‘Plural Reciprocity’ vs. ‘Acquaintance Society’: Place Attachment and Residential Satisfaction under Development-Induced Resettlement Differences in Guangzhou, China

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Abstract: In the context of urban expansion and regeneration, development-induced resettlement has had inevitable impacts on place attachment and residential satisfaction of residents. However, insufficient attention has been paid to the social-psychological performances of both attachment and satisfaction, and the possible influences of the former on the latter. Such deficiency also emerges when considering different resettlement patterns in peripheral urban China. This study conducted a semi-structural survey on two neighborhoods affected by the construction of Higher Mega Education Center (HEMC) in Guangzhou with different resettlement patterns. Based on multidimensional measurement, residents in relocated subsidized housing expressed higher attachment and satisfaction through the remaining social bonding as ‘acquaintance society’ than those in in-situ urban villages relying on self-identified clan-kinship and stable reciprocity. Hukou status is found to be fundamental in building attachment and life fulfillment, especially for the urban villages with plural population structure. Significances are found in the impacts of place dependence, social bonding and place identification on residential satisfaction in in-situ neighborhoods while only social bonding was found to be significant in the relocated ‘enclave’ one. However, deeper integration with affective connections are insufficient for both. The findings generally indicate that positive outcomes are also achieved for self-regeneration after resettlement.

Keywords: development-induced resettlement; place attachment; residential satisfaction; resettlement pattern differences; China

1. Introduction

In the ‘Anthropocene’, unprecedented urban expansion and regeneration have gradually taken over the planet with the proliferation of massive development projects [1]. However, negative outcomes are criticized nowadays because of profit-oriented development that has implemented land acquisition and demolition on indigenous people, resulting in severe injuries upon housing and neighborhood conditions [2,3]. Residents, particularly those of rural communities on marginal land, have been forced to relocate [4], and subsequent socio-spatial restructuring has taken place in the displacement of relocatees who are struggling in terms of land loss and rights deprivation in peripheral urban China [5,6]. Involuntary displacement, in this way, could cause severe emotional trauma [7], and further social, economic and affective losses with stress and impoverishment [8].

On the affective level, place attachment of residents is deeply challenged due to development-induced displacement and resettlement (DIDR). People are more or less attached
to the places where they live, and when peculiar meaning is imbued in specific places, attachment develops immanently as a multifaceted affective manifestation \cite{9,10}. When explored by differences in age, income, education, hukou status, length of residence, etc. \cite{11,12}, place attachment has been tightly connected to daily human experience and perceptions of residents inside the neighborhoods and cities \cite{13,14}. In the new era of market-oriented reforms, housing commodification and land financialization, modern China finds no way to dispense with intensified DIDR \cite{15}, and therefore, placelessness or displacement driven by urban regeneration projects will not be rare in the future. This diminishes the intimate human-place relationship with which individuals manifest an affective and cognitive experienced bond to the settings of particular environment \cite{16,17}, or the ‘genius loci’ widely identified from the ‘characteristic’ meanings of more than an abstract architecture/place connected with human beings \cite{18}, especially injuring the social-psychological construction of attachment after resettlement.

Housing usually occupies the lives of residents in China deep down \cite{19}, so when resettlement happens, the original living circumstance, neighborhood structure and social networks are damaged more or less to impact on their residential satisfaction \cite{4,20}. Mostly focused on Western middle-class residential areas \cite{21}, residential satisfaction is defined as the perceived differences between individuals’ real and desired housing situations, and to what extent their functional needs are satisfied \cite{22}. Recently, a substantial number of studies have shed light on the influences of housing types on residential satisfaction such as public housing \cite{19}, affordable apartments \cite{23}, gated communities \cite{24} and urban villages \cite{21}. With further studies focusing on social cohesion and security, more attention has been paid to psychological impacts of social attachment, affective belongingness and bonding on residential satisfaction \cite{25,26}. Fleury-Bahi et al. \cite{27} interpreted that the sense of identification tended to influence certain aspects of satisfaction, while Chen et al. \cite{28} found a significant response of environmental satisfaction on attachment building. Furthermore, the physical separation and displacement after development-induced resettlement are usually instant and tough. However, this is more durable and profound in subsequent socio-spatial reconstruction and emotional fluctuation for residents \cite{29}. Thus, it is important to pay more attention to the social-psychological impacts of innermost attachment on residential satisfaction.

When we concentrate our insights upon less-discussed but highly intricate urban regeneration in peripheral urban China, resettlement and redevelopment complicate residents’ linkages to their living places, which may affect how satisfied they feel and how well they are contented with higher needs \cite{3,30}. Most development-induced projects dominated by the Chinese government nowadays can be divided into two major patterns: in-situ resettlement where housing is often retained as urban villages on villagers’ plots of land (zhaijidi), and relocated resettlement, which is compensated by public housing, property right conversion or temporary residence waiting for moving back \cite{31}. Given such pattern differences, it is necessary for scientific investigation to decode residents’ place attachment and residential satisfaction at the neighborhood level \cite{32}, especially from the lens of innermost perception and neighboring regeneration in peripheral urban areas. Moreover, it is also an essential task under the scientific frontier of a prevailing transdisciplinary field as the Psychology of Sustainability and Sustainable Development, to build more sustainable neighborhoods and a harmonious society after DIDR.

Therefore, this article aims to fill the aforementioned gaps by untangling the differentiation of development-induced resettlement on two different kinds of resettled neighborhoods in peripheral urban Guangzhou, China. It will be conducive, on the one hand, to take a step forward to unveil the social-psychological changes of place attachment and residential satisfaction during the process of resettlement under different patterns at the neighborhood level. On the other hand, it is also necessary to provide effective and sustainable implications for urban governance in the context of large-scale urban regeneration, especially in cities like Guangzhou, where frequent deconstruction and reconstruction of landscapes and even cultures prevail. Fifteen years after relocation, distinctive place (re)attachment and residential satisfaction of residences themselves within different neighborhoods
have been established and stabilized to some extent. The two chosen neighborhoods, one being an urban village and the other being subsidized housing, are also the most resettled and debated types in urban China [33]. Based on semi-structural surveys and in-depth interviews, attempts are made to answer the following questions: (a) What are the features of place attachment and residential satisfaction of residents after resettlement? (b) To what extent does place attachment of residents to the neighborhoods influence their residential satisfaction? (c) How different are the resettled neighborhoods considering the two different resettlement patterns above?

The remainder of this article is structured as follows. First, we review the relevant literature and progress in place attachment, residential satisfaction, DIDR and also their connections. Next, we briefly introduce the research design and the case. A measurable analysis combined with SPSS software is then conducted with statistics analysis to reveal the results of the two resettled neighborhoods. Finally, we conclude by examining the impacts of place attachment on residential satisfaction, followed by policy implications.

2. Literature Review

2.1. Place Attachment and Residential Satisfaction at the Neighborhood Level

Since the late 1970s, human-place relationships have been explored from ‘Topophilia’ and ‘sense of place’ [10,34] to later ‘place attachment’ [35]. Altman and Low’s seminal monograph [16] defined place attachment as a positive affective bond rooted in mind to a particular environmental setting. In the early literature, the two-dimensional structure of place attachment received the most attention [1]. This consisted of place dependence as the functional satisfaction with utility that supports desired goals [36], and place identity as a symbolic feeling combining place imageability and distinction of self [37,38]. The composition recently is expanded with sense of belonging [9], social bonding [35], place affect [39], rootedness [13], place expectation [28], security [40], etc. Typically, the all-round combination of place dependence, identity, affect and social bonding has recently been considered as the pivotal formation of place attachment prevalently in current research, correspondingly reflected in functional, cognitive, affective/emotional and social dimensions [38,41]. Among them, the social bonding and affective connection of humans in particular further influence social-psychological imbueuements of the attachment to certain places.

