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Theoretical Frameworks and Analytical Approaches in Contemporary Urban Regeneration: A Four-Level Perspective

Toktam Asefi*

Lecturer in Architecture and Independent Researcher, Mashhad, Iran

*Corresponding Author Email: toktamasefi133@gmail.com

Abstract: Urban regeneration has become one of the key concepts in urban studies and spatial planning over the past two decades. This article aims to present and validate a four-level analytical framework (structural, institutional, experiential–spatial, and normative). The research method includes a systematic literature review and the collection of empirical data from 80 expert respondents in the field of urban regeneration using a standardized questionnaire. These respondents included 20 academics/researchers, 28 consultants/technical offices/engineering companies, 16 managers or experts from governmental/municipal institutions, and 16 from mixed groups. Data were analyzed using mean scores, standard deviations, and analysis of differences in viewpoints among the groups. Results show that the normative level, with a mean of 4.61, and the institutional level, with a mean of 4.39, hold the greatest importance, and that the four-level framework demonstrates both analytical coherence and empirical legitimacy. Analysis of respondent groups indicates that professional perspective and position shape their analytical priorities, with particular emphasis on normative, institutional, and experiential–spatial dimensions. This research can serve as a conceptual and practical tool for designing future studies and enhancing theoretical clarity in urban regeneration research.

Keywords: Urban regeneration, four-level analytical framework, empirical analysis, normative, urban governance

Introduction

Urban regeneration has become a central concept in urban studies and spatial planning over the past two decades. This concept emerged in response to the social, spatial, and economic consequences of previous urban renewal and redevelopment approaches, which primarily relied on physical interventions, market-driven logics, and large-scale projects, often exacerbating spatial inequalities, population displacement, and weakening social cohesion (Roberts & Sykes, 2000; Lees et al., 2022).

Unlike limited and short-term approaches, urban regeneration is a comprehensive and long-term process that simultaneously encompasses the physical, social, economic, institutional, and cultural dimensions of the city (Carmon & Shlomo, 2023). Despite the consolidation of urban regeneration in contemporary literature, research in this field shows significant diversity and dispersion in theoretical frameworks and analytical approaches.

Existing studies draw on multiple theoretical traditions—from political economy and neoliberal critiques to socio-spatial approaches, urban governance, and normative theories—to analyze regeneration (González et al., 2020; Healey, 2020; Zukin et al., 2020). While this plurality reflects the complexity of urban phenomena, it also causes

analytical ambiguity and difficulties in comparison and knowledge accumulation. Moreover, recent studies indicate that urban regeneration literature is increasingly integrating sustainability, social participation, and governance models. For instance, a systematic review of sustainable housing regeneration strategies highlights the role of community participation, cross-sector collaboration, and green infrastructure in achieving sustainable urban development (Chin et al., 2025). Similarly, a critical review of project-based urban regeneration research identifies meaningful stakeholder participation and ensuring community engagement as key challenges and prominent research areas in recent studies (Eun et al., 2025).

Empirical research also emphasizes that regeneration models involving multiple actors (governmental, private, and community-based) can have varying effects on environmental variables such as urban heat and pollution, highlighting the importance of considering environmental and sustainability aspects (Zhang et al., 2025). Additionally, bibliometric analyses reveal trends, challenges, and opportunities for sustainable urban development, showing that emerging topics such as smart technologies, social sustainability, and broad participation have become central in new research agendas (Lai et al., 2025). Bukola et al. (2025), focusing on inner-city housing regeneration, highlight a major gap in contemporary urban regeneration literature: the systematic neglect of gender differences and women's lived experiences in regeneration projects. Although urbanization in recent decades has drawn policymakers' and planners' attention to inner-city housing, its outcomes for vulnerable groups—particularly women—have been highly unequal. While some industrialized countries have partially mitigated inner-city housing issues through state interventions and social policies, in many developing countries, women's conditions have not only failed to improve but have worsened due to increased homelessness, marginalization, and spatial exclusion.

The main objective of this article is to present a four-level analytical framework and examine its effectiveness in analyzing urban regeneration. This framework includes structural, institutional, experiential–spatial, and normative levels and seeks to provide theoretical coherence while aligning with practical realities. Using a systematic literature review and empirical validation involving 80 expert respondents, the study analyzes mean scores and opinion dispersion while also examining the influence of experts' professional backgrounds on their analytical priorities.

