

New Model of Participatory Planning and Design for Community Renewal in the Perspective of the "People's City": A Case Study of YF Lane Renewal in Shanghai, China
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Abstract: Given the current situation in China where public participation in community micro-renewal is largely symbolic, this paper proposes the concept of "dual rationality" based on a literature review. The concept integrates both communicative and instrumental rationality, merging relationships between subjects and between subject and object and establishing an analytical model of participatory planning and design for community micro-renewal. The model is characterized by iteration, collectivity-rationality, and creativity orientations. It has the potential to empower residents with real voice in the participatory process under the policy guidance of the "people's city" concept. The operational method breaks down the complex micro-renewal planning and design process into several iterative stages that are easier for residents to understand. Each stage involves deliberate planning and design based on instrumental rationality, supplemented by public participation based on communicative rationality. This approach enables innovation in planning and design that helps stakeholders find common ground, contributing to public consensus on planning and design. Using the participatory planning and design of Shanghai YF Linong Micro-Renewal as an example, the paper analyzes the five stages of the case. In each stage, emphasis is placed on trust and understanding based on equal empowerment, plan preparation grounded in collective bargaining and negotiation, and creative knowledge production through the fusion of local and professional knowledge. Consequently, the final plan represents consensus among diverse interests. This new model of participatory planning and design for community micro-renewal advances the Western communicative planning paradigm epistemologically and points out a pathway to realize "true power participation" in urban planning and design.

Keywords: people's city; community renewal; participatory planning and design; dual rationality

In November 2019, President Xi Jinping proposed the important concept of "People's City" during his visit to Shanghai, succinctly encapsulating the relationship between people and cities: people are the mainstay of the city, cities are created by the people, and belong to the people. Urban construction needs to stimulate the enthusiasm, initiative, and creativity of the people to build a community of shared destiny. In recent years, various types of "whole-process" community renewal public participation have been carried out in many cities, but generally, most still remain at the stage of "symbolic participation" [1]. How to enhance the initiative of public participation and achieve a higher level of participation becomes the starting point of this research.

The subject of this study is participatory planning and design for the micro-renewal of old residential areas/communities. In July 2020, the "Guiding Opinions on Promoting the Transformation of Old Urban Communities" issued by the State Council Office clarified that "urban and town old communities refer to residential areas (including single residential buildings) in cities or county towns (town centers) built earlier, with poor maintenance, inadequate municipal facilities, incomplete community services, and strong resident renovation desires." The term "community" is used instead of "residential area/community" to emphasize the sociological attributes in the renewal process. Micro-renewal refers to projects that are small in scale, involve fewer groups, have shorter cycles, lower costs, and are easier to implement in the short term. This research focuses on community micro-renewal planning and design because planning and design play a

key role in the overall quality and final outcome of micro-renewal projects. Recent studies by domestic scholars [2-7] suggest that the influencing factors of community micro-renewal involve complex issues such as land ownership, social groups, diverse and even conflicting interests, making multi-stakeholders a significant and influential force in the planning process. The process has evolved from elite-led blueprint drawing to emphasizing broad social participation. The essence of community micro-renewal is community governance [8]; public participation in old community micro-renewal has various modes, but is still at the "symbolic participation" stage [1]. From Western literature, the rational scientific planning paradigm was replaced by the "communicative planning" paradigm in the late 1980s, which emphasizes experiential knowledge beyond logic and science, building rationality on mutual efforts among subjects, seeking consensus goals and strategies through communication [9]. However, previous communicative planning literature mainly focused on governance and institutional innovation in participation, with little discussion on how residents participate in the planning and design process [10-11], and the actual contributions of residents in this process are limited [12].

The following sections first analyze the progress of participatory planning and design research, then construct a "dual rationality" based analysis model for community micro-renewal participatory planning and design, followed by using the micro-renewal of YF Li community in Hongkou District, Shanghai as an example to elucidate the application of this model, and finally pointing out the differences between the new model of community micro-renewal participatory planning and design under the perspective of "People's City" and the Western communicative planning paradigm.

1 Research Progress on Participatory Planning and Design

1.1 Progress in Western Participatory Planning Research

Urban and rural planning in Western countries like the UK and the USA tends to focus on public policies and spatial management related to urban and rural resource allocation and land use. Literature on public participation mainly involves the planning level, with less exploration in planning and design. In the late 19th and early 20th centuries, Western countries saw the emergence of the "settlement movement", emphasizing the use of civil resources to enhance community self-help capabilities. However, substantive public participation in urban and rural planning did not emerge until after the 1960s. Even though the 1947 UK "Town and Country Planning Act" made general provisions for public participation in urban and rural planning, it was mainly about "consulting" public opinions. Addressing the failures of rational comprehensive planning, Paul Davidoff [13] proposed the concepts of "pluralism" and "advocacy planning" in 1965, arguing that urban planning should pay attention to the plurality of urban politics, planners cannot and should not remain neutral, but should listen to different interest groups, especially those marginalized by the market economy, to create positive social change. Facing multiple challenges in urban and rural planning, the UK government issued an amendment to the "Town and Country Planning Act" in 1968, stipulating that public participation is a prerequisite for local development planning approval, planning authorities must provide feedback to public