Place attachment is embedded in particular physical spaces at the beginning, and later turns to the perceived, social and psychological experiences representing human culture [38], such as applications on immigration [42], social segregation [43], disease and trauma [44], tourism [45] and environmental conservation [39]. Specifically, at the neighborhood level, neighborhood attachment is considered as the anchor for neighborhood cohesion and social integration with emotional links and cognitive dependence [46]. When decoding cases like gated neighborhoods [47], low-income communities [11] and tourism-dependent communities [48], neighborhood attachment stays highly relevant to the neighborhood environments and conditions [47]. During the process of urban regeneration, the intensified lack of connectivity to specific places induced by globalization is hindering residents’ feelings and experiences for they turn out to be more dependent on virtual remote connections (often through internets) over physical landscapes, which may subsequently result in the displacement or inability to establish place meanings [25,38].

As for residential satisfaction, a consensus has been achieved to reflect how satisfied individuals are with their current living conditions based on the comparison with the ideal ones [22]. It also implies a degree of fulfillment that enables residents to achieve their needs and goals from residential environments [49]. In this regard, it is actually a subjective-perceptional construct with the aspiration of closeness to the expected settings [50]. Gradually, residential satisfaction has become an academic criterium for the evaluation of residential and life quality [1]. Improving the residential satisfaction of different social groups thus turns out to be important for social cohesion and integration worldwide.
When reviewing the existing literature, it is found that scholars mainly concentrate on three categories of determinants in analyzing residential satisfaction [51], including objective housing characteristics and environments [19,52,53], demographic attributes of individuals and households [54,55] and neighborhood environments in the context of social interaction [21,56]. Recently, residential satisfaction is becoming predominant due to its relationship with relocation intention or willingness to stay at the neighborhood level. Although most studies have suggested that dwellers with lower satisfaction tend to express higher possibilities for relocation [57], some contradictory opposite outcomes emerge in the face of involuntary relocation [32,58]. In peripheral urban China, such involuntariness is common during the regeneration dominated by the government. This deserves further investigation regarding the residential satisfaction of those resettled people.

2.2. Impacts of Place Attachment on Residential Satisfaction

In the era of urban regeneration, neighborhood interaction, neighborhood type, intimate relatives and friends, security, social capital and network, and neighborhood effect are usually considered as the common factors that tend to gradually impose more influences on residential satisfaction [56–61]. Lin and Li [62] further indicated that social attachment has become one of the most important determinants in megacities worldwide. From the perspective of human-place bond, how individuals are attached to their living places, or briefly the sense of identification, is bound to exert certain significance on residents’ satisfaction [27]. Chow et al. [63] further clarified that deep-down place dependence and identification had a strong correlation with satisfaction. Actually, the intimate human-place relationship, or place attachment, provides a unique perspective of residents’ own perceptions, especially from social, emotional and psychological aspects [27]. However, such social-psychological effects of place attachment on residential satisfaction have rarely been investigated, particularly from the viewpoints of residents at the neighborhood level. Because place attachment may hold an intensified connection to residential satisfaction during the process of urban regeneration, more explanations are needed for testing the possibilities and impacts of place attachment on residential satisfaction, especially in peripheral urban China.

2.3. On-Going Development-Induced Resettlement in Transitional Urban China

While the contradiction between urban expansion and land shortage is intensifying, local government have begun to adopt the strategies of restructuring dilapidated areas that mismatch with modernized lifestyle like troublesome slums and old inner-city communities [3]. Thus, there has been large-scale land acquisition and demolition and the subsequent DIDR boom, resulting from infrastructure projects (mostly transportation and hydropower) [64], ecological conservation [65], climate change [66], disaster risk [67] and tourism [68]. That may bring lots of negative outcomes, like declining living satisfaction, increasing stress and alienation, loss of sense of place and erosion of social network [1,69]. Resettled people have to take slow steps to readapt and rebuild their livelihoods, functions, neighborhood trust and social interaction after relocation. Later, intimate bonding, reattachment and life satisfaction to resettled places might be reconstructed at the mental, emotional and cognitive levels [70]. However, it should be noted that the process of resettlement does not necessarily cause negative outcomes. Kale [71] found that local initiatives actively helped to build positive attachment of refugees through familiarization and daily practice involvement.

The resettlement pattern induced by multiplex development projects in transitional urban China mainly contains in-situ resettlement (often transformed into informal urban villages on villagers’ plots of land) [31], newly-built public-subsidized housing, monetary compensated resettlement and move-back resettlement (temporary outward apartment waiting for uprooted upgradation of original housing) [72]. Among them, in-situ urbanization with urban villages and relocated subsidized housing are the most usual kinds of resettlement [33]. Though existing literature has already strived to manifest the residential conditions and neighborhood attachment under the differences of housing types [11,32], different resettlement patterns caused by DIDR and the corresponding neighborhood reconstruction
in peripheral urban China deserve more exploration, as they play a significant role in engaging the prevailing topics of urban regeneration, in-situ urbanization and relocated ‘enclave’ neighborhood that have seldom been connected in previous studies. Moreover, even less focus has been paid to the self-perceived consequences under different resettlement patterns, especially those social-psychological effects at the neighborhood level [73]. DIDR has proved to be one of the thorniest and most sensitive issues bringing social conflicts in transitional urban China [74]. DIDR in China are often considered dominant by institutional design and regulations with complicating dual household registration and land systems. Therefore, to explore the place attachment and residential satisfaction with the consideration of resettlement pattern differences, it is necessary to better understand the mechanism of place attachment, especially in social and psychological ways, the motivation of residential satisfaction, and the practical impacts of urban regeneration on the former two issues.

3. Case Study and Method

3.1. Case Study

This case study sheds light on two different kinds of neighborhoods that are under different patterns of development-induced resettlement with the construction of a Higher Education Mega Center (HEMC), a well-known university town not only in Guangzhou but also in China. The major part of HEMC lies on the Xiaoguwei Island, Panyu District, connecting the central Guangzhou and its southern suburban. It covers an area of 17.9 km$^2$ and a population of 0.23 million with 10 universities, abundant industrial zones and convenient public facilities, aiming to develop as ‘Guangzhou international innovation zone’ [75].

In 2002, the construction scheme of HEMC was approved with the demand for high-skill labors, and then a tricky process of land expropriation and demolition to resettle indigenous villagers started. Trapped by fierce restrictions of local farmers, the demolishment was unable to be conducted until September 2003, with four natural villages (Beiting, Nanting, Suishi and Beigang villages) being retained. Nearly 8318 aborigines, motivated by an abundant compensation package that might be the highest government concession at that time [76], were moved to the newly-built resettled neighborhood, Guwei New Village (GWNV) that covers an area of 0.81 km$^2$ facing the southeastern bank of the HEMC [77]. After quite a long time, during which there was an increase in the stability and distinctiveness of housing, neighborhood, and social network, the four reserved villages inside HEMC have developed into urban villages (UVs) encircled by ten universities while GWNV turned into a modern community with diverse facilities, accordingly reflecting in-situ and relocated resettlement patterns respectively (Figure 1). They have become symbols for the typical resettlement patterns affected by DIDR in transitional peripheral urban China and ‘pioneer’ Guangzhou going through new practices of large-scale urban regeneration, representing developing countries experiencing the fierce social-cultural and landscape restructuring. Therefore, it makes them the typical and ideal case with a long-enough timespan to explore our scientific questions.
was first conducted in Beiting village in December 2018 and GWNV in March 2019. Then, semi-structural surveys were conducted from April to June 2019 aiming to collect the descriptive characteristics of residents and their scorings on place attachment and residential satisfaction. The basic socio-economic, demographic, housing and household data were first collected including gender, age, hukou status, education, income, length of residence, occupation, housing ownership and familiarity of Cantonese. Supplementary in-depth interviews were also combined with ‘open’ questions, mainly about residents’ perceptions on the construction of HEMC, their perceived and emotional changes after resettlement, social-psychological bonds with the living places, relocation intention and life expectation. Only residents over 18 years old were included.

