

Exploring the Challenges of Culture-Led Urban Regeneration in District 16, Tehran: A Qualitative Analysis

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Abstract

Culture-led urban regeneration is recognized as an effective approach for revitalizing dilapidated urban fabrics; however, its implementation within the complex context of metropolises faces multidimensional challenges. This study aims to analyze and identify the challenges of culture-led urban regeneration in District 16 of Tehran from the perspective of urban experts and policymakers. Conducted through a qualitative approach, field data were collected via in-depth interviews and analyzed using thematic analysis. The validity and reliability of the research were verified using Lincoln and Guba's four evaluative criteria, alongside Holsti's agreement coefficient, which was calculated at 0.860.860.86. The findings revealed that barriers to culture-led development in this district can be categorized into three main themes: first, the "political economy of space and the failure of collaborative governance," stemming from institutional fragmentation, the dominance of a speculative approach, and poor integrated policymaking; second, the "reproduction of spatial inequality and socio-cultural alienation," manifested through the risk of gentrification, the commodification of heritage, and the erosion of social capital; and third, "morphological decline and the collapse of the urban framework," which includes severe physical constraints, fine-grained plots, spatial fragmentation caused by major arterial roads, and infrastructure poverty. Consequently, achieving the goals of culture-led regeneration in metropolitan dilapidated fabrics necessitates a transition from reductionist and physical-centric interventions toward institutional capacity building, the realization of genuine citizen participation, and balanced infrastructure development relying on endogenous local assets. These findings provide significant practical implications for urban planners and managers.

Keywords: Culture-led urban regeneration, Distressed urban fabric, Qualitative analysis, Spatial inequality, Tehran District 16, Urban governance.

1. Introduction

In recent decades, rapid urbanization and haphazard spatial sprawl have confronted global metropolises with twin challenges: peripheral spatial expansion and the progressive decline of historic central and industrial cores (Mahmoudzadeh et al., 2025; Wen et al., 2025). In response to these spatial crises, urban regeneration has emerged as a foundational cornerstone in contemporary planning scholarship. Within this discourse, culture-led urban regeneration has garnered significant scholarly and policy attention as an integrated, holistic strategy—transcending purely physical interventions—to revitalize distressed urban fabrics, brownfields, and post-industrial landscapes (Earley, 2025). By leveraging cultural assets and local identity, this paradigm seeks to catalyze economic revitalization and bolster social cohesion in deteriorating neighborhoods; nonetheless, empirical evidence worldwide reveals that if disembedded from localized contexts, such interventions can precipitate unintended structural outcomes, including gentrification and the forced displacement of indigenous residents (Oliveira, 2025).

Theoretical and empirical trajectories addressing the complexities of urban regeneration have substantially evolved, bifurcating into two primary methodological strands. The first strand predominantly mobilizes quantitative frameworks, Multi-Criteria Decision-Making (MCDM) methods, and geospatial technologies—such as Remote Sensing (RS)—to delineate, prioritize underutilized lands, and evaluate the physical outputs of spatial projects (Barzegar et al., 2024; Dell’Anna et al., 2024; Wang et al., 2024; Yu et al., 2025). Conversely, the second strand redirects analytical attention toward institutional architectures, the political economy of space, grassroots civic participation, and multi-level governance dynamics (Khani et al., 2024; Doroudi et al., 2022; Kurt-Özman & Park, 2025; Tasan-Kok et al., 2025). Despite the breadth of this literature and the presence of insightful empirical models across Iranian cities (Heidari et al., 2024; Rahnema et al., 2024; Ghorbani et al., 2024; Mohammadi Rasti et al., 2025), a critical review reveals that unpacking the intricate nexus of institutional, social, and spatial barriers in culture-led schemes still necessitates a more profound investigation.

The analytical shortfall of prior scholarship can be traced across both methodological and epistemological planes. First, most regeneration studies in developing contexts have remained confined to reductionist, ex-post project evaluations or the deductive application of predetermined theoretical constructs. Such deductive trajectories frequently fail to capture the latent institutional dynamics and systemic entanglement of barriers embedded within complex local environments. Second, existing literature rarely offers a nuanced analytical representation of the relational web between the "political economy of space," "socio-spatial conflicts," and "morphological decay" in brownfields and post-industrial sites. To address this analytical gap, the present study adopts an inductive qualitative approach to formulate the multifaceted impediments of culture-led regeneration not as isolated, linear parameters, but as an interconnected assemblage of intersecting barriers derived directly from the analytical and lived insights of local planning experts. This paradigm shift—from a macro-prescriptive stance to a micro-contextual reading—represents the fundamental intellectual contribution of this inquiry in closing the existing knowledge gap.