opinions, and the public can appeal to safeguard their interests. To improve the level of public participation, the UK released the "Skeffington Report" in 1969, proposing several techniques for public participation in urban and rural planning. However, the basic idea of the report focused on the rational process of urban and rural planning, and the practicality of the proposed public participation techniques was questioned by many scholars [14]. In 1969, Sherry Arnstein, based on years of public participation experience, summarized the "Ladder of Citizen Participation," describing types of citizen participation as 3 stages and 8 rungs: from "non-participation" to "tokenism" to "citizen power"; and 8 rungs from the lowest "manipulation" to the highest "citizen control," each representing different levels of public participation [15]. Both Davidoff and Arnstein criticized the inadequacies of public participation in modernist planning thoughts and practices, arguing for a significant shift in the roles of planners and the public. However, their theories were criticized for lacking practicality and overlooking power structures [16]. Meanwhile, Arnstein's participation ladder implies a "perfection" at the highest rung, but in practice, even at lower levels of participation, stakeholders may gain more benefits, and power is not the core goal of stakeholders [17]. The 1973 United Nations Conference on the Human Environment proposed that community environments should be jointly created and maintained by community residents, and the 1977 Machu Picchu Charter further emphasized the importance of communication and participation of planners, governments, and residents in urban development and construction.

In 1984, German social philosopher Jürgen Habermas [18] introduced the concept of "communicative rationality," emphasizing inter-subjective understanding rather than subject-centered unilateral knowledge. This provided a theoretical foundation for communicative planning and spawned several related concepts, notably Patsy Healey's [19] "collaborative planning" and John Forester's [20] "deliberative planning." Collaborative planning invites stakeholders into the planning process to jointly experience, learn, change, and build consensus, using the 3A method of argumentation, analysis, and assessment, achieving common goals through cooperation rather than unstructured competition [21]. The theoretical basis of collaborative planning, besides Habermas's communicative rationality, also integrates Anthony Giddens's theory of structuration, Foucault's "discourse power" doctrine, and others [22-23]. However, despite the continuous "progress" of various communication and collaboration methods in different communicative planning approaches over the years, the academic community still holds certain skepticism about the operability of various application models in practice, including the overly idealistic nature of the models, unclear power structures matching communicative planning, and the negative consequences of participation, indicating that there is still a gap between theory and action [24]. Even so, as Crawford and others have acknowledged, "there is a general consensus that resident participation should be sought... Participatory actions help enhance the empowerment of citizens and create a more sensitive and inclusive planning final product" [25].

1.2 Domestic Research on Participatory Planning and Design

In 2007, China's newly promulgated "Urban and Rural Planning Law" clearly defined the principles of public participation in urban and rural planning, incorporating public participation into the formulation and revision of plans at all levels. Currently, there are several issues with collaborative planning practices in China. The majority still remain at the stage of passive participation. The development of community autonomous organizations is incomplete, and residents lack enthusiasm for participation. There is yet to be a suitable collaborative mechanism formed for different types of cases [21]. Yuan Yuan et al. [26] proposed relying on third-party organizations to form effective participation and collaboration mechanisms, including supervision organizations based on multiple forces, autonomous organizations based on community-enterprise cooperation, and authoritative organizations based on local talents and capable individuals. Liu Jiayan et al. [2] believe that the purpose, subjects, and practical process of participation are the three fundamental issues of community participation. Spatial planning and community governance should be integrated. Huang Yaofu et al. [27] and Li Xun et al. [28] emphasized the "co-creation workshop," centering on public participation and relying on planners to build a platform for interaction among multiple subjects such as government, public, planners, and associations. Through this, planning schemes are formulated and implemented through consultative co-governance. Chen Yulin et al. [29] think that participatory planning methods in China can be categorized into organized, individualized, and self-organized types. Similar to Western literature, although the urban planning community in China has conducted certain research on participatory "planning" mechanisms, discussions on participatory "planning and design" are less common.

Given the small scale of community micro-renewal, it touches upon residents' daily life "habits" and their associated spaces. Some of these "habits" can be captured through interviews and behavioral observations, while others require longer-term behavioral records or rational reflections on residents' local knowledge. Based on this, planners combine local knowledge with professional knowledge to form creative planning and design outcomes. Thus, the key to community micro-renewal planning and design is to combine residents' daily life "habits" with the professional "rationality" of planners. One of the basic approaches to solving this problem is the "empowered participation" of residents, integrating communicative rationality and instrumental rationality to respond to the diverse demands of residents.

2 Constructing a "Dual Rationality" Based Analysis Model for Participatory Planning and Design of Community Micro-Renewal

For a long time, instrumental rationality dominated the field of urban and rural planning in the West. Meyerson and others [30] first proposed the concept of "rational" planning in their 1955 book "Politics, Planning, and the Public Interest," arguing that planning is a series of rationally chosen actions aimed at maximizing the efficacy of the outcomes, thus equating "rational" planning with "efficiency" planning. Influenced by this

efficiency-oriented instrumental rationality, concepts like "rational comprehensive planning," "systems planning," and "procedural planning" emerged, dominating urban planning theory and practice from the 1950s to the 1970s [23]. German sociologist Max Weber [31] early on noted that in the process of modernization, instrumental rationality, which focuses on efficiency and utility, often overwhelms value rationality, which pursues morals, purposes, and values. Instrumental rationality is neutral and rational in itself but can lead to a one-sided focus on efficiency and utility, neglecting outcomes and values. Habermas [19] replaced instrumental rationality with communicative rationality, arguing that knowledge "is not a pre-set systematized store, but something new created in communication based on life experience, culture, and morals, through the exchange of perceptions and understandings" [32]. Influenced by communicative rationality, Western urban and rural planning thoughts shifted in the 1990s, viewing planning as a governance process and approach involving multi-party communication and negotiation. The role of planners also changed, from technical elites to organizers and facilitators of public participation, mediators of public opinion conflicts, and advocates of specific values. However, the field of "planning and design" is highly professional, and the instrumental rationality of problem-solving and achieving efficacy is still very important. Without instrumental rationality, achieving values, morals, and human care is like grasping for the moon [33].

