through the formal state apparatus. Consider, for example, the preliminary step for the randomized, multi-city study that Li and Wu conducted:

Given our sampling approach, developing the list of villages was a critical step and was carried out with the best resources available. In Beijing and Guangzhou, the “official” lists of villages were retrieved through contacts with local governments, likely because both cities intend to redevelop urban villages as a priority. For Shanghai, our survey was co-incident with the municipal planning bureau’s pilot study. The list of villages was collected from district planning offices (2013: 931).

Though the surveys were conducted in face-to-face interaction, the preliminary step already restricted the sample to officially recognized, pre-delineated villages.

As a contrasting mode of establishing cartographic boundaries, some scholars have tried to develop a more “historical and context-specific approach to understanding China’s enclave urbanism beyond Western paradigms” (He 2013: 5 in her discussion of Douglass, Wissink and Van Kempen 2012). Defining modes of segregation like the “enclave” becomes therefore both a critical aspect of methodological design – how to define the parameters of research – as well as a more fundamental exercise in theory-building ie. How should we define the concept of “enclave”?

As an alternative to these spatial zones that rely on extrapolations from census and survey data or constructed environments, activity zones offer an alternative (Wong and Shaw 2011; Wong, Li and Chai 2012). While still spatial, the definition of these spatial boundaries is set by the individual and her movements through space rather than the officially defined boundaries. These activity spaces deal with issues of exposure rather than cartographies of difference. This has the benefit of revealing more about the experience of socio-spatial segregation, and complements other methodologies that incorporate the administrative jurisdictions. As noted above with studies on migrant enclaves, governance structures impact the sustainability of both formal and informal settlements.

### *Categories of difference*

Setting the dimensions of segregations implies that beyond having population data and spatial boundaries, they also must define categories of difference. This is particularly important as the vast majority of researchers rely on some variation of questionnaire and regression analysis. Segregation implies a socio-spatial separation, reliant on ideas about social groups. For researchers in China, these analytical categories are often borrowed from research on “Western” cities, validated through other Chinese studies that do the same thing, rendering a kind of tautology of segregation characteristics. For example:

Since Shevky and Bell (1955) proposed the famous three dimensions of segregation—socioeconomic status, ethnicity and lifestyle—in their studies of Western cities, similar approaches have been successfully used in non-Western urban circumstances (Johnston et al., 2007; Li et al., 2010). As socio-economic differentiation is the principal determinant of residential segregation in Chinese cities (Wu & Webster, 2010), the following three categories of variables that are similar to those used for the case study of Guangzhou (Li et al., 2010) are chosen for this case study: (1) the common feature of demography; (2) occupational characteristics; and (3) housing. (Wu, et al 2010: 111).

In Wu, et. al.’s 2010 study, the variables are clustered along the lines of 8 “components” or typologies largely based on previous research. These components are then related statistically to certain professions or social groups. The interpretation of these social groups, classes, professions is notably inclined towards placing these results in a social hierarchy:

The census data at sub-district level shows that a high proportion of this type of housing is utilized as stores, restaurants, and cafés, etc. Hence, it can be inferred that this component may reveal those communities populated in part by an emerging entrepreneurial class, which is of higher status than shop and small business owners. (Ibid: 114).

These studies, largely quantitative, rely on statistical correlation in their design to make an argument about spatial differentiation. The predominant goal of these boundaries and categories of difference is to establish a means to measure segregation.

