

Research on the Protection and Regeneration of Historical and Cultural District from Game of Interest: A Case Study of Xiaoxi Historical and Cultural Street in Huzhou

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Abstract. The protection and regeneration of historical and cultural district is an important way to continue the historical context of the city and inherit the traditional spatial pattern, and is the key to the implementation of orderly urban regeneration. In view of this, the author takes Xiaoxi Historical and Cultural Street in Huzhou as an example, expands and decomposes the game model of stakeholders from the perspective of the game of interests, and studies its dynamic changes in the process of protection and regeneration of the historical and cultural district. This paper expounds the contradictions affecting the game relationship of interests from the four elements of government, residents, developers and lessees. The results indicated that the non-traditional top-down update model lacks stability, which affects the implementation of decision-making.

Keywords: Game of Interest; Historical and Cultural District; Protection, Regeneration.

1. Introduction

Since the Industrial Revolution, urban regeneration has been a major topic of widespread interest in international urban planning scholarship. In the first symposium on urban renewal held in The Hague, the Netherlands in 1958, urban regeneration was given the connotation of three dimensions: demolition and reconstruction, improvement and restoration, and preservation and protection [1]. Roberts and Sykes argued that urban regeneration was a means of ameliorating urban problems, sufficient to lead to the integrated coordination of economic, social, environmental and physical aspects in areas in urgent need of development [2]. Theoretical research on urban regeneration in China started relatively late, with Mr Chen Zhanxiang first emphasising the role of economic factors in urban regeneration in 1980 [3]. Subsequently, Professor Wu Liangyong proposed organic regeneration as a new direction for urban regeneration in China [4]. In addition, the concept of urban regeneration proposed by Zhang Pingyu in 2004 provided new ideas for solving urban problems [5]. As urbanisation continues to progress, urban regeneration has become increasingly enriched in practice in China.

At present, according to the different objects of reference, urban regeneration in China is divided into five categories: comprehensive regeneration of the three old areas, regeneration of old urban areas, regeneration of urban villages, regeneration of historic and cultural districts, and regeneration of urban industrial heritage [6]. Based on the international heritage conservation concepts of Historic Areas and Historic Urban Areas, China developed the concept of Historic Cultural Quarter in 2005 [7]. As a special type of urban heritage, the conservation and development of historic and cultural districts should reflect their irreplaceable role in the process of urban regeneration by continuing the historical lineage and inheriting the traditional spatial pattern [8], aiming at repositioning the functions of the districts and tapping into their vitality. However, with the rapid development of urbanisation, traditional historic and cultural districts are to a certain extent detached from the urban environment [9]. Residents have ignored the value of the neighborhoods and directly demolished and altered historic heritage buildings in order to improve their living conditions, which has caused nibbling damage to the historical and cultural values of the neighborhoods. In addition, some historical and cultural districts have ignored the characteristics of the district and the interests of the residents in the process of regeneration, and have been blindly developed for economic benefits, destroying the original spatial pattern of the district and introducing low-end industries, resulting in

many historic and cultural districts being out of touch with their historical lineage and cultural values, and the original intentions of conservation and development being at odds with reality [10]. These immature regeneration policies and the neglect of conflicts between stakeholders have destroyed the original historical lineage of the neighbourhood. Therefore, it is a topic worth exploring how to weigh the interests of all parties in the conservation and regeneration of historical and cultural districts to achieve sustainable development of the districts.

Currently, although many scholars have studied the game relationship between stakeholders in the process of conservation and regeneration of historical and cultural districts, they often stay in a static description of a certain stage and lack attention to the dynamic changes of the game relationship. This paper takes the historical and cultural district of Xiaoxi Street in Huzhou as a case study, analysing the conflicts among stakeholders in the process of conservation and regeneration of the historical and cultural district from the perspective of the game of interests. In order to balance the conflicts among stakeholders, the Nash Equilibrium Model is used to seek the optimal solution to the interests of the stakeholders, that achieve the sustainable development of the historical and cultural district.