Based on these analyses, this study proposes the concept of "dual rationality" that integrates communicative and instrumental rationality to construct an analysis model for participatory planning and design in community micro-renewal. This model seeks to achieve understanding, knowledge, values, and meanings born from communication between subjects, while emphasizing the supportive efficacy of professional planning and design knowledge, thereby integrating inter-subjectivity and the subject-object relationship. The model is characterized by its iterative nature, collective rationality, and creative orientation. Its iterative nature refers to its temporal dimension, where resident participation in communication shows phased repetitiveness and progressiveness; collective rationality refers to stakeholders following the principle of maximizing common interests to form consensual decisions in the communication and negotiation process; creative orientation refers to the innovativeness and humaneness in shaping community spaces. The specific operational path is shown in Figure 1. Depending on the complexity of the renewal project, participatory planning and design can be divided into 1-n stages, such as empowerment and preliminary consensus, problem identification and preliminary vision, prioritization of problems, scenario comparison and scheme selection, and resident self-help, simplifying the work content of each stage progressively. Each stage includes three steps: objectives and preparation (planning), participatory local workshops (action), and summary and reflection, iteratively cycling and interlocking until a multi-party "consensual" participatory planning and design outcome is formed. Objectives and preparation involve defining the tasks of each stage and preparing professional drawings and related materials for local workshops; local workshops involve stakeholders working together under the guidance of community planners to negotiate and confirm the

objectives and outcomes of that stage; summary and reflection involve organizing the workshop of this stage and planning the next steps. The implementation of local workshops emphasizes: trust and understanding based on equal empowerment, drawing on Habermas's "ideal speech situation" [34], allowing all stakeholders equal access to information and expression opportunities; scenario derivation based on collective consultation of interests and preferences, seeking collective rationality-based common decisions, forming a consensus-based preference integration; creative knowledge production based on the fusion of local and professional knowledge, valuing local life experiences, exploring characteristics rooted in specific times and places, and integrating them with professional knowledge of community planners to form new knowledge, while enhancing the communication and self-organization capabilities of stakeholders. In this model, the decomposition of renewal goals, phased planning, and summary and reflection mainly rely on the instrumental rationality of community planners, and the participatory local workshops rely on the communicative rationality between stakeholders and community planners, until a "consensual" outcome is reached. Community planners also act as a bridge for negotiation between residents and the government, and stakeholders may start a new cycle based on new renewal problems or goals.

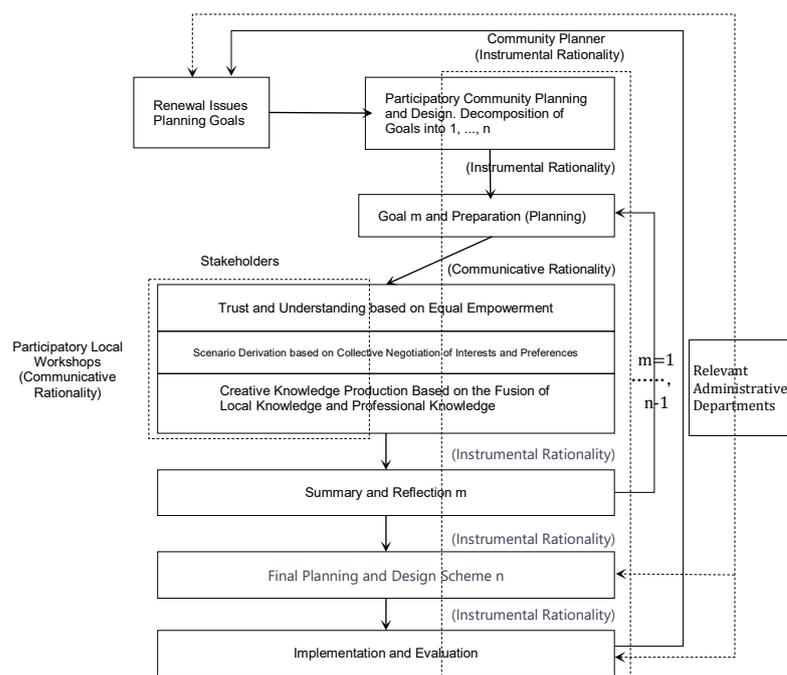


Fig.1 The analysis model of participatory planning and design of community microrenewal based on dual rationality

This model is led by community planners and centered on stakeholders, combining the collaborative effects of governmental power and social forces. It's important to note that in some contexts, market forces also play a significant role in community micro-renewal participation, necessitating the inclusion of government power, social power, and market power in the negotiation process. To illustrate the effectiveness of the model, an empirical analysis was conducted using the participatory micro-renewal of YF Li Alley in Shanghai as an example.

3 Case Analysis of Participatory Community Micro-Renewal in YF Alley

YF Alley, located in the old town area of Hongkou, Shanghai, is an old-style lane built in 1929 with two-story brick-and-wood structures. In 2016, it was included in the list of Shanghai's historical streetscape preservation areas. The alley is approximately 28 meters long and 3.2 meters wide, oriented east-west. The property rights of YF Alley's houses are publicly owned, with original residents holding tenancy rights. There are 34 households in the alley, including 28 original residents, 6 tenants, and 1 vacant house. About 90% of the original residents are retirees aged between 60 and 80, whose children have moved out after establishing their own families. The tenants are middle-aged and young people working in Shanghai. Like many old lanes, YF Alley faces issues such as aging building structures, insufficient sanitary facilities, high population density, small per capita living space, and an aging population. Some ground-floor residents have set up kitchens and sinks outside their front doors (Figure 2). The micro-renewal of YF Alley began in early 2018 when several residents hoped to improve the existing alley environment. Ms. U, the chairperson of the local residents' committee, also wished to improve the living conditions of the residents. Consequently, Ms. U contacted the author. After simple communications, the residents' committee, the residents, and university professors agreed to collaborate. In March of the same year, leveraging the resources available at Tongji University, the author organized a planning and design team with diverse cultural backgrounds. The YF Alley renewal project was thus initiated, embarking on a five-month micro-renewal practice.