A large body of work draws statistical correlation between housing types, income, and residential segregation (See e.g. Yang and Wang 2006; Lu, Chen and Yu 2010; Chen 2014). While Yang and Wang (2006) argue for a causal relationship, that economic factors related to housing prices cause social differentiation, Lu, et. al. (2010) offer a multitude of indicators that affect housing sales price that are not just economic. To provide evidence for this, they conducted surveys and interviews to establish additional indicators on quality, eco-environment, overall planning, service and culture (ibid). More commonly, typologies for housing like “villas,” “high-end residential housing,” “medium quality housing,” “middle-low residential housing” and “old-dilapidated housing” are used in tandem with income as indicators for spatial distribution of difference (Jiang and Feng 2015). This is based on the assumption that affordability determines housing or neighborhood choices (Wu and Cui 1999; Lu, Chen and Yu 2010). In these studies, segregation is determined by the spatial distribution of different income groups (Huang 2006; Yang 2006). Income groups are available in “Statistics Yearbook” available by city in simplified high – medium – low distribution categories. It’s worthwhile to note that the exact levels of “rich” or “poor” are significantly variable depending on the city, however (cf. Jiang and Feng 2015 with Li, et. al. 2012).

Questionnaire-based methods rely on mostly demographic characteristics and self-reporting to establish difference (See above “Table 5” from Du and Li 2010). Yet the subjective interpretation placing these groups in a hierarchy (ie. One class being of “higher status” than another by Wu, et. al. 2010) is left unexamined. In these research designs, the social groups, their differences and even the relationships between different groups, are presented as self-evident. Perhaps in this way, the underlying, implicit normative bent of segregation research in urban China is greatly sympathetic to Park’s delineations of “vice districts.”

Some studies leave behind the nature of difference and have noted processes of differentiation or polarization/isolation itself as a relevant factor in neighborhood change. Consider Li and Wu’s 2006a study on Shanghai, which established “socio-spatial differentiation” as the co-existence of inter-neighborhood homogenization and intra-neighborhood heterogenization. While they make claims about the stratification of “elites” and “migrants,” their claim about the heterogenization of certain neighborhoods is perhaps one of the more interesting contributions to the literature. It is possible only given their comparative research design, which allowed them to conclude that some neighborhoods are becoming more mixed –perhaps the opposite of segregation.

Another durable approach towards studying processes of differentiation is the multigroup isolation index introduced by Wong (1998) and expanded by Chen (2014). This look at spatial distribution and concentrations of different groups to investigate the degrees to which different groups are isolated from others. Though Wong's index is based on older segregation research methods (Morgan 1975; Sakoda 1981), the adaptation of the isolation index for a complex setting also enables researchers to move beyond the defining the categories of difference towards methods for measuring differentiation.

### 3. Key research areas

There is no shortage of research being done on segregation in urban China (See Annex). Based on this cursory view of the types of research and the methodologies being employed, and keeping in mind Park as inspiration, here are some potential research areas:

- A continuation of survey-based comparative research. While this is the predominant mode of research, it is also evident in the cursory review of that cities have undergone tremendous changes in their socio-spatial differentiation between the studies of the early 2000s and 2010s. It seems that comparative studies within cities (especially between different administrative jurisdictions) seem to have generated a number of novel insights into the spatialization of difference (Cf. Fan 2002; Li and Wu 2006a).
  - *What is the makeup of these variously administered settlements, gated areas and how has the composition changed over time? Beyond the "snapshot" survey of current residents, what generation of income liquidity is living in these areas? How can life course research (Li 2004) also reveal changing mores about living statuses (ie. Living alone)*
  - *How have regulatory reforms in hukou, real estate, property development, property tax, construction, conservation/environment, public housing impacted different areas and groups differently?*
  - *How does comparative research on segregation in different areas within the city, different cities offer grounded theorizations about segregation? How does this relate to (contradict, validate, supplement) the enormous body of empirical research based on single cases?*