2. Literature Review

2.1 Stakeholder Theory

Stakeholders as a concept was first proposed by Stanford University Institute in 1963, 'One of the conditions for the survival of a firm is the support of its stakeholders'. Since then, through the joint development of scholars such as Ansoff, Freeman, Blair, and Mitchell, stakeholders have formed a relatively well-developed theoretical framework [11]. Among them, Freeman's view is the most representative. He believes that stakeholders are any group or individual who can influence or be influenced by the process of achieving organisational goals [12]. This perspective is widely used in modern strategic business management, where a wide range of groups such as local community organisations, consumers, employees, suppliers, owners and managers are all considered legitimate stakeholders [13]. Based on Freeman's view, many scholars have further deepened the stakeholder theory. Jia Shenghua et al. propose that stakeholders are individuals or organisations that take certain risks with specific investments, and that they cannot only influence the achievement of corporate goals, but also be affected by the outcome of the goals in the process [14]. Jia's view focuses more on the specific investment of the project, making the stakeholder-firm interest game relationship more tangible. As stakeholder theory has matured, many scholars argue that when project decisions are driven by stakeholders, conflicts in the decision implementation process can be reduced [15]. In other words, stakeholder participation is a key factor in advancing the effective implementation of decisions.

2.2 Interest Game Model

Game Theory is used to study the mutual influence of stakeholders in the process of a certain behaviour, as well as analysing how to reach an equilibrium between the stakeholders under the mutual influence [16]. A complete game model generally contains elements such as participants, behaviour, information, strategy, order, benefits, outcomes and equilibrium [17].

After the research of Zermelo, Borel, Von Neumann and other scholars, the game model gradually changed from the traditional textual description to the precise mathematical expression [18]. And, after the Nash equilibrium theory was proposed in the 1950s, it achieved a landmark result, which laid a solid theoretical foundation for modern game theory and economic theory [19]. The game model has been widely used in economics, management, sociology and other fields [20]. The classical Nash equilibrium model consists of the participants, their strategy sets and their value functions, which are designed to maximise the payoffs of all participants through strategy adjustment [19].

2.3 Interest Game Model for the Protection and Regeneration of Historical and Cultural District

Discussing the ways of conservation and regeneration of historical and cultural districts, how to balance the contradictions and conflicts among stakeholders to achieve sustainable development of the districts is one of the important topics worth exploring at present. As stakeholder theory has practical reference value in solving many problems faced in the development of historic and cultural districts, many scholars have applied it to the study of conservation and regeneration of historic and cultural districts.

The conservation and regeneration of historical and cultural districts involves multiple stakeholders. The benefit orientation of one of these stakeholders affects the realisation of benefits for the others. Therefore, different models of preservation and regeneration of historic districts have different points of conflict between the stakeholders. The most basic stakeholder game model is the triangular model between the local government - villagers - developers (Figure 1). The local government obtains land targets and financial guarantees for the regeneration of historical and cultural districts through administrative power and laws and regulations. The residents are the most direct stakeholders, who actively or passively participate in the process of preserving and regenerating historical and cultural districts, maximising their own profits through various means. The developer is both an investor and an implementer of specific development work, expecting to make a profit from the difference in rent before and after regeneration [21].

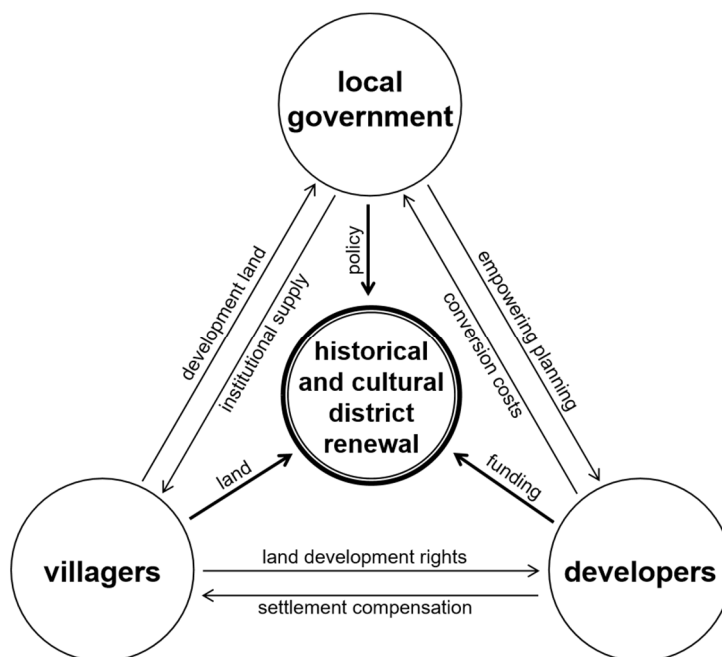


Figure 1. A model of the local government - villagers - developers tripartite interest game [22]