Fig.2 Current situation of YF Linong before renewal

3.1 Phase One: Empowerment and Preliminary Consensus

The planning and design team first negotiated with the street office and the residents' committee: The renewal of YF Alley would be guided by the planning and design team, with local residents participating fully in decision-making and a bottom-up approach to

renewal. At the same time, the team would consider a broader scope of holistic transformation planning and functional layout for the alley area, aiming to combine pinpointed, progressive renewal strategies with a broader area's planning vision. After receiving approval, the team visited the residents' committee office to discuss with over ten YF Alley residents and committee staff, understanding the basic situation and achieving an initial consensus. Subsequently, they entered YF Alley to further understand the residents' perspectives. However, some residents were indifferent to participating in the renewal, considering it a government matter. Facing this distrust, the planning and design team gained the support of most residents through patient explanation. Table 1 summarizes the process of this phase.

Tab.1 Process of the first stage of YF micro-renewal

Stage One: Empowerment and Preliminary Consensus	
Planning	<ul style="list-style-type: none"> • The planning and design team, along with the residents' committee, street office, and residents, determine the mode of participation. • The planning and design team drafts five operational stages of community renewal planning and design, simplifying decision-making content for each stage. • The planning and design team prepares foundational information and strategies for bottom-up participatory renewal by residents.
Action	<ul style="list-style-type: none"> • Consultation with the street office and negotiations with residents. • Preliminary understanding of the site situation and residents' demands. • "Mobilizing" residents to participate collectively in the alley's renewal.
Reflection	<ul style="list-style-type: none"> • The head of the residents' committee has a close relationship with the residents, facilitating the smooth progress of initial work. • Residents are divided into three groups: supportive, observing, and a minority opposing the community micro-renewal. • Consensus based on communicative rationality is reached among all parties: the street office empowers the bottom-up participation format; the residents' committee acts as a "bridge" connecting the street office, residents, and the planning and design team; the supportive group of residents expresses a strong willingness to participate in the bottom-up community micro-renewal; the planning and design team fosters trust and understanding among stakeholders. • The planning and design team, utilizing its instrumental rationality, analyzes the site's strengths and weaknesses and prepares professional materials for participatory local workshops.

3.2 Phase Two: Problem Identification and Preliminary Vision

Through preliminary preparation, the first planning and design workshop was held in the residents' committee's meeting room, involving some residents of YF Alley, representatives of neighboring residents, members of the residents' committee, and the planning and design team. The purpose of this workshop was to preliminarily determine the basic issues to be addressed in the alley's renewal. Tools such as "image scenes," the "PARK" concept, and "realistic representations" were used to stimulate residents' participation in the discussion, analyze current issues, and identify an initial vision for renewal.

In the "image scenes" section, the planning and design team displayed pre-prepared images of various renovation intentions in front of the residents. Participants selected scenes they liked or disliked and explained their reasons. This segment quickly engaged the residents, who expressed their opinions directly based on the images. For example,

regarding the renovation of external walls, some residents pointed out their fondness for green walls using reference images, while others argued against it, citing issues like the abundance of stray cats in the alley and the challenges in managing green walls in the limited space. When everyone saw attractive graffiti images, there was unanimous agreement to include some mural art, but with content reflecting the history of YF Alley. This warm-up led the group into the next discussion segment.

In the "PARK" concept section, the planning and design team first explained the meaning of "PARK": Preserve, Add, Remove, and Keep back. Then, residents were asked to write their views on sticky notes and place them on the wall under the corresponding "P, A, R, K" sections. However, unexpectedly, the residents expressed confusion, finding it somewhat challenging. Therefore, the team moved to the next step – the "realistic representation" section. The planning and design team had pre-assembled extended façade representations of the alley's buildings on the wall. Residents were free to move around and discuss with each other. If they wanted to express an opinion, they could write it on sticky notes, stick their chosen "image scenes" from the first section in relevant places, or convey their thoughts to the planners, who then noted down these opinions or sketched out the scenes. As the residents were very familiar with their environment, this discussion progressed smoothly. After three rounds of communication, the existing issues in the alley were identified one by one, and a YF Alley renewal WeChat working group was formed. After the workshop, the planning and design team summarized this round of action, as shown in Table 2.