This study can serve as a conceptual and practical tool to enhance theoretical clarity, guide future research, and improve decision-making in urban regeneration policy.

Conceptual Evolution of Urban Regeneration

The conceptual evolution of urban regeneration can be traced through critiques of post-World War II urban renewal. Urban renewal, influenced by modernist planning and centralized interventions, focused on large-scale demolition and replacement, often displacing marginalized social groups and eroding local networks (Jacobs, 1961; Smith, 1996). Although these approaches aimed to improve infrastructure and facilitate economic development, they often produced negative social and cultural outcomes.

In subsequent decades, concepts such as redevelopment and urban revitalization emerged, but these approaches largely remained project-based, short-term, and limited to physical interventions (Roberts & Sykes, 2000). Sole focus on large projects and physical spaces often neglected residents' lived experiences and ignored social justice concerns.

Since the 1990s, urban regeneration has emerged as a more comprehensive concept that views the city not merely as a collection of physical spaces but as a complex system of social, institutional, and economic relations (Moulaert et al., 2010). In this approach, coordination among policies, actors, and governance levels is essential to achieving regeneration objectives (Healey, 2020; Carmon & Shlomo, 2023).

The conceptual evolution of urban regeneration has fostered diverse theoretical frameworks while simultaneously generating analytical dispersion in the literature. This diversity of approaches—from policy-oriented and political-economic to socio-spatial, institutional, and normative—reflects the inherent complexity of urban regeneration but also underscores the need for a coherent, multi-level analytical framework to guide research and enable more precise analysis.

Major Theoretical Frameworks in Urban Regeneration

Urban regeneration, as a complex and multi-level process, draws on diverse theoretical frameworks. Each framework focuses on specific dimensions of urban phenomena, complementing a comprehensive understanding of regeneration. The most important theoretical frameworks are as follows:

Political–Economic Frameworks

These frameworks analyze urban regeneration in connection with neoliberal logics, urban competitiveness, and capital flows (Harvey, 1989; Lees et al., 2022). Studies indicate that many regeneration policies have led to the commodification of space and displacement of low-income groups (Zukin et al., 2020). Political–economic frameworks highlight structural forces and analyze the role of macroeconomic policies and power relations in shaping projects but often pay less attention to users' lived experiences.

Socio-Spatial and Cultural Frameworks

These approaches emphasize residents' lived experiences, social meanings, and the social production of space (Lefebvre, 1991). Neglecting these dimensions can result in social failure of projects even when economic indicators are positive (Colomb & Novy, 2021). Socio-spatial frameworks highlight the quality of public spaces, place identity, social interactions, and public participation, adding depth to structural–economic analyses.

Institutional and Governance Frameworks

The institutional approach views urban regeneration as a multi-actor, multi-level process where policies, laws, and power relations play a decisive role (Healey, 2020). Recent research emphasizes institutional capacity, coordination among governance levels, and active local actor participation in project success (Carmon & Shlomo, 2023). This framework analyzes legal and managerial aspects and examines public–private interactions.

Critical and Normative Frameworks

Critical approaches consider urban regeneration a political and value-laden arena, placing concepts such as spatial justice, the right to the city, and inclusivity at the center of analysis (Fainstein, 2010; Zukin et al., 2020). These frameworks challenge dominant regeneration discourses and emphasize that neglecting normative values results in incomplete analysis. However, without integration with other frameworks, these approaches may diverge from practical realities.

Analytical Approaches in Urban Regeneration Research

Analytical approaches serve as intermediaries between theory and research practice, allowing researchers to operationalize theoretical concepts in measurable ways. In urban regeneration, diverse approaches are employed to analyze projects and policies:

Process Analysis

This approach examines urban regeneration as a chain of decisions, interactions, and actions over time (Healey, 2020). Process analysis enables tracing the impact of policies, institutional changes, and social responses to regeneration projects, revealing that projects often result from complex interactions among structural, institutional, and experiential–spatial factors.

Comparative Analysis

Comparative analysis identifies common patterns and context-specific differences among cities or projects. It allows assessing the effects of national policies, institutional capacity, and socio-spatial characteristics on regeneration outcomes and identifying success or failure factors.

Practice-Based Approaches

These approaches analyze urban regeneration from the perspective of professional experience and practitioners' applied knowledge (Colomb & Novy, 2021). Data from consultants, project managers, and experts serve as reliable sources for developing analytical frameworks and testing theoretical assumptions. This approach bridges the gap between theoretical knowledge and practical experience.