Addressing this problem assumes heightened urgency within the metropolitan fabric of Tehran, which is deeply characterized by the dialectic tension between peripheral sprawl and the progressive blight of its southern and central quarters. District 16 of Tehran Municipality, epitomizing a distressed urban fabric imbued with a working-class legacy, represents a quintessential node where morphological crises and socio-spatial inequalities intersect. According to the planning documentation of the Tehran Detailed Plan (District 16 Detailed Plan, 2007) and national census data (Statistical Center of Iran, 2016), this district suffers from severe urban poverty concentration, acute infrastructural obsolescence, and acute environmental deterioration. Conversely, the presence of expansive brownfields and decommissioned industrial complexes—such as the historic Tehran Grain Silo and obsolete manufacturing sites—constitutes a fertile latent potential for culture-led regeneration, yet presents formidable institutional and operational hurdles for urban planners and policymakers.

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Accordingly, the present study is framed to explore and decipher the primary challenges underpinning culture-led urban regeneration in District 16 of Tehran through the critical lens of urban planners and domain specialists. Utilizing a qualitative research design based on "thematic analysis," this paper seeks to address the central research question: "What are the fundamental

challenges impeding culture-led urban regeneration in District 16 of Tehran?" To prevent conceptual conflation and ensure an analytical trajectory, this overarching inquiry is deconstructed into three distinct sub-questions: (1) institutional and political-economy barriers, (2) socio-cultural predicaments, and (3) morphological and spatial constraints.

2. Literature Review

A critical review of recent literature on urban regeneration reflects an epistemological and paradigmatic transition from positivist physical interventions toward multifaceted frameworks grounded in the political economy of space and spatial justice. Nonetheless, a close reading of this scholarship reveals that, rather than theoretical convergence, the domain is characterized by three distinct epistemological streams, each capturing only a fragmented dimension of regeneration's multifaceted complexity. The first stream adopts a technocratic and reductionist orientation, primarily focusing on smart identification and spatial decision-making. Mobilizing quantitative frameworks, machine learning algorithms, and Geographic Information Systems (GIS), these studies have sought to optimize resource allocation and prioritize underutilized, dysfunctional urban lands (Dell'Anna et al., 2024; Wang et al., 2024; Wen et al., 2025; Yu et al., 2025). Within Iranian domestic literature, this stream has harnessed geospatial technologies such as Remote Sensing (RS) to emphasize curbing outward peripheral sprawl and averting heavy-handed "bulldozer" clearance interventions across distressed urban fabrics (Barzegar et al., 2024; Mahmoudzadeh et al., 2025). Although this techno-spatial approach shares common ground with the present inquiry in its analytical focus on inefficient zones and brownfield sites, its fundamental flaw lies in reducing the multilayered ontological dimensions of regeneration to quantitative algorithms and purely spatial parameters. By conceptualizing post-industrial spaces merely as geometric coordinate grids, these studies remain blind to lived dynamics, tacit frictions, and latent structural barriers—a void that the present inquiry addresses in its third sub-question (morphological-spatial constraints) by transcending algorithmic abstractions in favor of a qualitative decoding of expert perceptions regarding the built fabric of District 16.

In response to the shortcomings of physical-centric paradigms, the second stream of scholarship has cultivated a critical discourse centered on socio-economic repercussions and spatial justice. Quantitative and longitudinal evaluations within this domain have demonstrated that regeneration initiatives do not inherently attenuate socio-spatial polarization and remain highly path-dependent and context-contingent (Albanese et al., 2020; Zhao et al., 2025). More recent inquiries in this body of literature have directed their critical gaze toward the adverse externalities of renewal, such as gentrification, the forced displacement of indigenous inhabitants, and identity contestations in culture-led initiatives (Earley, 2025; Oliveira, 2025). Resonating with this stance, domestic studies corroborate that in catalyst urban projects, cultural and symbolic dimensions are far more decisive than ephemeral, short-term economic gains (Mir-Ebrahimi, 2021; Vahedi-Yeganeh et al., 2022). This intellectual trajectory provides a robust conceptual footing for formulating the "socio-cultural challenges" (the second sub-question) in this study. However, while existing literature predominantly adopts an ex-post perspective to evaluate the consequences of implemented

projects, the present study advances an ex-ante, anticipatory approach to untangle latent identity frictions and potential grassroots resistances prior to the uncritical imposition of developmental blueprints.