Tab.2 Process of the second stage of YF micro-renewal

Stage Two: Problem Identification and Preliminary Vision	
Planning	<ul style="list-style-type: none"> • The planning and design team consults with residents to identify problems needing resolution in the renewal project and visualizes these issues. • The team organizes local workshops, capturing and preparing facades of YF Alley for discussion. • Based on conclusions from previous participation, the team selects reference images for the vision of YF Alley's renewal.
Action	<ul style="list-style-type: none"> • Conducting local workshops. • Utilizing tools like "image scenes," "PARK" concept, and "realistic representations," the planning and design team organizes alley residents to participate in actions to identify problems and choose a preliminary vision.
Reflection	<ul style="list-style-type: none"> • Consensus based on communicative rationality is achieved among all parties: Together, they build an equal participatory "field" at the local level, making residents feel respected and in control of decision-making. Residents' interests and preferences are respected, and consensus is formed during communication; residents collectively and autonomously choose renovation elements and future visions. The supportive group expresses preferences for renovation, and residents reach agreement through "debating" and negotiation, gaining common local knowledge and identifying issues to be addressed in the renewal project; the residents' committee acts as a connecting "bridge." • The planning and design team uses "props" to guide discussions among residents, enhancing their participation knowledge and ability, and identifies several potential "capable individuals" in the alley who can become nodes for stimulating community participation. • The "image scenes" and "realistic representation" discussion segments are relatively successful. This approach is intuitive, easy to understand, and engaging, allowing immediate discussion of different demands and conflicts. However, the residents' imagination might be limited by the pre-prepared images by the planning and design team. • The "PARK" concept discussion is less successful. The judgment on aspects of "preserve, add, remove, and keep back" requires stronger "professional" knowledge, which is challenging for residents participating in renewal planning and design for the first time. This method might be more suitable for experts, elites, or groups with higher education levels. • The planning and design team, utilizing its instrumental rationality, prepares professional materials for the local workshops and provides a vision for the micro-renewal.

3.3 Phase Three: Prioritization and Preliminary Scheme

A month later, after meticulous preparation, the planning and design team organized the second local workshop. The preparatory materials included a holistic transformation plan and functional layout for the broader alley area, adopting a pinpointed, gradual renewal strategy, which received approval from the street management department. The workshop was set up near the entrance of YF Alley, where, with the help of residents, one side of the mountain wall was covered with preliminary design drawings of the alley's facades, and the other side set up with models and projector equipment encompassing the surrounding environment. Residents brought stools from their homes and gathered in the informal "venue" of the local workshop. The workshop consisted of three parts: discussing the holistic transformation plan for the alley area, prioritizing the issues to be resolved in the renewal, and reviewing some node-specific schemes. Residents expressed approval of the holistic transformation plan, relieved to see a broader vision for the alley area. In prioritizing, the planning and design team first reviewed the key issues summarized from the previous workshop, listing categories like "airspace," "ground," and "facade." Residents were asked to discuss the order of urgency based on their daily life experiences, classifying issues into high, medium, and low priority levels, and concretizing the renovation content (Figure 3). Due to limited and uncertain funding, the project had to start with the most pressing issues. Through negotiation, compared to the previous workshop, two new elements were added to the renovation project: smoke exhaust pipes and sink lighting. The previously determined three pre-renovation elements – outdoor seating, ground transformation, and especially sanitary facilities – were placed in the "not to consider for now" category (Table 3). During the evaluation of node-specific schemes, some residents were pleased to see their previous suggestions reflected in the design drawings, proudly telling others, "This was my idea last time." The process of this round is summarized in Table 4.

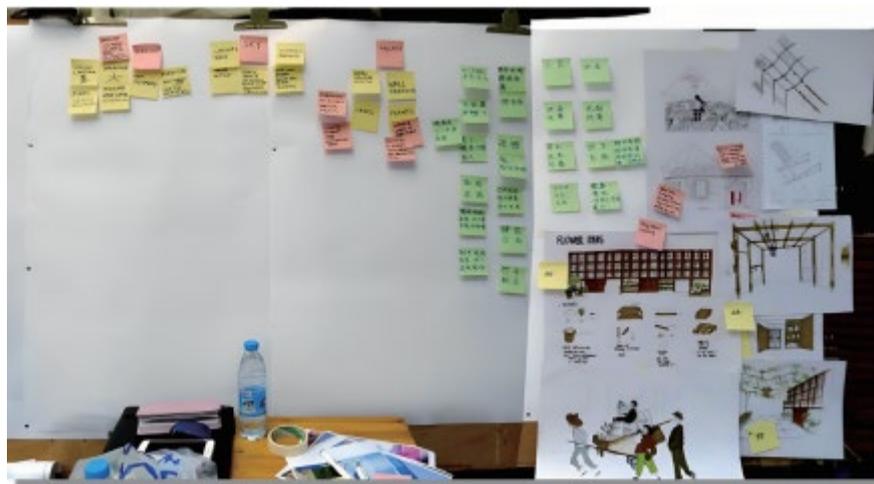


Fig.3 Classification problems based on priority and sketch of on-site work in the second workshop for YF micro-renewal

Tab.3 Priority ranking of renovation projects in the second local workshop in YF micro-renewal

Serial No.	Priority Level	Alley Renovation Element	Specific Issue
1	High Priority	Ground Drainage	The north and west sides of the alley are higher, while the south and east sides are lower. Rainwater accumulates at the entrances of ground-floor residences and outdoor "kitchens," causing inconvenience in entering/exiting and cooking. The residents suspect the issue might be due to blocked drainage pipes or insufficient pipe diameter.
2		Nighttime Lighting	The alley used to have outdoor lighting, but it was too bright and improperly positioned, affecting the rest of the second-floor residents. It was removed, but the lack of lighting reduced the sense of security.
3		Smoke Exhaust Pipes (Added Element)	Some residents' kitchen smoke exhaust pipes are too short and chaotically positioned, leaving oil stains on the facades. Hanging clothes also get tainted with the smell of smoke.
4	Medium Priority	Canopies and Clothes Drying	The canopies of each house on the first floor vary in material and height, creating a disorganized appearance. Their durability and robustness are concerning. Some newer canopies are present; whether to replace them is left to the residents' discretion.
5		Outdoor Kitchen Sinks	Initially constructed to save costs, the simple stacked sinks now detract from aesthetics. Renovating the sinks could add some storage space.
6		Planting Vertical Greenery	Currently, the front of the alley is cluttered with miscellaneous items. Residents hope to clear the clutter, create a unified appearance, plant greenery, and improve the environmental quality.
7		Wall Beautification	There is a blank wall on the west side of the alley, which could provide space for graffiti. Wall art could act as a catalyst for shared memories, creating a sense of place.
8	Low Priority	Electric Vehicle Management	Electric vehicles in the alley do not disturb residents. Once charged, owners can move them away. Consideration for a centralized electric vehicle parking spot.
9		Sink Lighting (Added Element)	Each household has installed different lights over their sinks, causing a mix of brightness, height, and colors that can be disorienting and uncomfortable. There is a desire for a unified lighting solution.
10	Not Currently Considered	Sanitation Facilities	Second-floor residents lack the conditions to install sanitation facilities; this is left for future renovation.
11		Rest Seating	The alley is too narrow for fixed public seating, which would occupy space. Conversely, it is easy for residents to place their chairs in the alley.
12		Ground Design	Ground paving or beautification is not currently needed.