According to the different objects, the common experiences of Kyle et al. [78], Cheung and Hui [65], Chen and Dwyer [79] and the literature review above, the four-dimension construction measuring place attachment is widely accepted and applied with high reliability in functional, cognitive, social and affective ways. The first is place dependence, which mainly examines the fulfillment degree of residents’ needs, including housing and neighborhood conditions, and their willingness of long-term residence. The second one is place identification that lies in the distinctiveness and internalization of the neighborhood as a part of self. Thirdly, social bonding is addressed to demonstrate the intimacy of social relationships combined with frequent contact and instant assistance. Last but not least is the affective connection that is often overlooked in previous studies and that emphasises the psychological aspect of residents, including belongingness, memories, and emotional linkages. For the measurement of residential satisfaction, it is argued that it should not be narrowed in neighborhood conditions but also expanded to life satisfaction [26,80]. After sorting out the most frequent questions in existing studies, items have been selected considering the local context of the case. A pilot questionnaire survey was first conducted in Beiting village in December 2018 and GWNV in March 2019. Then, through modifications, the main round of questionnaire survey was confirmed with higher validation and accuracy. All the above constructs and their items were measured with a 5-score Likert scale.

4. Empirical Results: Evidences from Guangzhou

4.1. Descriptive Characteristics of the Sample: ‘Diverse’ UVs vs. ‘Local’ GWNV

The basic socio-economic and residential characteristics of the sample are shown in Table 1. It can be found that the backbone of UVs in HEMC falls on young and middle-aged adults (18–60 years old) and that 75% of the residents are migrants receiving relatively higher salaries in service industries and...
self-employed business. With the proportion of rental housing reaching 75%, these UVs display the same service-based development trajectories as other urban villages in providing cheap but diverse life services for people in the neighborhood [76]. Fifteen years after the resettlement, the percentage of migrant residents there reached a high level in the context of ascending temporary migrants and the younger generation, like students, which is also typical for urban villages in China [21]. In this regard, the development pathway of in-situ resettlement in urban villages seems to enable the facilitation of more mixed spaces and a more plural population structure, meeting more new opportunities for the ‘regeneration’ of indigenous villagers.

Table 1. Socio-economic and residential characteristics of resettled neighborhoods.

| Characteristics       | UVs in HEMC |          | GWNV |          |
|-----------------------|-------------|----------|------|----------|
|                       | N           | %        | N    | %        |
| Gender                |             |          |      |          |
| Male                  | 97          | 48.5     | 45   | 45.0     |
| Female                | 103         | 51.5     | 55   | 55.0     |
| Age                   |             |          |      |          |
| 18–30                 | 82          | 41.0     | 25   | 25.0     |
| 30–60                 | 96          | 48.0     | 46   | 46.0     |
| >60                   | 22          | 11.0     | 29   | 29.0     |
| Hukou status          |             |          |      |          |
| Local (Panyu)         | 51          | 25.5     | 81   | 81.0     |
| Migrant               | 149         | 74.5     | 19   | 19.0     |
| Education             |             |          |      |          |
| Primary school and under | 38      | 19.0     | 22   | 22.0     |
| Middle or technical school | 97       | 48.5     | 45   | 45.0     |
| College and up        | 65          | 32.5     | 33   | 33.0     |
| <3000 Yuan            | 77          | 38.5     | 55   | 55.0     |
| 3000–6000 Yuan        | 63          | 31.5     | 25   | 25.0     |
| 6000–9000 Yuan        | 39          | 19.5     | 12   | 12.0     |
| >9000 Yuan            | 21          | 10.5     | 8    | 8.0      |
| <2 years              | 40          | 20.0     | 7    | 7.0      |
| 2–5 years             | 60          | 30.0     | 13   | 13.0     |
| 5–10 years            | 36          | 18.0     | 7    | 7.0      |
| >10 years             | 54          | 27.0     | 73   | 73.0     |
| Monthly income        |             |          |      |          |
| Governmental institutions | 6        | 3.0      | 2    | 2.0      |
| Manufacturing         | 15          | 7.5      | 13   | 13.0     |
| Services              | 47          | 23.5     | 17   | 17.0     |
| Self-employed business | 70        | 35.0     | 14   | 14.0     |
| Students              | 34          | 17.0     | 7    | 7.0      |
| Unemployed and retired | 28        | 14.0     | 47   | 47.0     |
| Self-purchasing       | 11          | 5.5      | 67   | 67.0     |
| Self-build            | 31          | 15.5     | 8    | 8.0      |
| Rent                  | 150         | 75.0     | 25   | 25.0     |
| Temporary stay        | 8           | 4.0      | 0    | 0.0      |
| Housing ownership     |             |          |      |          |
| Both understand and speak | 121      | 60.5     | 85   | 85.0     |
| Understand but not speak | 60        | 30.0     | 10   | 10.0     |
| Neither understand nor speak | 19      | 9.5      | 5    | 5.0      |
| Total                 | 200         | 100.0    | 100  | 100.0    |

On the other hand, GWNV is signified with an aging (nearly 30% people aged over 60), low-income (55% less than 3000 Yuan per month) and local (striking 81%) neighborhood. It was built especially for the resettled villagers from Xiaoguwei Island. Thus, most people in the prime of life at that time have now grown up into elderly people, and the residents there can perform as a proxy for those resettled people. That is consistent with the high percentages of unemployment and retirement, as well as with the length of residence reaching over 10 years of the sample. In addition, local dialect may play an unusual role in Guangzhou where Cantonese is becoming the dominant form of interaction, confirmed by the sample here that 85% of residents have no problem in both understanding and speaking Cantonese.
4.2. Place Attachment and Residential Satisfaction under Different Resettlement Patterns

4.2.1. Place Attachment at the Neighborhood Level: Uneven Identified ‘Reciprocal Bond’ vs. Strong-Attached ‘Acquaintance Society’

To test the reliability and validity of sample-based scales and measurements, we run the calculation combined with Cronbach’s alpha (\(\alpha\)), composite reliability (CR) and average variance extracted (AVE) through SPSS19.0 software. The results shown in Table 2 show that all constructs achieve higher than 0.72, 0.83 and 0.72 respectively on the Cronbach’s \(\alpha\), CR and AVE tests, indicating that the four-dimensional construction of place attachment that we set is reliable.

| Constructs and Items | UVs in HEMC | GWNV |
|----------------------|-------------|------|
|                      | Mean  | SD   | Mean  | SD   |
| Place dependence/PD (Cronbach’s \(\alpha\) = 0.726, CR = 0.834, AVE = 0.727) |  |  |  |  |
| I am fulfilled with housing conditions | 3.13 | 0.91 | 3.97 | 0.79 |
| I am fulfilled with neighborhood services | 2.86 | 1.07 | 3.70 | 1.00 |
| I’ve loved living in this neighborhood for a long time | 2.91 | 1.20 | 3.62 | 1.22 |
| Place identification/PI (Cronbach’s \(\alpha\) = 0.737, CR = 0.857, AVE = 0.771) |  |  |  |  |
| I identify strongly with neighborhood | 3.22 | 0.94 | 3.78 | 0.79 |
| I’m willing to dedicate myself to the neighborhood | 2.86 | 0.98 | 3.40 | 1.06 |
| I consider the neighborhood as a part of me | 2.80 | 1.14 | 3.52 | 1.13 |
| Social bonding/SB (Cronbach’s \(\alpha\) = 0.746, CR = 0.883, AVE = 0.791) |  |  |  |  |
| I have frequent contacts with neighborhood residents | 3.06 | 1.23 | 3.88 | 1.05 |
| I am pleased to invite residents to my home | 2.76 | 1.24 | 3.54 | 1.14 |
| I have many intimate friends for assistance in the neighborhood | 2.69 | 1.26 | 3.28 | 1.21 |
| Affective connection/AC (Cronbach’s \(\alpha\) = 0.810, CR = 0.914, AVE = 0.842) |  |  |  |  |
| I think I belong to the neighborhood | 2.81 | 1.15 | 3.62 | 1.06 |
| There are many memories in my neighborhood | 2.82 | 1.16 | 3.41 | 1.12 |
| If I moved out of the neighborhood, I would miss it | 2.88 | 1.22 | 3.36 | 1.21 |
| Total | 34.79 | 1.13 | 43.08 | 1.06 |