Linkage to the Four-Level Framework

The above analytical approaches provide a basis for testing and validating the four-level framework:

- Process analysis helps examine the influence of structural and institutional levels over time.
- Comparative analysis enables comparison across projects and perspectives in normative and experiential–spatial dimensions.

- Practice-based approaches contribute to empirical validation by evaluating experts' perspectives across institutional, experiential, and normative levels.

This linkage demonstrates that the four-level framework is applicable not only theoretically but also analytically, providing a coherent structure for urban regeneration analysis.

Empirical Section (Empirical Illustration)

Research Instrument and Questionnaire

To validate the four-level analytical framework, a standardized questionnaire was designed, including four analytical levels and an overall evaluation section:

Section A: Respondent Information

- Professional Role: Academic / Consultant / Policy / Mixed
- Field of Expertise
- Experience: <3, 3–5, 6–10, 11–15, >15 years
- Direct Participation in Urban Regeneration Projects: Yes / No
- City/Country of Professional Activity

Section B: Structural Level

6 items on the role of structural economic and political forces, socio-economic inequalities, macro policies, and project scale.

Section C: Institutional Level

6 items on governance quality, legal frameworks, public–private participation, transparency, and institutional capacity.

Section D: Experiential–Spatial Level

6 items on user experience, physical changes, public space quality, social interaction, and place identity.

Section E: Normative Level

6 items on value-based criteria, spatial justice, inclusivity of marginalized groups, cultural and heritage values.

Section F: Overall Evaluation of the Four-Level Framework

4 items on analytical coherence, prevention of level confusion, comparability, and recommendations for future research.

All items were measured on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

Population

- Number of respondents: 80
- Respondent groups:
  - Academic: 20
  - Consultant: 28
  - Policy: 16
  - Mixed: 16
- Average experience: 3–15+ years
- Direct participation in urban regeneration projects: 65% Yes
- Location: various cities/countries

Data Analysis Method

- Calculation of mean and standard deviation for each analytical level
- Comparison of means across respondent groups
- Analysis of response distribution (frequency distribution)

Interpretation of Results

Figure 1 presents mean scores across four analytical levels based on the opinions of 80 experts. The normative level (mean = 4.61) received the highest score among the four analytical levels, indicating that urban regeneration experts regard value-based criteria such as spatial justice, inclusivity, sustainability, and cultural values as fundamental elements in regeneration analysis.

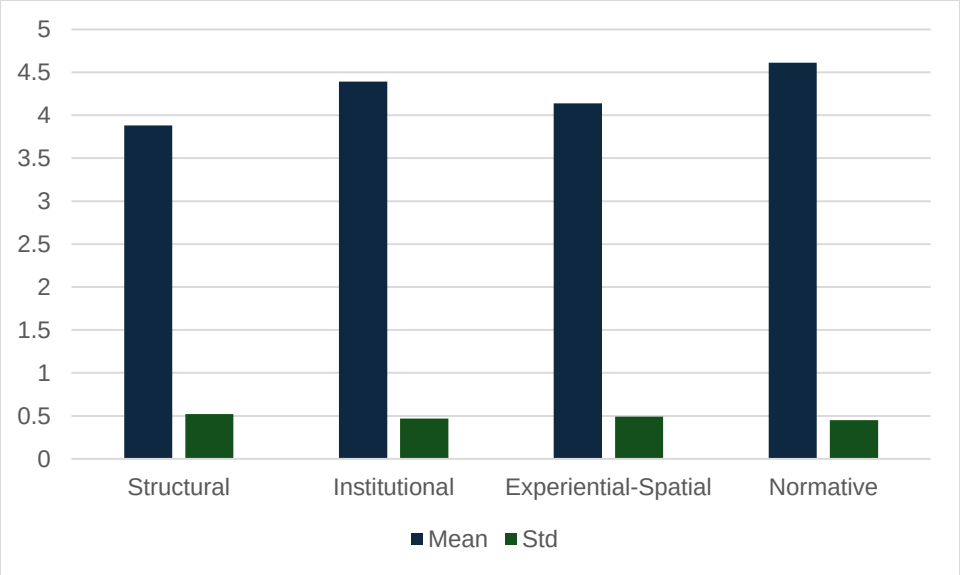

Figure 1. Comparative Mean Scores of the Four Analytical Levels

This figure presents the comparative mean scores of the four analytical levels (structural, institutional, experiential–spatial, and normative) based on expert evaluations. The results indicate a higher prioritization of normative and institutional dimensions in contemporary urban regeneration analysis

Following that, the institutional level (mean = 4.39) ranked second, highlighting the importance of governance, institutional structures, executive capacity, and decision-making mechanisms in the success or failure of regeneration projects.