Tab.4 Process of the third stage of YF micro-renewal

Stage Three: Prioritization of Issues and Preliminary Planning and Design Scheme	
Planning	<ul style="list-style-type: none"> The planning and design team completes a preliminary scheme for the holistic renewal of the alley. The team prepares a model including the surrounding alleys, considering broader future transformations, prints planning and design drawings, and prepares participatory tools for the local workshop such as blank paper boards, sticky notes, and projectors. The team organizes a list of major issues identified in the previous workshop for renovation, letting residents decide the priority of these issues and detailing and quantifying them.
Action	<ul style="list-style-type: none"> The local workshop format attracts residents who were not previously invited to participate. Residents actively organize the alley's external space, clearing some accumulated clutter to facilitate the second workshop. The planning and design team collaborates with residents on site to refine the facade of YF Alley, mural content, clothes racks, and water bucket renovation plans. Through negotiation, the renovation project adds two elements: smoke exhaust pipes and sink lighting. The previously determined three elements – sanitation facilities, outdoor resting seats, and ground transformation – are put into the "not currently considered" category.
Reflection	<ul style="list-style-type: none"> Consensus based on communicative rationality is achieved among all parties: Residents' demands and preferences are expressed in the design, enhancing trust and encouraging more residents to actively participate in the renewal. The method of problem prioritization proves effective, as residents reach consensus during negotiation, forming collective rationality. Agreement on the priority of issues resolves some conflicts, particularly regarding the urgent desire for sanitation facilities, which are not included in this renovation to avoid potential future conflicts. Through joint discussions and reading of plans, residents' understanding of planning and design schemes improves, sparking new design ideas between residents and the team. Residents display an increased sense of initiative and ownership, shifting from "I should do it" to "I want to do it." The residents' committee continues to play the role of a connecting "bridge." The planning and design team leads discussions, enhancing residents' participation knowledge. The planning and design team, using its instrumental rationality, prepares professional materials for the local workshop, creating creative knowledge that merges local and professional knowledge. The professional renovation scheme is designed based on the collective interests and preferences of residents.

3.4 Stage Four: Scenario Comparison and Scheme Selection

After the previous workshop, the planning and design team revised and deepened the renovation scheme based on collected information, visiting YF Alley multiple times to discuss multiple scenario comparison plans with residents. A month later, the third workshop was organized. To ensure the smooth implementation of the renewal project, the team first reported the plan to the street office, then moved to the local workshop in YF Alley. Both the government and the alley residents essentially agreed on the selected

renovation scheme (Figure 4), but their feedback differed. The street office preferred aspects of the plan that beautified or showed immediate results, while residents were more concerned with the practicality and durability of the renovations. A notable point of contention was whether to renovate the outdoor sinks. The government opposed the renovation, as the sinks were installed outdoors, encroaching on public space in the alley. One official said, "If the government agrees to renovate the sinks, it indirectly supports the occupation of public space." In contrast, residents were most satisfied with the renovation of the sinks and canopies (Figure 5). Facing this conceptual "conflict" between the government and the residents, the planning and design team emphasized the community renewal's original intention of "for the people." Ultimately, the street office agreed to the sink renovation but without financial support; meanwhile, they informed the team about the first "Xinli Cup" Shanghai Community Foundation Public Welfare Venture Competition. The team's proposal ranked among the top few out of over 100 participating projects citywide, winning an Excellence Award and a grant of 20,000 yuan. Due to still limited funds, residents initiated a fundraising campaign, collecting over 3,000 yuan. With these funds, the long-awaited implementation phase of the plan could begin. Additionally, the team secured free sponsorship of some canvas decorative materials from a Hong Kong-based company. The process of this round is summarized in Table 5.



Fig.5 Part of the facade improvement scheme in the third workshop in YF micro-renewal