The overall outcomes reveal that all items of place attachment have passed the median value of 2.5, so residents in both resettled neighborhoods have built positive attachment to their current living places. The scores of place dependence (PD) rank the highest, followed by place identification (PI), social bonding (SB) and affective connection (AC). This shows that the human-place relationship, with no exception for those affected by DIDR, originates from the value of utility, especially in terms of the basic housing conditions for survival and shelter. In addition, resettled people built a certain degree of symbolic identification with internalized ‘physical world socialization of the self’ [81], but underlying affective bonds with place are still deficient in sense of belonging and rootedness. Besides that, it is important to pay attention to the highest internal dispersion (shown by standard deviation) of social bonding.

When compared under resettlement pattern differentiation, residents in relocated GWNV are more attached in all four dimensions to their living places, although they have been forcibly resettled (25% higher than the in-situ one). This is probably explained by the similar living experiences they have to establish new networks towards ‘acquaintance society’ in relocated gatherings, subsequently promoting place attachment with easier re-adaptation. Nonetheless, the relatively low scores in mutual intimate assistance and affective cherishing if relocating outside are simultaneously presented. A certain level of physical and emotional separation may partly explain this. As residents from GWNV said,
‘... we used to drop around to our neighbors’ place nearby, but now it cannot happen because of the rigorous apartment management. We can just make an appointment through phones to shop or pick up kids together.’

(female, local, 50 years old)

‘... most young people chose to move outside to (earn) money. Only the elderly like us have no choice but to stay here isolated.’

(male, local, 60 years old)

For residents inside UVs in HEMC, a strong self-identification is found in the first item of PI based on their living on the remaining land inherited from ancestors and the connection around clan-kinship and rural collective committees. They often run small but diverse business on the in-situ plots of land targeted at the migrants, especially newly graduated youngsters and surrounding students, like catering, renting, hairdressing, groceries, and entertaining (Figure 2). In such regards, the large number of migrants tend to rely on cheap services for fundamental needs, which in turn builds a certain degree of self-integration to the neighborhood. As a shop owner from Beiting village in HEMC said,

‘... basically we rely on the payments of nearby students. We run small business with low costs, and students have a limited source of income. As long as their buying is stable, we can stand up (with mutual benefit) ...’

(female, local, 35 years old)

Figure 2. The roadside stands providing basic needs, especially for students, in Beiting village as the representative of UVs in HEMC (Source: the authors).

Their affective linkages to in-situ places, in this way, remain at a moderate level with intimate reciprocal relationships. The social bonding and interaction, on the contrary, tend to stay low with higher SD values, facing the increasing intricacy in population composition and subsequent intensification of housing and social segregation. This can be reflected in the higher heterogeneity in the population composition of UVs (75% migrant residents vs. 25% locals, as shown in Table 1). He [82] explained this outcome as the evolution of studentification that decreased the neighborhood attachment to some extent, because these youngsters are more attached to an external network for social delocalization away from local-based spatial barriers [46].
4.2.2. Residential Satisfaction at the Neighborhood Level: Upgrading Desire vs. ‘Stumbling’ Fulfillment

Data measured through the scale of residential satisfaction also passed the reliability tests with even higher reliabilities than that of place attachment (shown in Table 3). The residential satisfaction in GW_NV performs better than that in UVs in HEMC through great life upgradation with the support from property management companies and formal community governance. Although relocated outside the HEMC (more than 3 km distance), this newly-built neighborhood is made up of ‘gated’ apartments and spacious villas with more facilities and neater public spaces (Figure 3a,c). With reasonable monetary compensation and subsidies, these resettled people are able to receive preferable adjustments for high-level functions to build stronger satisfaction than before. However, compared with the neighborhood environment and neighboring relationship, the respondents gradually feel more dissatisfied with the current living and housing conditions. As two respondents said,

‘… more than a decade has passed, the transportation has rarely been improved. There isn’t a metro passing by. We have been waiting for more than 10 years to have the Xinhua Expressway. But it is still hard and far to travel to the central city.’

(female, local, 40 years old)

‘… there are many factories behind the village. Noise, air and water pollution (from them) often disturbs us. We jointly made complaints to the management company and the committee many times, but it still doesn’t work. They (factories) won’t care about us for the sake of profits …’

(male, migrant, 40 years old)

![Figure 3](source)

**Figure 3.** Residential characteristics of resettled neighborhoods: (a) Tidy subsidized apartments and cozy small villas in Guwei New Village (GW_NV); (b) Informal rental housings and short-term flats in Beiting village; (c) Spacious pavements, diverse services and enjoyable environment in GW_NV; (d) Crowded street, chaotic pipelines and haunted ‘psoriasis’ in Beiting village. (Source: the authors; Baidu panorama map).
Table 3. Measurement of residential satisfaction in two neighborhoods.

| Items                                      | UVs in HEMC | GWNV |
|--------------------------------------------|-------------|------|
|                                            | Mean       | SD   | Mean | SD  |
| Residual satisfaction (Cronbach’s $\alpha = 0.874$, CR = 0.918, AVE = 0.736) |             |      |      |     |
| I am very satisfied with my residential conditions | 3.35 | 1.24 | 3.77 | 1.20 |
| Most parts of my residence are close to ideal | 3.00 | 1.28 | 3.34 | 1.30 |
| I have acquired the most important thing in my life so far | 2.91 | 1.33 | 3.27 | 1.29 |
| If I could choose to live again, I wouldn’t change anything | 2.67 | 1.53 | 2.76 | 1.33 |
| Total                                      | 11.93 | 1.35 | 13.13 | 1.28 |

In contrast, residents in UVs inside the HEMC are much less satisfied with greater internal group differentiation (higher SD values). Under in-situ resettlement, informal urban villages often involve poor living conditions, haunted ‘psoriasis’ ads and disordered services (Figure 3b,d). Just like other urban villages in China, the informality, hasty urbanization and lack of management have jointly damaged the satisfaction of residents. When asked for the relocation intention, about 20% of the respondents would like to move out immediately if they were free from economic burden (12% correspondingly in GWNV). Residents in urban villages induced by in-situ resettlement often thrive on their functional, social and cultural status improvement in Chinese megacities. Nevertheless, in our in-depth surveys, the self-evaluations of their social position rank 10% higher for respondents in UVs than those in GWNV. It can be further assumed that the relatively diverse population structure of UVs helps to improve the residential satisfaction and regeneration of resettled indigenous villagers.

4.2.3. Comparison of Resettlement Pattern Differences: Local Hukou Matters although Housing Ownership and Familiarity of Cantonese Differ

To further investigate the differentiation of place attachment (PA) and residential satisfaction (RS) under different resettlement patterns, chi-square tests of the overall sample were conducted along with the consideration of major demographic and socio-economic characteristics (results are shown in Table 4). From the perspective of resettlement pattern differences (in-situ vs. relocated), great significances are manifested both in place attachment (as well as the four constructs of it) and residential satisfaction. Such differences lie in better attachment and satisfaction of residents in GWNV than those in UVs in HEMC. Moreover, more significant results are also indicated considering the differences of age, hukou status, income, length of residence, housing ownership and occupation on both PA and RS. It can be assumed that the heterogeneity of population structure may play an important role in the differentiation of PA and RS of resettled people, which is consistent with the sample structures compared between uneven and diverse UVs in HEMC and less plural GWNV. Notably, differences in education and the familiarity of Cantonese remain greatly significant for PA but not for RS, and no significant difference is found in the different gender groups.