The experiential–spatial level (mean = 4.14) ranked third, reflecting significant attention to lived experiences, quality of public spaces, place identity, and social interactions.

Finally, the structural level (mean = 3.88) scored the lowest, although still above average, indicating that macroeconomic and political forces, power relations, and macro policies remain influential in urban regeneration analysis.

This pattern indicates that the four-level framework demonstrates both theoretical and empirical coherence and legitimacy, serving as a valid tool for structuring urban regeneration studies.

This figure presents the comparative mean scores of the four analytical levels (structural, institutional, experiential–spatial, and normative) based on expert evaluations. The results indicate higher prioritization of normative and institutional dimensions in contemporary urban regeneration analysis.

Figure 2 compares mean scores of the four analytical levels across different expert groups. While all groups assign high importance to normative and institutional levels, notable differences appear in structural and experiential–spatial levels. Academic respondents emphasize experiential–spatial dimensions more, while policy-oriented experts give slightly higher importance to institutional factors. These differences indicate that professional background shapes analytical priorities and reinforce the need for a multi-level framework capable of accommodating diverse perspectives.

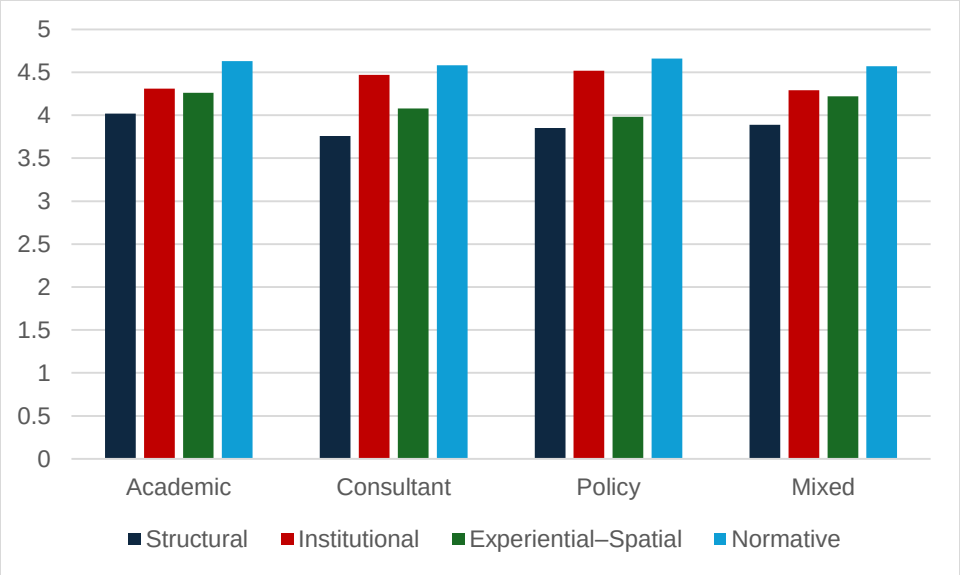

Figure 2. Comparison of Mean Scores of Analytical Levels across Expert Groups

Differences among expert groups highlight the contextual and positional nature of urban regeneration analysis. Such variations do not indicate theoretical inconsistency but rather show that the four-level framework enables complementary, non-reductive interpretations.

Figure 3 illustrates the distribution of responses across the four analytical levels. At the structural level, most responses are in categories 4 (agree) and 5 (strongly agree), although a significant number of neutral responses indicate some disagreement on the importance of macroeconomic and political forces.