At a macro-structural level, the third stream examines regeneration through the lens of political economy, actor constellations, and institutional mechanisms. Within this discourse, incentive-based policy frameworks, institutional trust, and collaborative governance are posited as foundational cornerstones of successful redevelopment (Park et al., 2025; Yang et al., 2025); conversely, authoritarian, top-down, and commodified approaches are critiqued as primary drivers of project failure (Kurt-Özman & Tasan-Kok, 2025). Iranian urban scholarship has likewise consistently validated the absence of integrated urban management and structural deficits in participatory mechanisms as fundamental bottlenecks of urban governance (Doroudi et al., 2022; Khani et al., 2024). Furthermore, recent foresight and futures-oriented studies indicate that institutional parameters and master regulatory frameworks act as the prime drivers shaping regeneration scenarios across Iranian cities (Heidari et al., 2024; Mohammadi Rasti et al., 2025). Engaging with this institutional dialectic constitutes the analytical foundation of the present study in addressing its first sub-question (institutional and political-economy barriers), elucidating how conflicting institutional rationalities and agency interests undermine the operationalization of culture-led regeneration.

A comparative and critical synthesis of these three research streams reveals that, while both international and domestic scholarship offer rich insights into spatial modeling, ex-post social impact assessments, and macro-institutional foresight, a profound epistemological and methodological gap persists. Prior inquiries have largely tended to deduce indicators from macro-level theoretical constructs in a "deductive" manner, subsequently measuring them through compartmentalized, single-dimensional lenses (focusing exclusively on physical, social, or macro-institutional facets). The fundamental void lies in the scarcity of "qualitative and inductive" inquiries capable of capturing the simultaneous, complex nexus of these three dimensions within a specific, severely distressed, and post-industrial setting—such as District 16 of Tehran—under the rubric of "culture-led urban regeneration." Addressing this inadequacy and aligning with its core objectives, this study consciously avoids the pre-emptive imposition of a priori variables. Instead, it seeks to inductively and exploratorily extract the triadic challenges (institutional, social, and spatial) from the lived expertise and operational insights of practitioners, thereby constructing a conceptual model of culture-led regeneration barriers through an iterative, dialectical dialogue between text (literature) and context (the local urban fabric).

2.1. Theoretical Framework

Extending the critical critique of physical-reductionist approaches to urban regeneration, the theoretical framework of this study is grounded in the premise that culture-led urban regeneration in developing metropolises cannot simply be reduced to cosmetic interventions in built form and townscape aesthetics. Rather, it must be conceptualized as a structural process that simultaneously

articulates the production of space with the reproduction of collective identities, power geometries, and economic flows (Evans, 2005; Zukin, 1995). Accordingly, the theoretical apparatus of the present inquiry is forged through a critical synthesis of two foundational paradigms: the Cultural Political Economy (CPE) of Space and Collaborative Spatial Governance. Rather than resulting in an eclectic, mechanical aggregation of disparate notions—such as the right to the city, the production of space, the rent gap, the entrepreneurial city, the ladder of participation, and morphological doctrines—this synthesis embeds them within a coherent dual logic. In this formulation, inquiries into the mechanics of capital accumulation and value capture in culture-led projects are dialectically intertwined with structural questions regarding the institutional architectures and decision-making networks that enable or constrain these interventions (Harvey, 1989, 2008, 2012; Healey, 1997, 2006).

At the primary level, the Cultural Political Economy approach contextualizes culture-led regeneration within the critical tradition of the production of space and the right to the city (Harvey, 2008; Lefebvre, 1991; Purcell, 2002). Within this theoretical lens, culture-oriented schemes within distressed and post-industrial fabrics, rather than responding to the lived spatialities and needs of marginalized demographics, predominantly function to serve the logic of accumulation through symbolic valorization and land rent appreciation. The analytical constructs of the rent gap and the entrepreneurial city illuminate how municipal authorities and urban growth coalitions mobilize cultural branding and flagship mega-projects to capture the disparity between actual capitalized ground rent and potential land value, thereby steering extralocal capital toward historically disinvested zones (Harvey, 1989; Smith, 1996). In such an urban landscape, phenomena such as gentrification and the socio-spatial exclusion of indigenous residents emerge not as contingent anomalies, but as structural imperatives of the commodification of space and culture (García, 2004; Miles & Paddison, 2005; Wyly, 2008). Within the theoretical model of this study, empirical themes pertaining to identity contestations, perceived spatial injustice, residential tenure insecurity, and disenfranchisement are coded under this CPE logic and analyzed as the socio-spatial externalities of culture-led agendas in District 16 of Tehran.