In order to reveal how different the population structure of the resettled neighborhoods is, and to what extent it features under resettlement pattern differences, chi-square tests were also conducted with the division of these two neighborhoods (in Table 5, gender was omitted for its non-significance above). High significances are shown in the differences of age, hukou status, length of residence, housing ownership and occupation on both PA and RS in UVs in HEMC, which is similar to the overall sample. Thus, there is significantly stronger place attachment and residential satisfaction of those local-hukou elderly people living for more than 10 years in self-owned housing. With significant results found in all the items between our sample with local hukou and those without it, the household registration (hukou) status is therefore fundamental for the thorough attachment and life satisfaction of the residents, especially after DIDR in transitional urban China. In the context of extremely high housing prices and the volatile real estate market in Chinese large cities, housing property and home ownership has increasingly become an important aspect of place-based bonds, life pursuit and the subsequent satisfaction of people. The students, a special group in UVs, show less PA and RS considering the
neighborhood as just a living place, and their poor localized social bonding further confirms their pursuits for virtual network-based connection outwards. However, in terms of monthly income, significant differences are only shown in social bonding, affective connection and residential satisfaction.

| Variables                  | PD        | PI        | SB        | AC        | PA        | RS        |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Resettlement pattern       | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.003 **  |
| Gender                     | 0.866     | 0.485     | 0.097     | 0.150     | 0.338     | 0.148     |
| Age                        | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** |
| Hukou status               | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** |
| Education                  | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** |
| Monthly income             | 0.000 *** | 0.036    | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** |
| Length of residence        | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** |
| Housing ownership          | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** |
| Familiarity of Cantonese   | 0.004 **  | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.087     |
| Occupation                 | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** | 0.000 *** |

Notes: * p < 0.05, ** p < 0.01, *** p < 0.001.

| Variables                  | UVs in HEMC | GWNV     |
|----------------------------|-------------|----------|
| Age                        | 0.000 ***   | 0.000 ***| 0.000 ***| 0.000 ***| 0.000 ***| 0.000 ***| 0.000 ***| 0.000 ***| 0.000 ***|
| Hukou status               | 0.000 ***   | 0.000 ***| 0.000 ***| 0.000 ***| 0.000 ***| 0.000 ***| 0.000 ***| 0.000 ***| 0.027 ** |
| Education                  | 0.005 **    | 0.040    | 0.037    | 0.000 ***| 0.183    | 0.061    | 0.093    | 0.051    | 0.191    | 0.735    |
| Monthly income             | 0.112       | 0.549    | 0.037    | 0.000 ***| 0.226    | 0.005    | 0.000 ***| 0.000 ***| 0.157    | 0.268    |
| Length of residence        | 0.000 ***   | 0.000 ***| 0.000 ***| 0.000 ***| 0.003    | 0.119    | 0.002    | 0.323    | 0.000 ***| 0.191    |
| Housing ownership          | 0.000 ***   | 0.000 ***| 0.000 ***| 0.000 ***| 0.000 ***| 0.400    | 0.001    | 0.114    | 0.006    | 0.674    |
| Familiarity of Cantonese   | 0.004 **    | 0.002    | 0.000 ***| 0.000 ***| 0.856    | 0.333    | 0.000 ***| 0.175    | 0.000 ***| 0.015    |
| Occupation                 | 0.010 **    | 0.000 ***| 0.000 ***| 0.000 ***| 0.003    | 0.415    | 0.287    | 0.012    | 0.473    | 0.229    |

Notes: * p < 0.05, ** p < 0.01, *** p < 0.001.

In GWNV, significant differences in PA and RS are found considering the differences in hukou status and familiarity of Cantonese. Based on the original township network, local-hukou residents (over 80%) are particularly dependent on a safe and steady environment to rebuild functional, cognitive, social and affective attachment and residential satisfaction to the relocated newly-built neighborhood. When asked about the opinions of residents on the construction of HEMC, about 70% of them are in favor nowadays, although they are forced to resettle. Just as a respondent suffering from the process of relocated resettlement and reconstruction said,

‘... (I’m) surely in favor of the construction of HEMC. (Our) life quality gets improved. (There is) no need to work hard on farmland to wait for harvest. The house is much better than before...’

(female, local, 45 years old)

After displacement and emotional loss, they have redeveloped distinct pathways of rebuilding place attachment and residential satisfaction for a better life. Development-induced resettlement, in this way, is also able to convert positive outcomes for resettled people and surrounding residents in terms of the great upgrades of living and housing conditions, differing from the purely negative ones in most research [69,74]. However according to the statements of our respondents, more than 45% of residents in GWNV express a relocation intention if they are economically abundant, reflecting their underlying complaints about the hastily-urbanized, ‘isolated’ and deprived neighborhoods. In addition, migrants, especially those unfamiliar with Cantonese, have gradually been ‘marginalized’ as newcomers struggling to build their innermost identities, social integration and life satisfaction in this regard.
4.3. Impacts of Place Attachment on Residential Satisfaction: Functional Self-Regeneration vs. ‘Isolated’ Social-Maintenance

To further explore the possible impacts of place attachment on residential satisfaction, a multiple linear regression analysis was conducted. The four dimensions of place attachment were distinguished functionally, cognitively, socially and psychologically, and special attention was paid to the resettlement pattern differences. Other control variables were also included in the experiences above. The regression results are displayed in Table 6.

Table 6. Regression results under resettlement pattern differences.

| Variables                        | Total | UVs in HEMC | GWNV |
|----------------------------------|-------|-------------|------|
| Place attachment                 |       |             |      |
| Place dependence/PD              | 0.344 | 0.485 ***   | 0.082|
| Place identity/PI                | 0.326 | 0.276 *     | 0.404|
| Social bonding/SB                | 0.307 | 0.295 ***   | 0.340 |
| Affective connection/AC          | -0.085| -0.121      | -0.081|
| Age                              | 0.284 | 0.590       | 0.375 |
| Hukou status                     | -0.009| 0.191       | -2.655|
| Education                        | 0.495 | 0.726 *     | 0.651 |
| Monthly income                   | 0.480 | 0.538 **    | 0.333 |
| Length of residence              | -0.211| -0.210      | -0.712|
| Housing ownership                | 0.157 | 0.997 **    | -0.748|
| Familiarity of Cantonese         | -0.010| 0.021       | -1.046|
| Occupation (Constant)            | 0.102 | 0.116       | 0.258 |
| R                                | 5.981 | 8.372 ***   | 10.088*** |
| Adjusted R²                      | 0.246 | 0.267       | 0.129 |
| Sig.                             | 0.000 | 0.000       | 0.000 |

Notes: * p < 0.05, ** p < 0.01, *** p < 0.001.

First of all, it is found that the residential satisfaction of our residents is significantly affected by their place dependence, social bonding and place identification while no significance is shown in affective connection overall. In this regard, localized functional dependence and social interaction of residents become the most fundamental elements in promoting residential satisfaction, which is aligned with the findings of some previous studies [27,63]. In addition, it should be noted that monthly income is found to exert great impact on residential satisfaction in the sample, and this result is significant.

Under in-situ resettlement, the regression model shows higher relevance than that of the relocated one, indicating that their perceived place attachments are much tighter connected with residential satisfaction. Based on the in-situ urbanization, resettled people are able to continue relying on their hereditary land to build rootedness and homeness, particularly through functional dependence, for the fulfillment of residence and life. Such place-based bonds greatly contribute to their self-regeneration after resettlement, especially through the remaining customary lifestyles and clan-kinship networks. For the control variables, education, monthly income and housing ownership reflect positive significances to promote residents’ social positions, helping to build deeper satisfaction of residents after DIDR.

In particular, housing ownership plays an important role in residential satisfaction in the plural neighborhood with the highest coefficient.