Due to the complexity of reality, scholars have added variables to the traditional three-party interest game model in practical research. Fa Nianzhen proposed a multi-party interest game model of government - developer - ownership - technical personnel (Figure 2). He argued that in the conservation and development of historical and cultural districts, Nash Equilibrium is achieved by clarifying policies and regulations, establishing management institutions, and guiding social participation [23]. Basically, the economic benefits of reviving historic and cultural districts are often obtained through the development of tourism resources [24]. Therefore, Chen Yuena argued that local governments, tourism developers, tourism enterprises, tourism practitioners, tourists and residents are all participants in the interest game model, and that particular attention should be paid to safeguarding the interests of vulnerable groups such as tourists and residents in the game process [25]. In addition, in the core stakeholder game model of local government - tourism operator - community residents - tourists proposed by Mei Qing et al., a Nash Equilibrium is achieved by building a platform for

stakeholder communication, constructing a plurality of subjects to participate together and a third party to safeguard the interests of vulnerable stakeholders [26].

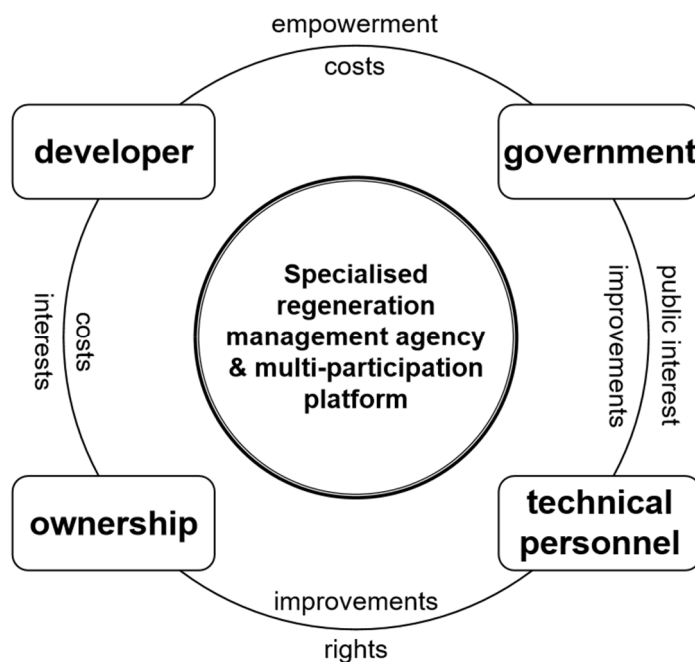


Figure 2. A game model of multi-stakeholder claims in the renewal process [23]

3. Methods

3.1 Case Study

The Xiaoxi Historical and Cultural Street in Huzhou is a provincial-level historical and cultural protection district in Zhejiang Province, located in the central area of the ancient city of Huzhou (Figure 3). The neighbourhood is built by the river and has a strong historical and cultural heritage, preserving the architectural groups of the late Qing and Republican periods, especially the courtyard-based residential buildings [27]. The spatial pattern of the streets and lanes in the district has remained unchanged since the Ming and Qing dynasties, and its spatial pattern has the typical structural characteristics of river - road - room and river - room - road in the southern water town.



Figure 3. The location of Xiaoxi Historical and Cultural Street in Huzhou

With the population expansion brought about by urbanization, Xiaoxi Street, as an old neighbourhood, has gathered a number of low-income earners, unemployed people and elderly people

[28]. In order to solve their housing problems, the residents have erected buildings illegally, laid their own ground sewers, and grafted electrical wires at will. These initiatives have destroyed the original street texture and landscape environment of the neighbourhood. In addition, as most of the buildings in Xiaoxi Street are wooden structures, they have been in disrepair for many years, which also poses a safety hazard to the living environment of the residents.