Tab.5 Process of the fourth stage of YF micro-renewal

Stage Four: Scenario Comparison and Scheme Selection	
Planning	<ul style="list-style-type: none"> ·The planning and design team prepares a detailed design scheme, including the general form and content of the mural. ·The team negotiates with the street office and residents' committee regarding funding for the project, as well as the arrangement and safety of construction.
Action	<ul style="list-style-type: none"> ·Selection and discussion of the implementation scheme, finalizing materials and colors for the renovation elements. ·Conflicts arise between government and residents' demands, with the community planner acting as a mediator for negotiations. ·The planning and design team's mural plan does not receive full approval from residents, who wish for the mural to depict scenes from their past life, possibly with life-sized human figures representing typical childhood scenes in the alleys, preferably from the 1960s-1970s.
Reflection	<ul style="list-style-type: none"> ·Consensus based on communicative rationality is achieved among all parties: The equal negotiation "field" continues, with the government having decisive control over funding for the update. The street office communicates with the planning and design team about funding implementation; the residents' committee supports the team's participatory workshops, organizing residents to negotiate and raise some funds themselves; residents reach the most suitable plan under the given constraints through collective negotiation; the planning and design team coordinates between the street office and residents over conflicts in the renovation project and secures funding for implementation. ·The planning and design team, using its instrumental rationality, prepares professional materials for the local workshop, deepens the micro-renewal design scheme, and secures NGO funding through competition participation. Additionally, combining residents' local knowledge with professional instrumental rationality, the team generates new, locally appropriate creative knowledge. This includes natural architectural facade design, unique murals reflecting residents' everyday life, and low-cost, storage-equipped outdoor sink renovations. These efforts enhance the spatial value and significance of YF Alley, boosting residents' social capital, confidence, and participation skills.

3.5 Stage Five: Resident Self-Help

After communication with the District Planning and Natural Resources Bureau, it was determined that this project would only involve renovations of the external space and environment of the alley, without any new construction, and thus did not require approval from the Bureau. The street office's agreement was sufficient to proceed. Therefore, the micro-renewal project quickly entered the implementation phase. The work was divided into two parts: tasks with higher technical requirements were handled by the construction crew, including clearing underground drainage ditches, uniformly arranging smoke exhaust pipes, setting up nighttime lighting, replacing canopies uniformly, and repairing outdoor sinks; the other part was the creation of a mural depicting “alley stories,” a collaborative effort between residents and the planning and design team. Due to thorough preparation, the new mural plan, which reflected the residents' ideas, was ultimately approved, and both aspects were successfully implemented.

The mural painting was scheduled for the weekend, allowing residents of all ages to participate. Initially opposing residents, seeing others painting on the wall, also joined the “graffiti” group. Mr. C, a resident who had once worked in advertising drawing, played a significant role in the finalization of the mural. However, the drafting of the “Resident Covenant” went “too smoothly.” The efficiency of the residents' committee staff was “too high,” and they drafted the “Resident Covenant” themselves within a few days. After the residents signed it, the content of the covenant was made into a sign and hung at the entrance of the alley. The process of this round of action is summarized in Table 6.



Fig.4 The layout of the master plan for YF micro-renewal

Tab.6 Process of the fifth stage of YF micro-renewal

Planning	<ul style="list-style-type: none"> ·The residents' committee and the planning and design team jointly negotiate with the construction team about the content and schedule of the project. ·The planning and design team prepares the draft for the mural and materials for residents' DIY activities. ·Discuss the "Resident Covenant" to ensure sustainable self-organization capacity of residents after the completion of the update.
Action	<ul style="list-style-type: none"> ·The planning and design team guides residents in participating in the mural "graffiti." ·Residents supervise the construction work. ·Residents sketch flowers and greenery in front of their homes. ·Discussion on the "Resident Covenant" is not active, possibly because residents currently don't see it as a priority.
Reflection	<ul style="list-style-type: none"> ·Consensus based on communicative rationality is achieved among all parties: The previously observing and opposing groups mostly changed their attitude, agreeing or directly joining the local workshop. Collective rationality, transcending individual rationality, plays an important role in promoting the renovation process; residents' trust, cohesion, and action capabilities are greatly enhanced, improving their social capital. The residents' "graffiti" activity creates cultural symbols unique to their alley. The residents' committee acts as a connecting "bridge." The planning and design team organizes local graffiti workshops. ·The "Resident Covenant" is not "successful," but residents' sense of identification and organizational ability are enhanced, laying the foundation for future self-organization. The residents' committee supports the planning and design team's participatory workshops and organizes the signing of the "Resident Covenant," but by overstepping their role, they may render the "Resident Covenant" a mere formality, failing to substantively promote resident autonomy. ·The planning and design team utilizes its instrumental rationality to provide professional guidance for the implementation of the micro-renewal.

3.6 Micro-Renewal Summary

The description of the five-stage micro-renewal process in this case clearly demonstrates the collaborative effect of communicative and instrumental rationality. Communicative rationality mainly involves the joint collaboration between community residents, the residents' committee, the street office, and the planning and design team. Within an open, trusting, and equal "context," collective consensus is formed. The roles of these four entities vary at different stages. The street office empowers participation in the initial phase and makes decisions at the scheme finalization stage; the residents' committee acts as a bridge between the street office, residents, and the planning and design team, facilitating communication and coordination. Residents are the main body of the micro-renewal, and despite initial division into supportive, observing, and a minority opposing groups, most residents support participatory community micro-renewal through local workshops, frank communication, and dialogue, forming collective interest preferences and locality-based knowledge from shared living experiences.

The planning and design team plays a central role in the micro-renewal process, communicating and negotiating with residents, the residents' committee, and the street office, and liaising with the main funding NGO organization and sponsoring private enterprises. They act as leaders, promoters, and coordinators of the micro-renewal (Figure 6). Collective consensus is reflected not only in the final scheme but also in the phased results. Relying on their professional instrumental rationality, the team endeavors to present the best locally appropriate "creative" planning and design outcomes based on the consensus reached at each stage, to lay a solid foundation for the next phase of communication, creating a virtuous cycle (Figure 7). This approach has facilitated the smooth implementation of the project, achieving the "citizen power" level of participation as outlined in Arnstein's "Ladder of Citizen Participation." The renewal results not only meet the aesthetic needs of the alley's appearance but also address practical issues like sewage systems and outdoor sink renovations, transforming the alley into a comfortable living "lounge," enhancing residents' sense of achievement and ownership. Residents' interests and preferences are fully considered, avoiding potential dissatisfaction among

individual residents in the future, enhancing collective rationality, and embodying the principle of "People's City built by the people."