When it comes to the relocated GWNV, the results are very different, not only to the in-situ one, but also to the total sample, with rare significance found in the effects of place attachment upon residential satisfaction, except for social bonding. This is aligned with a common conclusion in the existing research that social bonding plays an important role in impacting residential satisfaction [20]. It can be assumed that, since the physical and functional environment is not promoted based on the own wills of those resettled [82], they have to turn to internal social-attached interactions for better life satisfaction. This is especially the case for elderly people, like chess-and-cards-oriented friendship,
square dance involvement, food-market partnership, parenting communication, etc. Moreover, the measurement of attachment and satisfaction are all higher in GWNV than the UVs but struggling in the impacts of place attachment on satisfaction. For the relocated-resettled neighborhood, in this regard, it's easier to internalize a certain degree of ‘isolation’ as an ‘enclave neighborhood’ in peripheral urban Guangzhou that is greatly dependent on an original (pre-resettled) sociocultural network maintenance to achieve higher residential satisfaction without a great inflow from outside.

5. Conclusions

While urban expansion and regeneration have become predominant in contemporary China, development-induced displacement and resettlement are usually utilized as a governmental strategy for land expropriation and development in peripheral urban areas, which inevitably imposes direct impacts on indigenous people functionally, socially and psychologically. The perceptions and feelings of those resettled on their human-place relationships and life satisfactions deserve more explanation, especially considering resettlement pattern differences. Therefore, based on a case study of two neighborhoods resettled by the construction of HEMC in Guangzhou, this study focuses on the perceived place attachment and residential satisfaction of residents after resettlement, and the possible impacts of the former on the latter. With special attention paid to social-psychological aspects, it fills in the gaps of existing research by highlighting the performance of two different resettlement patterns including in-situ and relocated resettlement, through which some sustainable and effective applications could be developed.

It is found that residents in this case have built strong place attachment basically through values of utility and symbolic identification in both neighborhoods, but there is a lack of deeper affective bonds. For in-situ UVs in HEMC, the residents self-identify relatively strongly through intimate clan-kinship and stable reciprocity with migrants, which is greatly affected by the process of studentification. The intricate and uneven population composition of the UVs hinders the innermost attachment of residents to some extent. In contrast, in the relocated GWNV with more ‘isolated’ neighborhood environment, place attachment of residents is much higher based on the remaining ‘acquaintance society’ consisting of pre-resettled indigenous villagers. However, there is still a lack of intimate mutual assistance and affective cherishing. When it comes to residential satisfaction, nearly 70% of the sampling residents favor the construction of HEMC. Similarly, residents are more satisfied with their residences in GWNV through reasonable compensation and noticeable upgradation, with which they are able to make preferable adjustment for higher-level pursuits with pleasing residential conditions. However, those living in the UVs became less satisfied on the basis of the informalized and hasty in-situ urbanization, and thus they are striving for status upgrades for a better life.

With the consideration of resettlement patterns by DIDR, significant differences between the two neighborhoods are found both in place attachment and residential satisfaction. Such differences lie in the better attachment and satisfaction of residents in GWNV than those in the UVs. The heterogeneity of population structure of the UVs results in the corresponding significant differences in terms of age, hukou status, income, length of residence, housing ownership and occupation on PA and RS within the neighborhood. Among them, elderly people with local hukou who have lived for more than 10 years in self-owned housing tend to express higher place attachment and residential satisfaction. Residents in GWNV mainly differ in hukou status and those indigenous people can rely on their original township network for reattachment and life satisfaction building, which sets obstacles for migrants who gradually get ‘marginalized’ by ‘dominant’ locals. However, at the same time, 45% of the researched residents still show strong relocation intention as they are discontented with the hasty-urbanized ‘enclave neighborhood’.

In this case, residential satisfaction of our residents is significantly affected by their place dependence, social bonding and place identification while no significance is shown in affective connection, indicating that the localized functional dependence and social interaction of residents become the most fundamental elements in impacting residential satisfaction. Moreover, monthly
income is also found to be an important determinant of residential satisfaction. Compared to GWNV, the PA of the residents under in-situ resettlement (UVs) is found to exert much stronger impacts on their RS. Based on the hereditary land, the functional dependence has greatly contributed to self-regeneration, and residents being well-satisfied after resettlement. However, a rare exception is found in GWNV for social bonding, indicating that internal social-attached interactions have considerable impacts on better life satisfaction. As an ‘isolated enclave’ neighborhood in peripheral urban Guangzhou, the sociocultural network maintenance becomes essential for the (re)construction of residential satisfaction of the resettled people.

With special attention paid to resettlement pattern differences, this study may contribute to a more comprehensive understanding of the attachment and satisfaction of resettled people against the booming DIDR during the process of urban regeneration in urban China. When analyzing the consequences of resettlement, especially those caused by those government-driven development projects, more attention should be paid to the perception of residents, their social-psychological experiences and the differences in resettlement patterns. This would provide a new but imperative lens for expanding the depth of the current study. In this study, we found that, although complaints and dissatisfaction are apparent in residents from resettled neighborhoods, the relatively high place attachment and residential satisfaction have been positively achieved in both neighborhoods after resettlement. Thus, it might be inappropriate to prejudge the outcomes of resettlement without long-enough observation and consideration of residents themselves. Moreover, place attachment and its impacts on residential satisfaction differ between different groups of people from neighborhoods of different resettlement patterns. Actually, the attachment of residents to their neighborhoods has gone far beyond physical places, even after DIDR. Instead, it has developed into their ‘genius loci’ embedded with place meanings on the basis of the material and social environment to build satisfaction, which differentiates between different resettled kinds of neighborhoods, especially those under on-going urban regeneration.

For the construction of a more sustainable and harmonious society, new pathways of urban governance should be applied to enable residents to make cautious decision making while taking resettlement pattern differences and their impacts into full account. Firstly, sociocultural and psychological (re)attachment like social bonding and affective connection deserves to be well developed and integrated, particularly in terms of caring for vulnerable groups inside plural, uneven neighborhoods, including rural migrants, temporary floating population and those unfamiliar with local dialect. Furthermore, effective resettlement assistances should be provided for the ‘outsiders’ without local hukou or housing property to help them develop stronger residential satisfaction in a self-regeneration way. Besides, multifaceted support of the promotion of rootedness, social status and sociocultural network are also indispensable. Last but not least, different but tailored strategies and policies are imperative in considering resettlement pattern differences for the corresponding neighborhoods. For example, there should be better management of the heterogeneity and informality with appropriate ‘benefits’ from surrounding projects towards deeper social integration for in-situ urbanized neighborhoods and a dispersal of physical and psychological isolation with all-round services and developing opportunities for relocated ‘enclaves’. The lessons we have learned from this case might become effective experiences for other resettlement transformations in cities going through urban regeneration and the upcoming intensified DIDR like Guangzhou.

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References

1. Wang, Y.; Feng, Y.; Han, Q.; Zuo, J.; Rameezdeen, R. Perceived discrimination of displaced people in development-induced displacement and resettlement: The role of integration. *Cities* 2020, 101, 102692. [CrossRef]

2. Shin, H.B. Residential redevelopment and the entrepreneurial local state: The implications of Beijing’s shifting emphasis on urban redevelopment policies. *Urban Stud.* 2009, 46, 2815–2839. [CrossRef]

3. Wu, F.; Zhang, F.; Webster, C. Informality and the development and demolition of urban villages in the Chinese peri-urban area. *Urban Stud.* 2013, 50, 1919–1934. [CrossRef]

4. Atkinson, R. Does Gentrification Help or Harm Urban Neighborhoods? An Assessment of the Evidence-Base in the Context of the New Urban Agenda; ESRC Centre for Neighborhood Research: Bristol, UK, 2002.