The Huzhou Historical and Cultural District Management Committee (HCDMC) carried out a series of conservation and regeneration of the Xiaoxi Street in 2017, and its conservation and regeneration procedures are divided into two main steps. The first is the conservation renovation of the neighbourhood, which involves more than 600 households in total. The renovation mainly includes repairing damaged parts of the buildings, adding a waterproof layer to the roof, re-laying the underground drainage network, laying the communication and electricity pipelines into the ground, and adding fire-fighting facilities. The second is the commercial operation of the neighbourhood. After the renovation of the Xiaoxi Street was completed, the HCDMC hired a Cultural and Creative Company (CCC) and entrusted it with the integration and management of the commercial part of the street. For example, the unified leasing of the unused courtyards to the public, the investment in the neighborhood's businesses and the coordination of the neighbourhood's commercial business.

The conservation and regeneration of the Xiaoxi Street took nearly a year to complete, with housing repairs, the entry of overhead pipelines, the addition of a new municipal underground pipe network and new sanitation facilities. At the same time, rainwater and sewage were diverted in the neighbourhood, solving the problems of leaking houses, stagnant water in low-lying courtyards and rubbish recycling. In addition, the implantation of landscape nodes was adopted as one of the means to enhance the tourism value of XiaoXi Historical and Cultural Street. The neighbourhood was officially opened in October 2017 as shown in Figure 4, with interpenetration between the residential, commercial and cultural areas within the neighbourhood.

As a historical and cultural district that once had a predominantly residential function, the very existence of the residents is part of the historical information of the district, and they assume an important role in the conservation and regeneration process of the district. However, the conservation and regeneration of the Xiaoxi Street has adopted a top-down regeneration model, with the HCDMC and the CCC taking the lead more often than not. Under this model, the renovation of the Xiaoxi Street has been able to move forward efficiently. Unfortunately, in the course of the neighborhood's operation, the project has faced greater social resistance to advancement, as market players tend to favour economic efficiency considerations [30]. At the same time, the number of stakeholders and their conflicting interests are constantly changing in this regeneration process. In view of this, the Xiaoxi Historical and Cultural Street is an excellent sample to study the dynamic changes of the interest game model in the conservation and regeneration of historical and cultural districts.



Figure 4. Post-renovation landscape of the Xiaoxi Historical and Cultural Street

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3.2 Data Source

The author visited the Xiaoxi Historical and Cultural Street on four days, namely 26 July 2022, 29 July 2022, 30 July 2022 and 1 August 2022, to record the spatial form of the quarter after the renovation, and interviewed the residents, merchants and the head of the management committee of the quarter. Among the interviews with the residents, the main issues involved were the choice of rehousing method, conflicts arising in the rehousing process and the outcome of the rehousing. In the interviews with the merchants, the author was more concerned about why they chose to locate their shops here, the rental channels for their shops, and the difficulties they encountered in the course of their business. During the interviews with the management committee, the author learnt about the rehousing policy for the residents, the business model of the neighbourhood, the choice of commercial business in the neighbourhood and the difficulties encountered by the management committee in the process of neighbourhood conservation and regeneration. Through the interviews, the author was able to grasp the views of various stakeholders on the distribution of interests in the conservation and regeneration of the neighbourhood, and to construct a preliminary game model of interests in the conservation and regeneration of the Xiaoxi Street.

3.3 Establishment of the Interest Game Model

As a public policy for the organic regeneration of the stock of land, the conservation and regeneration policy of the historical and cultural district should reflect its value orientation of considering the demands of multiple interests and responding to multiple goals. In the process of conservation and regeneration, the Xiaoxi Street is constantly faced with the problem of balancing the interests of various parties. In this study, stakeholders include HCDMC, residents, CCC, merchants, tenants, travel agents, tourists and technical personnel. Among them, the main stakeholders can be summarized as HCDMC, residents, CCC, merchants and tenants, who represent the government, the property owner, the developer and the lessees respectively. While travel agents, technical personnel and tourists, as secondary variables, can be summarized as other stakeholders and will not be analyzed in this study. Therefore, the stakeholder relationship in the regeneration of historic and cultural districts can be simplified as shown in Figure 5. As the representative of the government, the management committee plays the role of manager, decision-maker and coordinator in the regeneration project. It needs to guide the residents to participate in the neighbourhood regeneration project through some incentive policies or administrative means, so as to ensure the smooth implementation of the neighbourhood regeneration project. However, residents, as finite and rational economic beings, seek to maximize their own interests in the regeneration of their neighborhoods and often lack consideration for public benefits. Similarly, merchants and tenants, as lessees, are not only finite rational economic agents, but are always vulnerable in this game process. Their individual interests are often ignored by other groups. In addition, the CCC, as a third actor between public and private interests, are to a certain extent rational economic agent. On the one hand, it needs to carry out the commission of the management committee and coordinate the conflicting interests between the residents and the management committee. On the other hand, it is difficult for a CCC to ignore its own economic

interests in the operation of a neighbourhood, which to some extent hinders the development of the neighbourhood.