At the secondary level, the theory of Collaborative Spatial Governance provides a systematic lens to map institutional strata, actor constellations, and participatory mechanisms within culture-led regeneration trajectories (Healey, 1997, 2006; Sørensen & Torfing, 2007). Moving beyond the conceptualization of governance as a rigid hierarchy of centralized mandates, this paradigm accentuates the networked distribution of power, institutional capacity-building, and the formation of resilient coalitions across state, market, and civil society actors. Foundational constructs such as the ladder of citizen participation (Arnstein, 1969) are deployed here not as autonomous frameworks, but as heuristic instruments to operationalize the authenticity and depth of citizen engagement in regeneration decision-making. Consequently, empirical codes indexing decision-making monopolies, opacity in financial mechanisms, cross-sectoral institutional fragmentation, and deficits in grassroots participatory arenas are synthesized through the prism of collaborative spatial governance. In other words, institutional and managerial parameters are not treated as

isolated administrative variables, but as mechanisms that either mitigate or reproduce the systemic inequalities generated by the cultural political economy of regeneration.

Bridging these two theoretical axes, the literature on urban morphology and spatial legibility serves a complementary function in deciphering the physical-spatial manifestations of culture-led regeneration challenges (Jacobs, 1961; Lynch, 1960). This scholarship demonstrates that grafting cultural amenities onto deteriorated, dysfunctional fabrics without rigorous alignment with parcel granularity (urban grain), circulation networks, public realm quality, and morphological contiguity precipitates isolated "cultural enclaves," functional disruptions, and deepened spatial fragmentation (Orueta & Fainstein, 2008). Within the proposed theoretical model, these morphological dimensions are understood in dialectical relation to political economy and collaborative governance; spatial-physical form is conceptualized not as a neutral backdrop, but as the material terrain where the imperatives of capital accumulation, institutional governance, and grassroots resistance concretize. Hence, themes related to morphological discontinuity, spatial severance, deficits in inclusive public spaces, and the infrastructural incongruence of cultural installations are analyzed as physical bottlenecks within the broader network of regeneration barriers in District 16.

Consequently, the proposed theoretical framework conceptualizes culture-led regeneration in District 16 of Tehran as an asymmetric interplay across three structural axes of friction: institutional friction, socio-identity contestation, and morphological-infrastructural constraints. Institutional friction stems from the chasm between the entrepreneurial city logic and the institutional capacity of collaborative governance to mediate conflicting stakeholder rationalities; socio-identity contestation intensifies when culture is instrumentalized as an imported commodity for spatial marketing at the expense of the right to the city and the lived experience of local communities; and morphological-infrastructural constraints manifest when cultural interventions are superimposed without adequate consideration of circulation capacity, spatial legibility, and fabric continuity. By orchestrating the concepts of the right to the city, the rent gap, the production of space, the entrepreneurial city, the ladder of participation, and urban morphology into an integrative CPE–Collaborative Governance nexus, this model circumvents conceptual fragmentation, establishing an integrated thematic foundation to rigorously decipher the operational barriers to culture-led regeneration across post-industrial urban fabrics.