5. Zhang, Y.; Fang, K. Is history repeating itself? From urban renewal in the United States to inner-city redevelopment in China. *J. Plan. Educ. Res.* 2004, 23, 286–298. [CrossRef]

6. de Haan, A. Social exclusion: Enriching the understanding of deprivation. *Stud. Soc. Political Thought* 2000, 2, 22–40.

7. Rosbrook, B.; Schweitzer, R. The meaning of home for Karen and Chin refugees from Burma: An interpretative phenomenological approach. *Eur. J. Psychother. Couns.* 2010, 12, 159–172. [CrossRef]

8. Bennett, O.; McDowell, C. *Displaced: The Human Cost of Development and Resettlement*; Palgrave Macmillan: New York, NY, USA, 2012. [CrossRef]

9. Relph, E. *Place and Placelessness*; Pion: London, UK, 1976.

10. Tuan, Y.F. *Space and Place: The Perspective of Experience*; University of Minnesota Press: Minneapolis, MN, USA, 1977.

11. Wu, F. Neighborhood attachment, social participation, and willingness to stay in China’s low-income communities. *Urban Aff. Rev.* 2012, 48, 547–570. [CrossRef]

12. Du, H.; Li, S.M.; Hao, P. ‘Anyway, you are an outsider’: Temporary migrants in urban China. *Urban Stud.* 2018, 55, 3185–3201. [CrossRef]

13. Trentelman, C.K. Place attachment and community attachment: A primer grounded in the lived experience of a community sociologist. *Soc. Nat. Resour.* 2009, 22, 191–210. [CrossRef]

14. Lewicka, M. Ways to make people active: The role of place attachment, cultural capital, and neighborhood ties. *J. Environ. Psychol.* 2005, 25, 381–395. [CrossRef]

15. Gaubatz, P. China’s urban transformation: Patterns and processes of morphological change in Beijing, Shanghai and Guangzhou. *Urban Stud.* 1999, 36, 1495–1521. [CrossRef] [PubMed]

16. Allman, I.; Low, S. *Place Attachment*; Plenum Press: New York, NY, USA, 1992. [CrossRef]

17. Scannell, L.; Gifford, R. Defining place attachment: A tripartite organizing framework. *J. Environ. Psychol.* 2010, 30, 1–10. [CrossRef]

18. Norberg-Schulz, C. *Genius Loci: Towards a Phenomenology of Architecture*; Rizzoli: New York, NY, USA, 1980.

19. Huang, Z.; Du, X. Assessment and determinants of residential satisfaction with public housing in Hangzhou, China. *Habitat Int.* 2015, 47, 218–230. [CrossRef]

20. Doucet, B. Living through gentrification: Subjective experiences of local, non-gentrifying residents in Leith, Edinburgh. *J. Hous. Built Environ.* 2009, 24, 299–315. [CrossRef]

21. Li, Z.; Wu, F. Residential satisfaction in China’s informal settlements: A case study of Beijing, Shanghai, and Guangzhou. *Urban Geogr.* 2013, 34, 923–949. [CrossRef]

22. Galster, G.C.; Hesser, G.W. Residential satisfaction compositional and contextual correlates. *Environ. Behav.* 1981, 13, 735–758. [CrossRef]

23. Li, P. Residential satisfaction on affordable housing and its determinants—evidence from a housing survey in Beijing. *South China J. Econ.* 2010, 4, 15–36. [CrossRef]

24. Li, S.; Zhu, Y.; Li, L. Neighborhood type, gatedness, and residential experiences in Chinese cities: A study of Guangzhou. *Urban Geogr.* 2012, 33, 237–255. [CrossRef]

25. Davidson, M. Displacement, space and dwelling: Placing gentrification debate. *Ethics Place Environ.* 2009, 12, 219–234. [CrossRef]

26. Temelová, J.; Dvořáková, N. Residential satisfaction of elderly in the city centre: The case of revitalizing neighbourhoods in Prague. *Cities* 2012, 29, 310–317. [CrossRef]
27. Fleury-Bahi, G.; Félonneau, M.L.; Marchand, D. Processes of place identification and residential satisfaction. *Environ. Behav.* **2008**, *40*, 669–682. [CrossRef]

28. Chen, N.C.; Hall, C.M.; Yu, K.; Qian, C. Environmental satisfaction, residential satisfaction, and place attachment: The cases of long-term residents in rural and urban areas in China. *Sustainability* **2019**, *11*, 6439. [CrossRef]

29. He, S. Evolving enclave urbanism in China and its socio-spatial implications: The case of Guangzhou. *Soc. Cult. Geogr.* **2013**, *14*, 243–275. [CrossRef]

30. Logan, J.R.; Fang, Y.; Zhang, Z. The winners in China’s urban housing reform. *Hous. Stud.* **2010**, *25*, 101–117. [CrossRef]

31. Liu, Y.; He, S.; Wu, F.; Webster, C. Urban villages under China’s rapid urbanization: Unregulated assets and transitional neighbourhoods. *Habitat Int.* **2010**, *34*, 135–144. [CrossRef]

32. Wang, D.; He, S.; Webster, C.; Zhang, X. Unravelling residential satisfaction and relocation intention in three urban neighborhood types in Guangzhou, China. *Habitat Int.* **2019**, *85*, 53–62. [CrossRef]

33. Zhao, W.; Zou, Y. Un-gating the gated community: The spatial restructuring of a resettlement neighborhood in Nanjing. *Cities* **2017**, *62*, 78–87. [CrossRef]

34. Tuan, Y.F. *Topophilia: A Study of Environmental Perception*; Prentice-Hall: Englewood Cliffs, NJ, USA, 1974. [CrossRef]

35. Kyle, G.; Graefe, A.; Manning, R. Testing the dimensionality of place attachment in recreational settings. *Environ. Behav.* **2005**, *37*, 153–177. [CrossRef]

36. Stokols, D.; Shumaker, S.A. People in places: A transactional view of setting. In *Cognition Social Behaviour and the Environment*; Harvey, J.H., Ed.; Lawrence Erlbaum: Hillsdale, NJ, USA, 1981; pp. 441–488.

37. Anton, C.E.; Lawrence, C. Home is where the heart is: The effect of place of residence on place attachment and community participation. *J. Environ. Psychol.* **2014**, *40*, 451–461. [CrossRef]

38. Ujang, N.; Zakariya, K. The notion of place, place meaning and identity in urban regeneration. *Procedia Soc. Behav. Sci.* **2015**, *170*, 709–717. [CrossRef]

39. Ramkissoon, H.; Weiler, B.; Smith, L.D.G. Place attachment and pro-environmental behaviour in national parks: The development of a conceptual framework. *J. Sustain. Tour.* **2012**, *20*, 257–276. [CrossRef]

40. Billig, M. Sense of place in the neighborhood, in locations of urban revitalization. *GeoJournal* **2005**, *64*, 117–130. [CrossRef]

41. Hashemnezhad, H.; Heidari, A.; Hoseini, M. “Sense of Place” and “Place Attachment”. *Int. J. Archit. Urban Dev.* **2013**, *3*, 5–12.