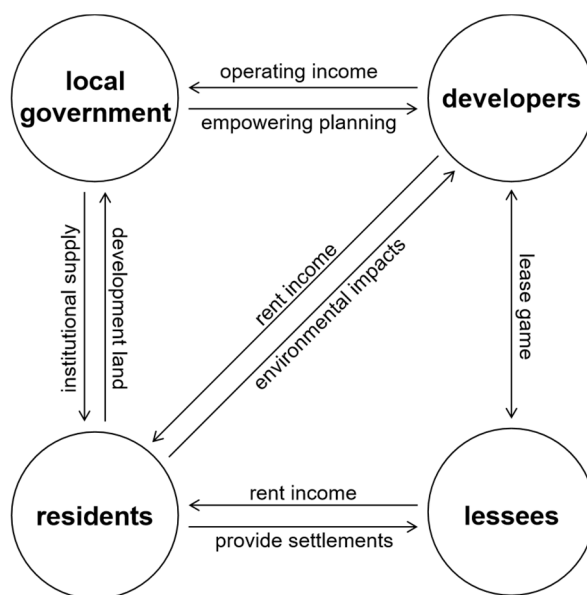


Figure 5. The stakeholder relationship in the regeneration of the historical and cultural district

4. Analysis on the Protection and Regeneration of the Xiaoxi Historical and Cultural Street

4.1 Interview Results

Through communication with the person in charge of the HCDMC, the author learn that there are three main categories of rehousing for residents in the regeneration process. The first type of rehousing is for those who choose to be rehoused locally, involving a total of more than 50 households. The HCDMC allowed them to continue to live in their original homes, and their houses were updated as needed. The second type of residents is those who opted for transitional rehousing, involving more than 140 households. They moved out of the neighbourhood temporarily and returned to their original addresses when the neighbourhood was completed. The HCDMC rehabilitated their houses, adding separate kitchens and bathrooms, and increasing the size of their homes for families with low per capita living space. The third type of residents who chose to be relocated involved more than 400 households. For these residents, the HCDMC provided eight resettlement communities within Huzhou City for them to choose from, and took back their original homes to be used as extensions for residents who chose to be rehoused in transition, or for commercial use.

Many residents expressed support for the rehousing options offered by the HCDMC. Resident 11 chose the second rehousing option, and in the interview, he told the author, 'We used to have no bathroom at home and had to go to public bathrooms, which was not convenient at all. Especially at night and on rainy days, it was dangerous to go to the public bathroom. Now that our house is bigger and equipped with a toilet, the living environment has improved a lot.' However, resident 6, who also chose option two, believed that the transformation of the neighbourhood has caused inconvenience to his life due to the commercialization of the operation. 'A coffee shop has opened next to my house, which is open late, while I am old and go to bed early, and the old house is not well insulated, which affects my rest', resident 6 mentioned to the author. Resident 5 had a similar experience, 'My neighbour rents out his house to a restaurant and the noise from the kitchen is so loud that I couldn't stand living there and moved in with my daughter'. In this case, resident 5 had to rent out his house to a cultural and creative company in order to gain income.

As the living areas of the neighbourhood interpenetrate with the commercial and cultural areas, the living elements of the residents make the historical and cultural neighbourhood look less harmonious in terms of appearance as a tourist function. The head of the management committee told the author