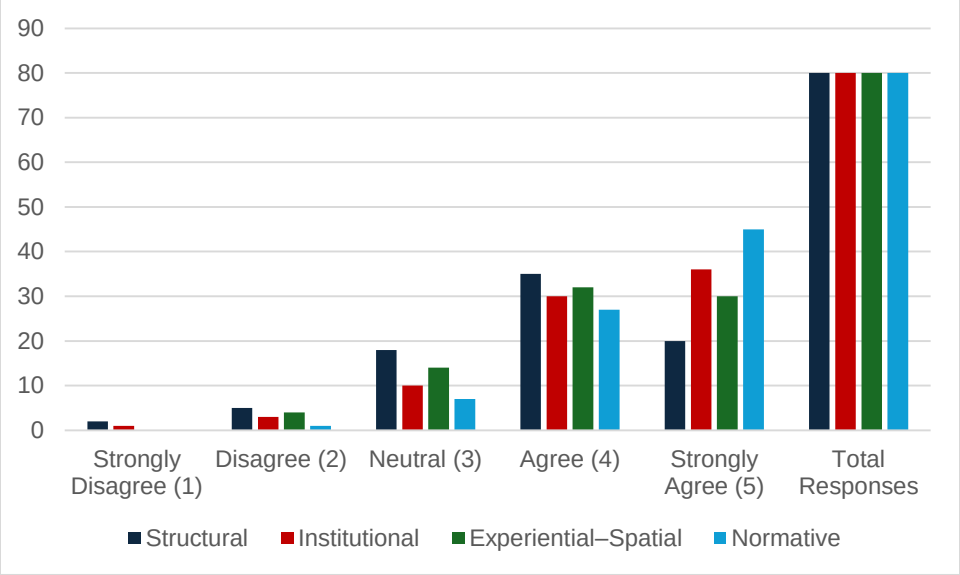

Figure 3. Distribution of Expert Responses on the Four Analytical Levels

At the institutional level, nearly all responses fall in categories 4 and 5, showing high agreement on governance, institutional capacity, and decision-making mechanisms.

The experiential–spatial level shows relative consensus with a primary concentration in 4 and 5, though some neutral or disagreeing responses highlight individual differences in perceptions of lived experience and public space quality.

Finally, the normative level, concentrated in categories 4 and 5, demonstrates the highest consensus, confirming that value-based criteria, including spatial justice and inclusivity, are the most important considerations in regeneration analysis.

The distribution in Figure 3 indicates that the four-level framework is reliable both in terms of mean scores and expert consensus. The greatest agreement is observed at normative and institutional levels, emphasizing the importance of value-based criteria and institutional capacity.

The experiential–spatial level shows slightly more dispersion, reflecting differences in perceptions of lived experiences and social interactions, while the structural level has the lowest consensus but still receives support from the majority of experts.

These results confirm that the four-level framework can accommodate diverse perspectives and provide a comprehensive, coherent analytical tool for urban regeneration research.

Figure 4 shows the mean profile of the four analytical levels of the proposed framework. As seen, the normative level has the highest mean (4.61) and the structural level the lowest (3.88). The institutional level (mean = 4.39) and experiential–spatial level (mean = 4.14) occupy intermediate positions.

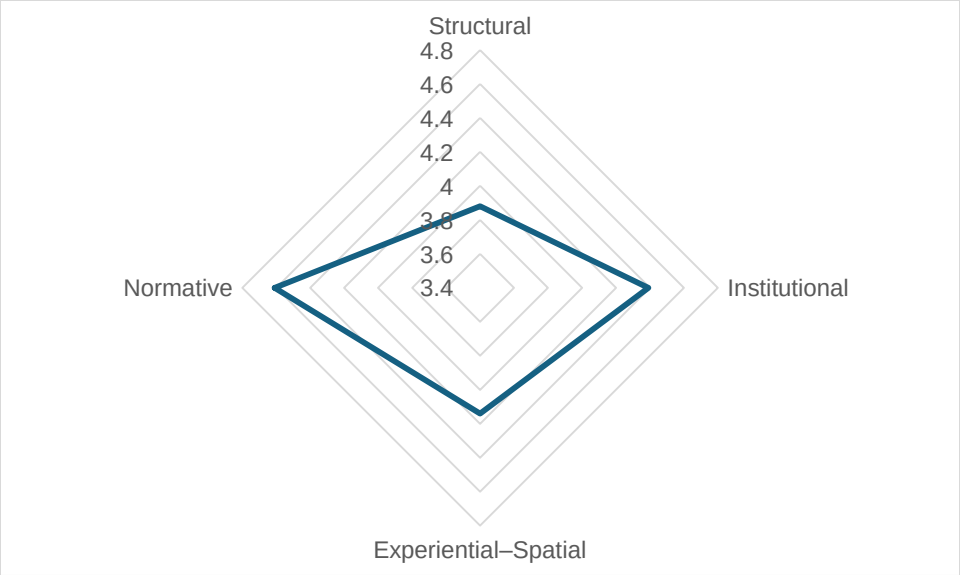

Figure 4. Radar Chart of Mean Scores for the Four Analytical Levels

The radar chart clearly illustrates that the four-level framework is not only theoretically balanced but also validated by expert perspectives. The chart emphasizes value-based and institutional criteria while positioning structural and experiential–spatial levels as complementary.