42. Waite, L.; Cook, J. Belonging among diasporic African communities in the UK: Plurilocal homes and simultaneity of place attachments. *Emot. Space Soc.* **2011**, *4*, 238–248. [CrossRef]

43. Palladino, S. Older migrants reflecting on aging through attachment to and identification with places. *J. Aging Stud.* **2019**, *50*, 100788. [CrossRef]

44. Brown, B.B.; Perkins, D.D. Disruptions in place attachment. *Hum. Behav. Environ. Adv. Theory Res.* **1992**, *12*, 279–304. [CrossRef]

45. Yuan, Q.; Song, H.; Chen, N.; Shang, W. Roles of tourism involvement and place attachment in determining residents’ attitudes toward industrial heritage tourism in a resource-exhausted city in China. *Sustainability* **2019**, *11*, 5151. [CrossRef]

46. Lewicka, M. Place attachment: How far have we come in the last 40 years? *J. Environ. Psychol.* **2011**, *31*, 207–230. [CrossRef]

47. Lu, T.; Zhang, F.; Wu, F. Place attachment in gated neighbourhoods in China: Evidence from Wenzhou. *Geoforum* **2018**, *92*, 144–151. [CrossRef]

48. Amsden, B.L.; Stedman, R.C.; Kruger, L.E. The creation and maintenance of sense of place in a tourism-dependent community. *Leis. Sci.* **2010**, *33*, 32–51. [CrossRef]

49. Canter, D.; Rees, K. A multivariate model of housing satisfaction. *Int. Rev. Appl. Psychol.* **1982**, *31*, 185–207. [CrossRef]

50. Riazi, M.; Emami, A. Residential satisfaction in affordable housing: A mixed method study. *Cities* **2018**, *82*, 1–9. [CrossRef]

51. Dekker, K.; de Vos, S.; Musterd, S.; Van Kempen, R. Residential satisfaction in housing estates in European cities: A multi-level research approach. *Hous. Stud.* **2011**, *26*, 479–499. [CrossRef]
52. Chen, L.; Zhang, W.Z.; Yang, Y.Z. Disparities in residential environment and satisfaction among urban residents in Dalian, China. Habitat Int. 2013, 40, 100–108. [CrossRef]

53. Elsinga, M.; Hoekstra, J. Homeownership and housing satisfaction. J. Hous. Built Environ. 2005, 20, 401–424. [CrossRef]

54. Tao, L.; Wong, F.K.W.; Hui, E.C.M. Residential satisfaction of migrant workers in China: A case study of Shenzhen. Habitat Int. 2014, 42, 193–202. [CrossRef]

55. Kshetrimayum, B.; Bardhan, R.; Kubota, T. Factors Affecting Residential Satisfaction in Slum Rehabilitation Housing in Mumbai. Sustainability 2020, 12, 2344. [CrossRef]

56. Ibem, E.O.; Aduwo, E.B. Assessment of residential satisfaction in public housing in Ogun State, Nigeria. Habitat Int. 2013, 40, 163–175. [CrossRef]

57. Clark, W.; Ledwith, V. Mobility, housing stress, and neighborhood contexts: Evidence from Los Angeles. Environ. Plan. A 2006, 38, 1077–1093. [CrossRef]

58. Fang, Y.P. Residential satisfaction, moving intention and moving behaviours: A study of redeveloped neighbourhoods in inner-city Beijing. Hous. Stud. 2006, 21, 671–694. [CrossRef]

59. Kasarda, J.D.; Janowitz, M. Community attachment in mass society. Am. Sociol. Rev. 1974, 39, 328–339. [CrossRef]

60. Parkes, A.; Kearns, A.; Atkinson, R. What makes people dissatisfied with their neighbourhoods? Urban Stud. 2002, 39, 2413–2438. [CrossRef]

61. Vemuri, A.W.; Grove, J.M.; Wilson, M.A.; Burch, W.R. A tale of two scales: Evaluating the relationship among life satisfaction, social capital, income, and the natural environment at individual and neighborhood levels in metropolitan Baltimore. Environ. Behav. 2011, 43, 3–25. [CrossRef]

62. Lin, S.; Li, Z. Residential satisfaction of migrants in Wenzhou, an ‘ordinary city’ of China. Habitat Int. 2017, 66, 76–85. [CrossRef]

63. Chow, A.S.; Ma, A.T.; Wong, G.K.; Lam, T.W.; Cheung, L.T. The impacts of place attachment on environmentally responsible behavioral intention and satisfaction of Chinese nature-based tourists. Sustainability 2019, 11, 5585. [CrossRef]

64. Wilmesen, B. After the Deluge: A longitudinal study of resettlement at the Three Gorges Dam, China. World Dev. 2016, 84, 41–54. [CrossRef]

65. Cheung, L.T.O.; Hui, D.L.H. Influence of residents’ place attachment on heritage forest conservation awareness in a peri-urban area of Guangzhou, China. Urban For. Urban Green. 2018, 33, 37–45. [CrossRef]

66. Rogers, S.; Xue, T. Resettlement and climate change vulnerability: Evidence from rural China. Glob. Environ. Chang. 2015, 35, 62–69. [CrossRef]

67. Zheng, C.; Zhang, J.; Guo, Y.; Zhang, Y.; Qian, L. Disruption and reestablishment of place attachment after large-scale disasters: The role of perceived risk, negative emotions, and coping. Int. J. Disaster Risk Reduct. 2019, 40, 101273. [CrossRef]

68. Xue, L.; Kerstetter, D.; Buzinde, C.N. Residents’ experiences with tourism development and resettlement in Luoyang, China. Tour. Manag. 2015, 46, 444–453. [CrossRef]

69. Vanclay, F. Project-induced displacement and resettlement: From impoverishment risks to an opportunity for development? Impact Assess. Proj. Apprais. 2017, 35, 3–21. [CrossRef]

70. Xi, J.; Hwang, S.S. Relocation stress, coping, and sense of control among Resettlers resulting from China’s Three Gorges Dam project. Soc. Indic. Res. 2011, 104, 507–522. [CrossRef]

71. Kale, A. Building attachments to places of settlement: A holistic approach to refugee wellbeing in Nelson, Aotearoa New Zealand. J. Environ. Psychol. 2019, 65, 101315. [CrossRef]

72. Li, L.H.; Lin, J.; Li, X.; Wu, F. Redevelopment of urban village in China—A step towards an effective urban policy? A case study of Liede village in Guangzhou. Habitat Int. 2014, 43, 299–308. [CrossRef]

73. Major, B.; Quinton, W.; McCoy, S. Antecedents and consequences of attributions to discrimination: Theoretical and empirical advances. Adv. Exp. Soc. Psychol. 2002, 34, 251–330. [CrossRef]

74. Huang, X.; He, D.; Tang, S.; Li, X. Compensation, housing situation and residents’ satisfaction with the outcome of forced relocation: Evidence from urban China. Cities 2019, 96, 1024–1036. [CrossRef]

75. Government of Panyu District, Guangzhou City. A Brief Introduction of Higher Education Mega Center of Guangzhou. Available online: http://www.panyu.gov.cn/gzpy/xgwjzjgk/201810/5b1c57f44584c13a870065b39c81c8b.shtml?from=singlemessage&isappinstalled=0 (accessed on 17 October 2018).
76. Li, Z.; Li, X.; Wang, L. Speculative urbanism and the making of university towns in China: A case of Guangzhou University Town. *Habitat Int.* **2014**, *44*, 422–431. [CrossRef]

77. Government of Panyu District, Guangzhou City. Panyu Yearbook 2019. Available online: [http://www.panyu.gov.cn/zcfc/fzlswh/fznj2019n/index.html](http://www.panyu.gov.cn/zcfc/fzlswh/fznj2019n/index.html) (accessed on 5 January 2020).

78. Kyle, G.T.; Mowen, A.J.; Tarrant, M. Linking place preferences with place meaning: An examination of the relationship between place motivation and place attachment. *J. Environ. Psychol.* **2004**, *24*, 439–454. [CrossRef]

79. Chen, N.C.; Dwyer, L. Residents’ place satisfaction and place attachment on destination brand-building behaviors: Conceptual and empirical differentiation. *J. Travel Res.* **2018**, *57*, 1026–1041. [CrossRef]

80. Amérgio, M.; Aragonés, J.I. A theoretical and methodological approach to the study of residential satisfaction. *J. Environ. Psychol.* **1997**, *17*, 47–57. [CrossRef]

81. Proshansky, H.M.; Fabian, A.K.; Kaminoff, R. Place-identity: Physical world socialization of the self. *J. Environ. Psychol.* **1983**, *3*, 57–83. [CrossRef]

82. He, S. Consuming urban living in ‘villages in the city’: Studentification in Guangzhou, China. *Urban Stud.* **2015**, *52*, 2849–2873. [CrossRef]