Analysis of Culture-Led Urban Regeneration Challenges in District 16 of Tehran

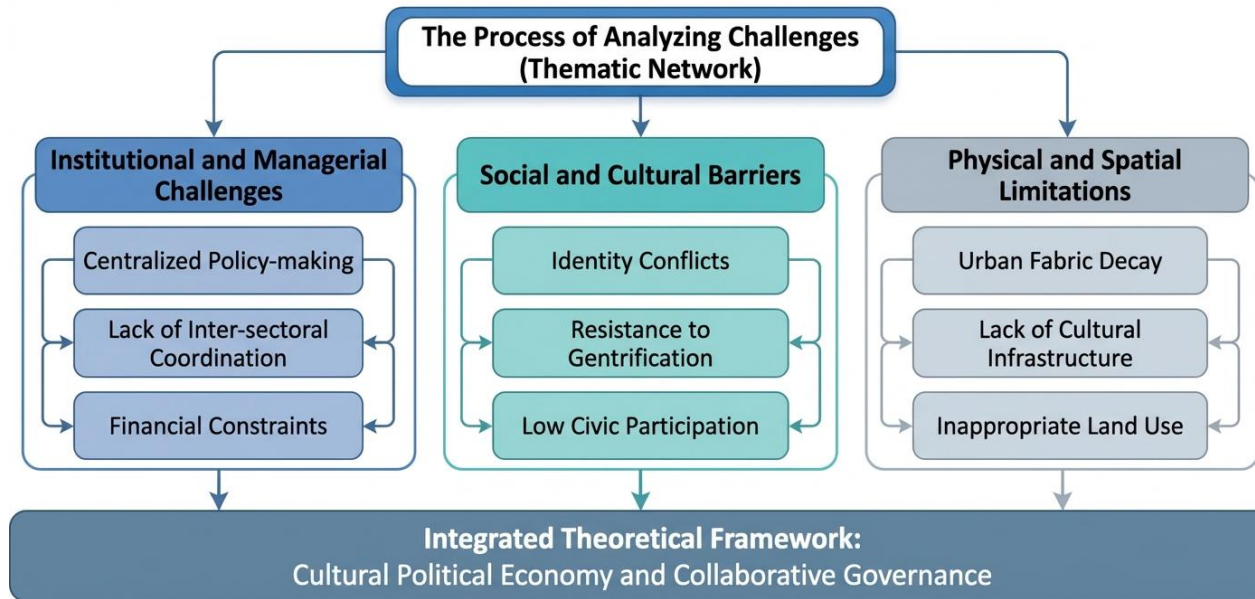


Fig 1. Conceptual model

3. Research Methodology

3.1. Research Design

Framed within the metaphor of the Research Onion (Saunders et al., 2019), the epistemological and ontological foundations of this study are situated within the interpretivist-constructivist paradigm. The research embraces an inductive approach informed by the doctrine of theoretical sensitivity (Strauss & Corbin, 1998; Charmaz, 2006). This implies that while the thematic architecture was inductively generated from the empirical field data, the final conceptualization, nomenclature, and synthesis of themes were dialectically aligned with established theoretical discourses—notably the cultural political economy of space and urban morphology. Methodologically, the study adopts a qualitative mono-method design and, in terms of its temporal horizon, is structured as a cross-sectional inquiry conducted between August 2025 and March 2026 (Mordad to Esfand 1404). This qualitative-exploratory framework was deployed because unraveling the latent layers of socio-spatial phenomena, power asymmetries, and institutional dynamics in urban regeneration cannot be achieved through the reductionism of quantitative modeling; rather, it necessitates a deep, context-sensitive, and interpretive excavation of lived experiences and institutional rationalities.

The target population comprised key urban policy-makers, executive directors, and multidisciplinary specialists directly engaged with regeneration trajectories in District 16 of Tehran. The inclusion criteria were strictly established as having a minimum of five years of

specialized professional tenure and direct, verifiable involvement in the design, management, or execution of culture-led regeneration initiatives in this specific district.

Employing a combined purposive and snowball (chain-referral) sampling strategy, a total of 30 prospective key informants were initially identified and invited. Of this initial cohort, 10 candidates were excluded due to schedule constraints and executive time limitations, and 6 declined participations. Consequently, the final sample consisted of $N = 14$ key informants. To ensure institutional heterogeneity and systematically control for confirmation bias (epistemic bias across institutional silos), the sampling matrix was deliberately stratified across three distinct governance tiers:

1. Municipal Executive Tier: 7 senior directors, urban planners, and municipal experts from District 16 Municipality;
2. Metropolitan Policy & Renewal Tier: 3 senior specialists from the Tehran Urban Renovation Organization (TURO);
3. Grassroots & Facilitation Tier: 4 key practitioners, including urban planners, social development specialists, and directorship staff from Local Development Facilitation Offices across District 16.

The termination of data collection was governed strictly by the logic of theoretical saturation (Glaser & Strauss, 1967) through the systematic, concurrent monitoring of the code-generation matrix. Primary thematic saturation was achieved by the 12th interview. To confirm empirical robustness, interviews 13 and 14 were conducted; the attainment of 100% data replication confirmed that no novel open codes or emergent sub-themes surfaced, signifying that the conceptual space was exhaustively mapped.

Table 1. Demographic and Professional Profile of the Research Participants

Code	Gender	Educational Background	Implementing Organization	Professional Experience in Urban Regeneration Projects	Experience in Urban Regeneration Projects in District 16
Interview 1	Male	M.Sc. in Urban Planning	District Municipality	17 years	9 years
Interview 2	Female	M.Sc. in Urban Planning	Local Development Offices	14 years	6 years
Interview 3	Male	M.Sc. in Urban Design	Urban Regeneration Organization	28 years	23 years
Interview 4	Male	M.Sc. in Sociology	District Municipality	9 years	5 years
Interview 5	Female	M.Sc. in Civil Engineering	District Municipality	23 years	14 years
Interview 6	Male	M.Sc. in Sociology	District Municipality	15 years	12 years
Interview 7	Female	Ph.D. in Sociology	Local Development Offices	30 years	19 years
Interview 8	Male	Ph.D. in Urban Planning	Urban Regeneration Organization	14 years	8 years
Interview 9	Female	Ph.D. in Urban Planning	Local Development Offices	19 years	8 years
Interview 10	Male	Ph.D. in Architecture	District Municipality	12 years	12 years

Interview 11	Male	Ph.D. in Urban Planning	Urban Regeneration Organization	19 years	15 years
Interview 12	Female	M.Sc. in Urban Planning	District Municipality	17 years	13 years
Interview 13	Male	Ph.D. in Sociology	Local Development Offices	26 years	21 years
Interview 14	Male	M.Sc. in Urban Management	District Municipality	11 years	7 years

The primary empirical data collection instrument comprised in-depth, semi-structured interviews. The thematic axes and inquiry protocols were inductively formulated based on the theoretical and empirical gaps identified in the literature review. Prior to each session, written informed consent was formally obtained from all participants. The interviews were digitally audio-recorded and subsequently transcribed verbatim to construct the foundational qualitative textual corpus for rigorous coding. Throughout the interview process, reflexive and responsive probing (follow-up) questions were dynamically deployed alongside the primary guiding questions to excavate latent socio-spatial layers and institutional rationalities.