The radar chart provides a visual, integrated representation of the four-level framework. High focus on normative and institutional levels, combined with balanced attention to experiential–spatial and structural levels, shows that the framework can integrate diverse expert perspectives in urban regeneration analysis.

This pattern underscores the framework's flexibility and applicability in practical and research analyses, serving as a standard tool for organizing urban regeneration studies.

Data Analysis and Interpretation

Analysis of data from 80 expert respondents indicates a significant pattern in the importance of the four analytical levels. The normative level (mean = 4.61) holds the highest value, emphasizing that value-based criteria—such as spatial justice, inclusivity, sustainability, and cultural values—are recognized as fundamental principles in urban regeneration analysis. This suggests that even amidst structural and institutional complexities, normative principles serve as key indicators for evaluating project and policy success.

The institutional level (mean = 4.39) ranks second, highlighting the critical role of governance, stakeholder coordination, and executive capacity. Dispersion analysis shows that government experts and professional consultants emphasize this level more than others, reflecting their practical experience and direct involvement in decision-making and project management in urban regeneration.

The experiential–spatial (mean = 4.14) and structural levels (mean = 3.88) indicate relative convergence, although minor differences appear in priority across groups. Academic and mixed groups focus more on experiential–spatial dimensions, public space quality, place identity, and social interactions, whereas consultant and policy groups emphasize institutional and structural aspects. This pattern shows that professional background and practical experience shape analytical priorities and reinforces the need for a multi-level analytical framework capable of integrating diverse perspectives.

Overall, this analysis emphasizes that the proposed four-level framework is not only theoretically balanced but also empirically adaptable to practical realities, illustrating the interaction among structural, institutional, experiential–spatial, and normative dimensions. It provides researchers and decision-makers with a coherent, reliable tool for analyzing and organizing urban regeneration projects.

Conclusion and Future Work

The four-level framework presented in this study enables comprehensive and multi-dimensional analysis of urban regeneration. Empirical analysis based on 80 experts' opinions showed that normative and institutional levels hold the greatest importance in evaluating urban regeneration, while experiential–spatial and structural levels follow, indicating relative convergence of perspectives.

Key findings include:

1. **Enhanced analytical coherence:** The framework allows simultaneous examination of structural, institutional, experiential–spatial, and normative dimensions, preventing analytical level confusion.
2. **Facilitation of complementary theoretical perspectives:** The framework integrates diverse theoretical and empirical viewpoints into a unified analysis, aiding researchers in explaining urban regeneration complexities.
3. **Applicability in policy and projects:** Due to its adaptability to practical realities and attention to institutional capacity, lived experience, and normative criteria, the framework can serve as a standard tool for project design and evaluation in urban regeneration.

These findings indicate that the four-level framework possesses both theoretical and empirical legitimacy and reliability, enabling researchers and urban decision-makers to provide comprehensive, precise, and practical analyses.

Future Work

Considering the limitations of this study and the variability of urban regeneration contexts across different cities and countries, future research is recommended to focus on:

1. **Testing the framework in real projects:** Implementation in practical projects using field data and comparative project analysis.
2. **Comparative analysis across cities and countries:** Evaluating the framework in diverse urban contexts and governance systems to assess generalizability and adaptability.
3. **Combining quantitative and qualitative methods:** Using surveys, interviews, and field data for more precise analysis and multi-faceted framework validation.
4. **Long-term impact assessment:** Analyzing the effects of the four-level framework on policy-making, project management, and socio-spatial cohesion over time.
5. **Developing visual and analytical tools:** Creating charts, indices, and dashboards to improve understanding and application of the framework in decision-making and urban education.

These actions can deepen and expand the four-level framework and strengthen its role as a standard and reliable tool in urban research and policymaking.

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