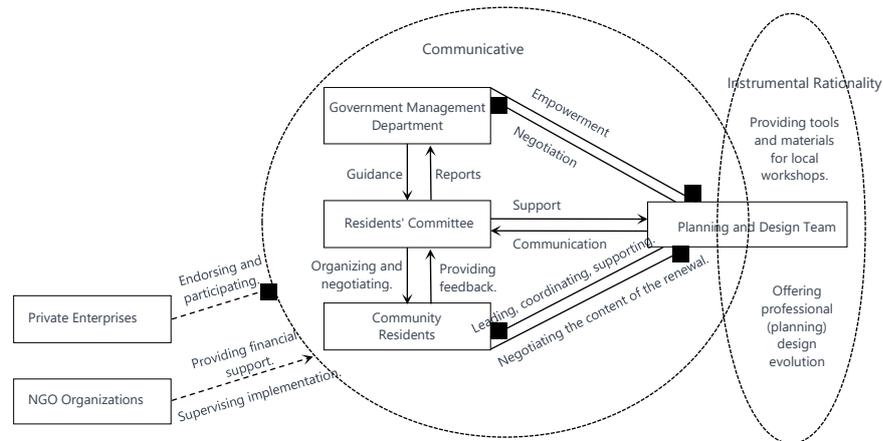


Fig.6 Stakeholders and interactions in the YF microrenewal built on "dual-rationality"

4 Conclusion: Exploring New Models of Participatory Planning and Design in Community Micro-Renewal for the Stock Development Era

After about 40 years of rapid growth, China's urban development has entered an era focused on quality improvement in existing stock. For the renewal of old residential areas, this implies not only improving the physical space and supplementing missing facilities but also caring about the significance of the spatial environment. Residential areas are not just spaces for living but places called "home," carrying residents' daily life, memories, and emotional experiences, and shaping their individual personalities. During the renewal process, language dialogue between subjects can "awaken" these latent emotional experiences and inspire creativity. Simultaneously, it is essential to rely on the professional instrumental rationality of community planners to create a thick spatial environment that adapts to residents' "habits," emotional experiences, and new inspirations. It is with these considerations that this study proposes the concept of "dual rationality," integrating communicative and instrumental rationality, and combining inter-subjectivity with subject-object relations, plus a temporal factor, to construct an analysis model for participatory planning and design in community micro-renewal.

In practical operation, this model breaks down the relatively complex community micro-renewal planning and design into several stages that are easier for residents to understand. Each stage includes both deepening of schemes based on instrumental rationality and open local workshops for communication and negotiation based on communicative rationality, with iterative progression between stages, thus achieving the creative "greatest common denominator" results. In terms of content, each stage includes goals and preparation, participatory local workshops, and summary and reflection, cycling iteratively until a consensus implementation plan is reached among stakeholders, community planners, and relevant government departments, realizing the optimal result of residents' "empowered participation" in the entire process.

Local workshops are vital for achieving collective rationality through communication, focusing on three factors. First, trust and understanding based on equal empowerment must be established among stakeholders and between them and the community planner, laying the foundation for consensual communicative rationality. Second, the presented planning and design schemes should reflect the collective interests and preferences of residents, with decisions made through debate, analysis, evaluation, and deduction, greatly enhancing residents' confidence and satisfaction, and promoting individual rationality towards collective rationality. Lastly, integrating residents' spatial cognition "materials" forms creative actions. These cognition "materials," or local knowledge, encompass context, personality, history, politics, culture, and action, making them unique. The collision of local knowledge with professional knowledge can stimulate continuous thinking, helping to generate creative sparks and condense multi-consensual results reflecting locality and culture.

The new model of participatory planning and design that integrates communicative and instrumental rationality transcends the communicative planning paradigm of the West. While the latter encompasses technical, aesthetic, and ethical dimensions, its basic starting point is collective consensus based on inter-subjectivity. However, in participatory planning and design, subject-object relations based on efficiency and creativity remain crucial, and professional operations like vision "supply," logic deduction of planning and design, and creative form expression are irreplaceable. In fact, there is an interrelationship between communicative and instrumental rationality, where consensual communication in communicative rationality can include the content of instrumental rationality, and conversely, the purpose of instrumental rationality should aim towards consensual results in communicative rationality. This "dual rationality" approach constitutes a new model for participatory planning and design in community micro-renewal under the "People's City" concept in the stock development era. For ease of operation, this model generally does not touch upon the power structure. However, to achieve the common goal of the "People's City," relevant government departments should give communities greater autonomy in financial funding and implementation decisions. Furthermore, although the case study focuses on small-scale community micro-renewal, the planning and design team also conducted holistic planning and design for the larger area encompassing YF Alley, adopting a pinpointed micro-renewal approach. Due to space limitations, this article focuses only on YF Alley, but the proposed methodology is also applicable to larger-scale community renewals. It should be noted that in some specific community micro-renewals or larger-scale projects, the relationships among government power, social power, and market power are more complex. How community planners use the participatory planning and design methods proposed by this model, integrating communicative and instrumental rationality to achieve the goal of the "People's City," requires further exploration.

The planning and design team members of this case also include Iris Belle (Germany), Michela Caserini (Italy), Ho Hon Leung (Canada), Raymond Lau (Canada), Daegeon Lee (Korea), and over ten other teachers and students including Li Wen and Li Ziming.

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