that, ‘a beautiful courtyard with a handicraft workshop and residents living next to it, where clothes, including intimate clothing, are dried in the courtyard during the day, affects the image and the feeling of tourists too much’. As a result, the management committee has commissioned a cultural and creative company to manage the businesses in the neighbourhood. The company will recover the unused houses from the indigenous people at a higher rent than the market rate and sublet the courtyards for a second time, introducing light meals, bed and breakfasts, art galleries and bookshops. However, as the main operator, the cultural and creative company, while carrying out the commission of the management committee, also considers its own economic income, and the operation of the neighbourhood will deviate from the committee's expectations. The management committee's director said, ‘The compounds that are packaged for subletting are usually those without relocated households or with only one or two relocated households, so that the cost of recovery is lower, but for compounds with almost all relocated households, the cost of recovery is too high, and there is no profit in subletting. If the whole compound had been packaged up and a café or bookstore introduced, it would have been better for the development of the neighbourhood, but it was full of relocated tenants, so the company didn't take the compound back’. In addition, the higher than market rents paid to the residents by the cultural and creative company means that the residents are more willing to rent out their homes to the cultural and creative company rather than to the merchants and tenants, who in this case have to leave the neighbourhood and choose another shop or pay higher rents to stay in the neighbourhood. ‘I've had this shop on Xiaoxi Street for a long time, so if I change the address customers won't necessarily find it’, merchant 4 expressed his helplessness, ‘but (after the rent increase) costs are higher and profit margins are being squeezed, so there is a lot of pressure.’ Similarly, tenants are forced to leave the block in search of other more suitable premises as they cannot afford to pay the rent after the increase due to their lower income.

4.2 Application of Interest Game Model in the Protection and Regeneration of Xiaoxi Historical and Cultural Street

Based on the game model shown in Figure 5, the game can be expanded into three stages according to Freeman's game theory (Figure 6). The first stage is the decision-making stage of the neighbourhood renovation project, which is the government's self-game about whether to implement the regeneration. The second stage is the implementation stage of the neighbourhood improvement project, where there is a game of financial compensation between the government and the residents. In the third stage, the neighborhoods are put into operation, and the interests become a game between the government, the developer, the residents and the lessees about the benefits.

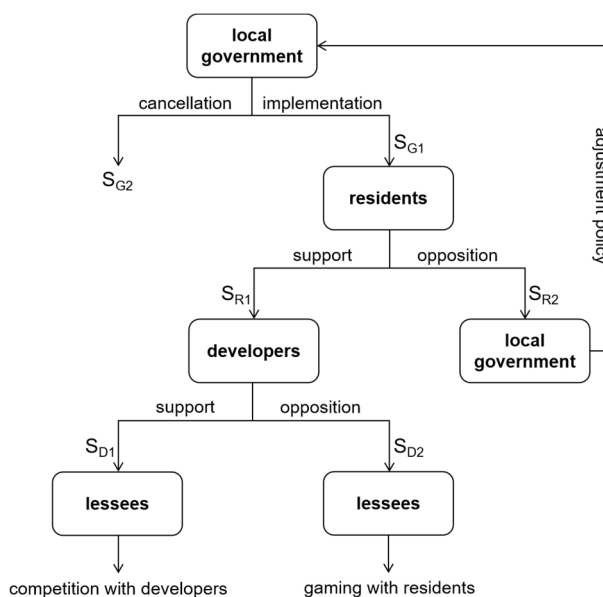


Figure 6. The expanded model of the game relationship between stakeholders

4.2.1 Stage One: Planning Stage of the Street Improvement Project

In the planning stage of the conservation and renewal project of the Xiaoxi Historical and Cultural Street, the government, as the dominant party in the game, is faced with two options, namely to carry out the transformation of the district (S_{G1}) and to cancel the transformation of the district (S_{G2}). According to the Nash equilibrium, the following parameters are set:

F: The government can invest the funding for the neighbourhood renewal project (assumed to be quantitative).

T: the social benefits obtained from the conservation renewal of the neighbourhood.

When $F \leq T$, the government chooses S_{G1} ; when $F > T$, the government chooses S_{G2} .

4.2.2 Stage Two: Implementation Phase of the Street Improvement Project

During the implementation phase of the conservation and regeneration project of the Xiaoxi Historical and Cultural Street, the government sought to gain more residents' support for the district renovation project by increasing the rehousing compensation rate. At this point, residents become the main decision makers. Whether the government chooses S_{G1} or S_{G2} , residents are faced with two choices, namely supporting the neighbourhood renovation (S_{C1}) and rejecting it (S_{C2}). Of course, the government will not raise the compensation rate indefinitely. When the rehousing compensation standard is raised to a certain level, the dominant party of decision making at this stage will shift from the residents to the government. According to the Nash Equilibrium, the following parameters are set:

C_1 : Rehousing compensation that can be paid by the government.

C_2 : The amount of money that the government can pay for neighbourhood improvement.

C_3 : The minimum amount of money that the government needs to invest in neighbourhood improvement.