- Keeping with the theme of temporality, research on segregation as a process to be investigated through longitudinal approaches would help to document socio-spatial change over time. Currently, change is being documented largely through self-reporting in the various surveys and questionnaires. Much of the work that follows transition (commodification of the housing market) is now considerably outdated. Moreover, it would be valuable to investigate neighborhood stability (a theme from Park); is it easy to enter and exit?
  - For instance, that migrant groups and groups without hukou are most vulnerable to living in urban poverty is often taken for granted in the research. What remains unclear is how this changes over time. Beyond taking account of hukou reform, how do the concentrated areas where these groups live change over time? Some studies have proposed that they offer accessible, affordable housing where the state or the market fails them (Song, Denou and Ding 2008). Researching the movement of residents within the city (similar to the work on activity space) offers a mode to also investigate social mobility. Indeed, segregation research that take segregation as process as opposed to status would offer a means to
    - *Have informal settlements served as a transition to formal, more durable, more secure, higher quality housing arrangements? Or have informal settlements themselves become more institutionalized over time?*
    - *How have perceptions of exclusion or belonging changed over time, among different groups, and what are the factors that influence these changes?*
  - Informal settlement is generally construed as a mode of segregation distinct from the formalized, centralized, integrated yet gated communities. The informal/illegal aspect of urban villages in China is often connected to their migrant characteristic, but there are missing bridges between neighborhood composition and the morphological forms evident in the built environment, the spatial ordering of center-periphery and the development of infrastructure. The research on the spatialization of poverty indicates that segregation can be a means to identify the intensification of certain experiences not evidenced at other (national, provincial, city) scales.
    - *What processes of economic, social or cultural marginalization or re-centering parallel processes of segregation?*
    - *How is the trajectory of marginalization connected to cases of eviction, displacement or large scale demolition?*

- *Are there lasting, material consequences of settlements that were temporary (ie in the infrastructure?) how does the experience of marginality shape the city?*
  
- As much of the existing segregation research is objectivist in nature, it would be valuable to consider the various interests, agencies and resources of the social groups being associated with these socio-spatial differentiations. Currently, the social groups exist at level of abstraction of an emergent “class,” but what this means remains unclear –not only in economic terms, but also social. The differentiation of social groups, like the concept of class, is likely an issue for sociology in China more broadly. Segregation could be a topic through which to investigate the construction of different social groups. It would require a qualitative, ethnographic methodology that does not pre-determine the categories of difference.
  - *Beyond demographic makeup, what are the meaningful bonds that serve to delineate socio-spatial groups? What kinds of activities establish these relationships?*
  - *How can experiences of discontent help foster feelings of solidarity (Yip 2012)? What are the unexpected sources for feelings of group belonging?*
  
- One of the assumptions Park makes about segregation relates to social conflict between social groups. When dealing with subjective positions, the research so far seems to focus on questions of satisfaction. There is literature on social control as it relates to the enclaves and gated communities – under what assumptions about social strife do these forms of control operate?
  - *Is there social conflict? There seems to be no research on this – is it because there is no conflict, or is it somehow rendered invisible? Between which interests/groups?*
  
- Theorization is desperately needed about what constitutes the “good city” in China. Some vision about the “good city” is implicit in most of the research. Whether it is about gated communities or migrant enclaves, there exists an assumption that even though it is not the same kind of normative “ill” as in other contexts, it is not desirable.
  - *Following in Park’s footsteps, are there urban interventions to investigate, through which to develop an understanding of what a good city constitutes? Are there policy interventions at the neighborhood level to explicitly counter*



*segregation? Can policies focused on specific social groups like parents or the elderly be construed as urban policies? At a basic level: what would an anti-segregation policy be?*

- *What are the official justifications behind policy reforms for hukou, housing, etc.?*

#### **4. Remarks**

As a cursory overview about the existing research on segregation in urban China, this report should serve as a working paper and reflective analysis for researchers in the field. While it has attempted to integrate literature in both English and Chinese language publications, the main structure of the report is biased towards the English-language publications. This bias is mediated, however, as most of the authors cited have published in both languages. No claims are made about categorical differences between the nature of the research conducted in different languages, published in different venues, or originating from different institutions or disciplines, though an STS-based study of this would surely be fruitful.

This scoping study is the first of two reports that are part of the project “From Chicago to Shenzhen: ‘The City’ at One Hundred” at the City University of Hong Kong. More information about the project is available here: WEB INSERT.

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