Table 2. Interview Guide Protocol, Thematic Axes, and Expected Analytical Outputs

Interview Theme and Guiding Questions	Expected Output (for Theme Extraction)
Theme 1: Institutional and Governance Challenges • How would you assess the level of intersectoral coordination among the municipality, cultural heritage authorities, and other relevant institutions in District 16? • What legal and policy-related barriers constrain the implementation of culture-led regeneration projects? • What challenges do the financing mechanisms for these projects face?	Identification and extraction of codes related to administrative bureaucracy, top-down policymaking, the absence of integrated urban governance, limited capacity to attract private investment, and institutional fragmentation.
Theme 2: Social and Cultural Barriers • Given the distinctive industrial and working-class identity of District 16, how does the local community respond to urban regeneration projects? • What are the principal barriers to securing active citizen participation in this area? • Is there a perceived risk of identity conflicts or gentrification within the existing urban fabric?	Identification of codes related to civic resistance, local distrust, identity gaps, fear of displacement among long-term residents, and weak social capital in accommodating new models of regeneration.
Theme 3: Physical–Spatial Constraints • What constraints do the deterioration and high density of the urban fabric in District 16 impose on the development of cultural spaces? • How adequate are basic infrastructure systems—including accessibility, parking, and utilities—for supporting this approach? • How do incompatible land uses, particularly abandoned industrial areas, affect this process?	Elucidation of codes related to the shortage of development-suitable land, functional and traffic-related disruptions, inadequate physical infrastructure, and the spatial isolation of target areas.
Theme 4: Synthesis and Thematic Network Construction • From the perspective of a policymaker or expert, which challenge would you identify as the central and root constraint? • How do these physical, institutional, and social barriers interact with and influence one another?	Identification of causal and reciprocal relationships among concepts, recognition of the overarching theme, and generation of the conceptual basis required to graphically construct the thematic network in the relevant software.

To ensure the methodological rigor and quality of the qualitative inquiry, the foundational criteria of trustworthiness proposed by Lincoln and Guba (1985) were systematically operationalized across four dimensions:

1. Credibility (Internal Validity): Established through two complementary techniques: member checking and peer debriefing. Transcripts, open codes, and primary analytical categorizations were returned to four key informants for respondent validation and theoretical alignment. Furthermore, the emergent conceptual model was subjected to peer debriefing by two independent urban design scholars (external to the research team) to adjust and refine thematic nuances.
2. Transferability (External Validity / Generalizability): Addressed by providing a thick, rich description of the socio-spatial, morphological, and institutional context of District 16, coupled with an explicit, transparent delineation of the entire methodological pathway.
3. Dependability (Reliability): Guaranteed through the establishment of a comprehensive audit trail and the rigorous documentation of reflexive analytical field memos, enabling external auditors to track the trajectory of analytical and interpretive decisions.
4. Confirmability (Objectivity): Ensured by subjecting the interview transcripts to an independent external qualitative coder. To assess inter-coder reliability, Holsti's reliability coefficient was computed:

The resultant score of 0.86 indicates a robust degree of inter-subjective agreement. Minor coding divergences and discrepancies were resolved through two structured consensus-building deliberative sessions until unanimous thematic agreement was achieved.

Data Analysis Protocol: Reflexive Thematic Analysis

The qualitative textual corpus was analyzed using the six-phase Thematic Analysis framework established by Braun and Clarke (2006). Rather than a rigid linear process, the analysis unfolded as an iterative, reflexive, and non-linear trajectory comprising:

1. Deep data familiarization through repetitive and critical reading of the verbatim interview transcripts;
2. Generating initial open codes directly from empirical statements;
3. Searching for candidate themes by clustering conceptually aligned codes;
4. Reviewing and refining candidate themes against the entire dataset to ensure internal homogeneity and external heterogeneity;
5. Defining and naming themes to articulate the essence of each conceptual node and constructing the thematic network; and
6. Producing the scholarly report contextualized within urban theory.

Notably, all coding procedures, conceptual clustering, and codebook iterations were conducted manually to preserve direct interpretive immersion and nuanced sensitivity toward the contextual, socio-spatial idioms of the study area.