C_4 : The amount of resettlement compensation residents expects to receive.

When $C_1 < C_4$, the residents choose S_{C2} , and vice versa, the residents choose S_{C1} , at which point the decision-making dominance begins to shift. As $F=C_1+C_2$, the larger C_1 is, the smaller C_2 is. When $C_2 < C_3$, the neighbourhood improvement cannot be carried out, so the dominant decision maker becomes the government, which will choose S_{G2} . When $C_2 \geq C_3$, the game enters the third stage.

4.2.3 Stage Three: Operational Phase of the Street

After the completion of the conservation and renewal project of the Xiaoxi Historical and Cultural Street, the district enters the operation phase, when the stakeholders are increased to include developers and tenants, and the conflicting relationships between stakeholders are transformed. At this stage, the developer can choose between S_{D1} (participation and cooperation) and S_{D2} (refusal to cooperate). In S_{D1} , both the tenant and the developer need to obtain the lease from the resident, and the two become in competition with each other as the highest bidder wins. In S_{D2} , the developer withdraws from the neighbourhood conservation and regeneration project, and the tenant plays a game of interest with the residents. According to the Nash Equilibrium, the following parameters are set:

R: Rent for residential housing leases.

R_1 : The rent that the tenant is willing to pay.

R_2 : The rent that the developer is willing to pay.

I: The revenue received by the developer.

When $R \leq I$, the developer chooses S_{D1} . At this point, if $R_1 > R_2$, the resident chooses to lease the house to a tenant. Conversely, the resident chooses to lease the house to the developer. In this case, the tenant is faced with two choices, either to increase R_1 or to opt out of the competition. Whichever of these two options is chosen, the neighbourhood conservation and improvement project will continue.

When $R < I$, the developer chooses S_{D2} . At this point, the lessee is faced with two choices. When $R \leq R_1$, the tenant leases the house (S_{I1}) and continues to operate or live in the neighbourhood. When $R > R_1$, the tenant leaves the neighbourhood (S_{I2}) and chooses to operate or live in premises with more suitable rents.

5. Conclusion

This paper investigates the game equilibrium of stakeholders in the process of regeneration of historical and cultural districts. By analyzing the behaviour of stakeholders in the conservation and regeneration of the Xiaoxi Historical and Cultural Street in Huzhou, and it attempts to establish a dynamic model of top-down interests in a non-traditional model. This model is different from the government-led top-down regeneration, in which there are stakeholders who take the lead in each stage. In this case, the government leads the decision on whether to implement the renovation project, while the way the renovation project is implemented is jointly led by the residents and the developer. As a result, the non-traditional top-down model of regeneration is not stable and any one stakeholder's decision can change the direction of policy implementation. In addition, this study found that lessees have a very weak voice in the regeneration projects of the neighbourhood and are basically in a completely passive position. Lessees, as a vulnerable group in society, should be protected. In future regeneration projects of historic and cultural districts, mechanisms should be established to protect their reasonable interests. The regeneration of historic and cultural streets requires public interests to be put first. Therefore, the regeneration of the neighbourhood should reflect long-term benefits and improve as much as possible the mechanism for stakeholders to obtain benefits in the process. It should achieve sustainable development by promoting the harmonious development of the public interests of society and the economic interests of individuals, thereby safeguarding the cultural lineage of historical and cultural districts in urban regeneration. In this study, as more than two-thirds of the indigenous people chose to move out, and the eight resettlement areas are far away from each other, the sample of the out-migrated indigenous people was too scattered. Due to the limited time and energy, it was not possible to trace a large number of indigenous people who moved out to the resettlement areas and the tenants who used to rent there.