3.2. Case Study Context

District 16 of Tehran Municipality, situated within the capital's southern spatial sector, represents one of the city's historic working-class districts. Historically emerging beyond the extramural boundaries of the 19th-century Naseri fortifications (hesar-e Naseri) along the historic Tehran–Rey trade corridor, the district's spatial armature and urban morphology have been profoundly structured—and fragmented—by macro-infrastructure barriers. Prominent linear interventions, notably the trans-territorial north–south railway corridor and the east–west Besat Expressway, have partitioned the area into isolated enclaves, exacerbating acute intra-district spatial disparities and physical severance.

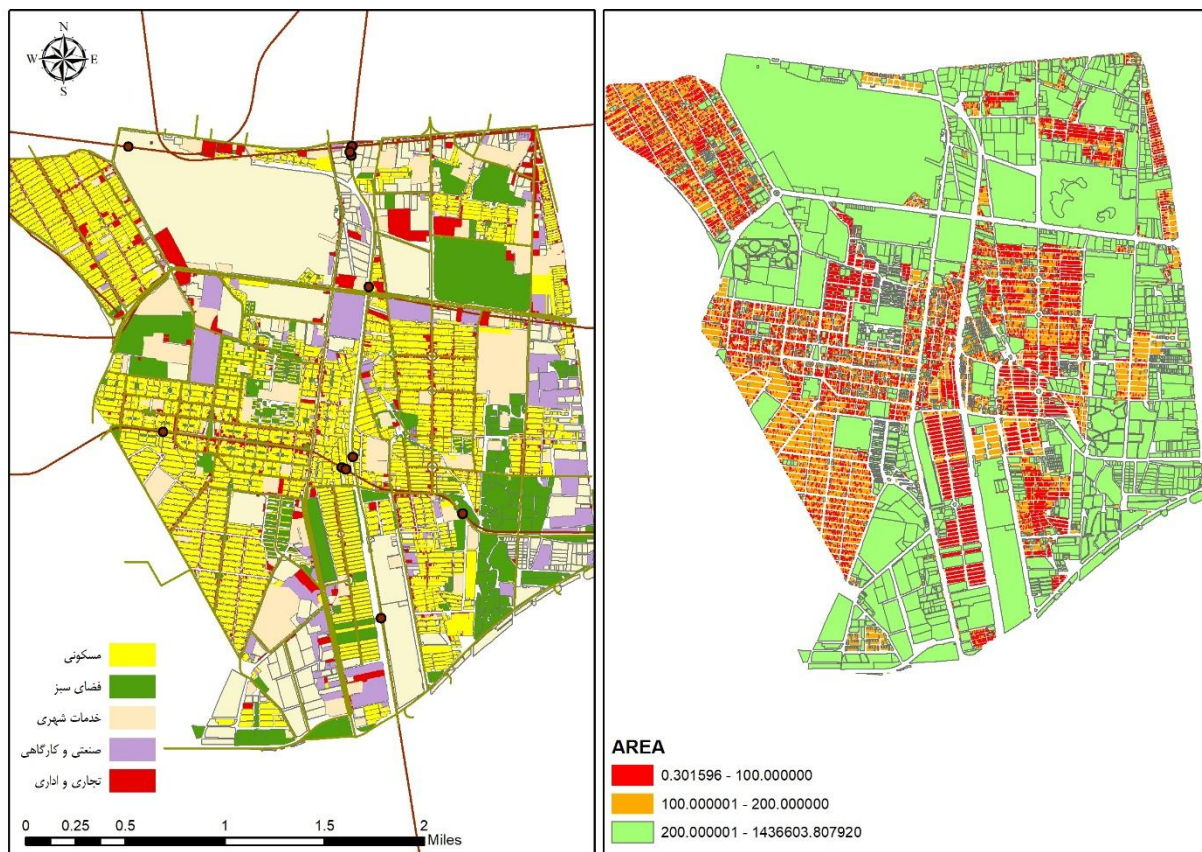


Fig 2. Case Study Context: District 16 of Tehran Municipality

From a historical perspective, the district originally served as a strategic locus for the early installation of Tehran's modern industrial and transit infrastructure—including the Tehran Central Railway Station, the Grain Silo, the municipal slaughterhouse, the Chitsazi textile mills, and traditional brick kilns. The spatial clustering of these industrial drivers catalyzed the emergence of

early peri-urban settlements and historic working-class neighborhoods such as Javadiyeh, Nazi Abad, Khazaneh, and Bagh-e Azari. Today, District 16 is characterized by a hyper-dense, fine-grained urban morphology: approximately 60% of residential parcels occupy footprints under 100 m², and nearly 90% are smaller than 150 m². The confluence of hyper-parcelization, severely substandard rights-of-way (under 6 meters in width), and widespread structural vulnerability has resulted in approximately 85% of the district's urban blocks being categorized as distressed/dilapidated urban fabric (baft-e farsudeh), with net residential densities ranging between 728 and 1,000 persons per hectare. Furthermore, the presence of macro-scale, supra-local facilities—such as the South Intercity Bus Terminal and major logistics and freight hubs—subjects the district to pervasive functional friction, chronic traffic congestion, and negative environmental externalities.