References

- [1] Miller, J. M. *New Life for Cities Around the World: International handbook on urban renewal* [M]. Books International, 1959.
- [2] Roberts, P., & Sykes, H. *Urban regeneration: a handbook* [M]. Sage, 1999.
- [3] Yao Jie. The city, from 'big demolition and big construction' to 'fine embroidery' [J]. *People's Life Weekly*, 2022, (09): 89-91.
- [4] Wu Liangyong. From 'organic renewal' to a new 'organic order': a way to improve the residential areas of the old city of Beijing (II) [J]. *Journal of Architecture*, 1991, (02):7-13.
- [5] Zhang Pingyu. Urban Regeneration: China urbanization trends in 21st century [J]. *Progress in Geography*, 2004, (04): 72-79.
- [6] Liu Boxia, Liu Jie, Cheng Ting, et al. The theory and practice of urban renewal in China [J]. *China Ancient City*, 2021,35(07):1-10.
- [7] Li Chen. Generation, interpretation and analysis of the concept of 'historic and cultural district' [J]. *Planners*, 2011,27(04):100-103.
- [8] Tan Z, He H. Method of protection and renewal on Nanyang Historical Street District-An example on town hall historical street district in the center of Nanyang town hall [C]. *Applied Mechanics and Materials*. Trans Tech Publications Ltd, 2014, 584: 217-221.
- [9] Sun Y. Application of characteristic protection of historical and cultural blocks in urban renewal through the investigation and research in Jinan by taking Furong street-qushuiting street as an example [C]. *IOP Conference Series: Earth and Environmental Science*. IOP Publishing, 2021, 787(1): 012080.
- [10] Zhuang Kaiyue, Yang Peifeng. The vitality analysis and planning application of historic city [C]. *2020/2021 China Urban Planning Annual Conference and 2021 China Urban Planning Academic Season*, 2021, 33-45, doi: 10.26914/c.cnkihy.2021.032181.
- [11] Feng Junhua, Zhang Long. Development and review of stakeholder theory [J]. *Policy and Management*, 2009, (15):13-14.

- [12] Freeman, R. E. Strategic management: A stakeholder approach [M]. Cambridge university press, 2010.
- [13] Freeman R E. A stakeholder theory of the modern corporation [J]. Perspectives in Business Ethics Sie, 2001, 3(144): 38-48.
- [14] Miles S. Stakeholder theory classification: A theoretical and empirical evaluation of definitions [J]. Journal of Business Ethics, 2017, 142(3): 437-459.
- [15] Voinov A, Bousquet F. Modelling with stakeholders [J]. Environmental modelling & software, 2010, 25(11): 1268-1281.
- [16] Li Yuhan. Research on intelligent vehicle lane changing behavior decision based on game theory [D]. Chongqing University of Technology, 2022, doi: 10.27753/d.cnki.gcqgx.2022.000303.
- [17] Zhao Yanjuan. Study of the game in urban village reconstruction and its benefit evaluation [D]. Shandong Jianzhu University, 2010.
- [18] V. Neumann J. Zur theorie der gesellschaftsspiele [J]. Mathematische annalen, 1928, 100(1): 295-320.
- [19] Li Peiyu. Some studies on Nash equilibrium problems [D]. Dalian University of Technology, 2013.
- [20] Von Neumann J, Morgenstern O. Theory of games and economic behavior, 2nd rev [J]. 1947.
- [21] Zhao Yanli. Analysis on old city renovation of Guangzhou from the perspective of public choice theory [J]. City Planning Review, 2012, (6):61-65.
- [22] Deng Maoying, Deng Cefang. Assessment of the implementation path of urban renewal from the perspective of interest coordination: A case study on Guangzhou urban village redevelopment [J]. Tropical Geography, 2021, 41(4), 760-768.
- [23] Fa Nianzhen. Exploring the implementation path of regeneration of historical and cultural districts from the perspective of interest coordination - An example of regeneration of the historical and cultural district of Fayuan Temple [J]. Housing Industry, 2022, (Z1):31-34.
- [24] Ji Shuoyang, Zhang Shuaibing, Zhou Chao. Research on the conservation and development of historical and cultural districts from a game perspective [J]. Cities and Towns Construction in Guangxi, 2021, (07): 29-32.
- [25] Chen Yuena. Deconstructing the contradiction between conservation and tourism development in historic districts based on game theory - the case of Yangzhou Shuangdong Historic District [D]. Yangzhou University, 2011.
- [26] Mei Qing, Sun Shurong, Liu Yiming. A research into the conflicts of tourism stakeholders among historic blocks [J]. Journal of University of Jinan (Social Science Edition), 2009,19(06):60-64+90.
- [27] Wu Lin. Research on urban design in the dynamic conservation of Xiaoxijie historic block, Huzhou City [D]. Zhejiang University, 2012.
- [28] Han Huili. The protection of our cultural heritage in the course of urbanization - Taking Huzhou's historical streets of Yishang and Xiaoxi as an example [J]. Journal of Huzhou University, 2007, (05):93-96.