The purposive selection of District 16 as the empirical locus for interrogating the challenges of culture-led urban regeneration is directly grounded in its structural alignment with the research's triadic analytical pillars (socio-cultural, spatial-morphological, and institutional-governance dimensions):

1. Alignment with Socio-Cultural and Identity Dimensions (Industrial Heritage vs. Vernacular Identity): District 16 possesses a deeply rooted working-class identity coupled with rich mid-20th-century industrial heritage (exemplified by the Tehran Grain Silo and decommissioned manufacturing plants). While these assets theoretically render the district prime terrain for cultural adaptive reuse and culture-led interventions, the acute friction between embedded local identities and speculative development agendas elevates the risks of exclusionary gentrification, socio-spatial displacement, and grassroots civic resistance. This makes the empirical investigation of socio-cultural barriers exceptionally pertinent in this fabric.
2. Severity of Spatial-Morphological and Infrastructural Constraints (Acute Fabric Decay and Amenity Deficits): Over 71% of the district's population (approximately 207,357 inhabitants) resides within severely decayed, fine-grained urban blocks. The co-occurrence of the triple dimensions of urban distress (narrow and impassable alleyways, high parcel fragmentation, and structural instability), alongside an acute per capita deficit of public amenities (green infrastructure and cultural spaces) and the enclaving of residential quarters within high-speed transit arteries (space of flows), generates formidable spatial obstacles to the accommodation of new cultural infrastructure (District 16 Detailed Master Plan, 2007).
3. Complexity of Institutional and Governance Bottlenecks (Conflicting Jurisdictions and Multi-Scalar Frictions): The juxtaposition of large-scale supra-local land uses (railway marshalling yards, the South Terminal, logistics warehousing) against high-density residential fabrics transforms District 16 into a contested arena among metropolitan authorities, sectoral central ministries, and local municipal management. This fragmented property regime and overlapping governance hierarchy offer an ideal empirical ground to examine institutional silos, administrative inertia, and

the absence of horizontal and vertical cross-sectoral coordination in culture-led regeneration projects.

4. Findings

The qualitative empirical data in this study were analyzed through a systematic Thematic Analysis (TA) approach grounded in the foundational six-phase framework established by Braun and Clarke (2006). This methodology was operationalized to systematically identify, analyze, and interpret recurring patterns of meaning (themes) across the qualitative dataset, thereby conceptualizing the multi-scalar and multifaceted bottlenecks impeding culture-led urban regeneration in District 16 of Tehran. The iterative procedural execution of these phases was conducted as follows:

Phase 1: Familiarization with the Data

To achieve profound data immersion, the primary researcher conducted iterative, in-depth readings of the verbatim transcripts derived from the semi-structured interviews with urban scholars, municipal policymakers, and local practitioners. During this initial stage, reflexive memoing and exploratory margin annotations were systematically recorded. These annotations captured recurring discursive patterns, latent semantic structures, and salient insights pertaining to the institutional-structural, socio-cultural, and morphological-spatial barriers embedded within the study area.

Phase 2: Generating Initial Codes

The generation of initial codes was conducted inductively through a rigorous, line-by-line coding protocol. Meaningful text segments (units of analysis) that either explicitly articulated or latently signified urban regeneration challenges were extracted and assigned distinct conceptual labels (open codes). Through this systematic data reduction process, a total of 67 open codes—such as "labyrinthine administrative bureaucracy in permit issuance" and "acute structural-spatial vulnerability"—were extracted from the raw empirical material.

Table ۳. Initial Coding Using Direct Quotations

Direct Quotation	Initial Codes	Supporting Theories
Interview 2: "In Iran, we still confuse urban regeneration with mass apartment construction by large-scale developers. Unless our approach shifts from a focus on the physical fabric to a focus on people, we will remain stuck in the same pattern." Interview 4: "Local development plans have been prepared, yet we still do not know what District 16 is expected to become over the next ten years. Is it supposed to function as a logistics hub for Tehran, or as a quiet residential district? This lack of a clear vision has resulted in fragmented, short-term, and contradictory decisions." Interview 9: "Urban management in this area, rather than addressing the root causes of problems, is primarily concerned with showcase and quick-return	Top-down policymaking in defining cultural projects; short-termism among urban managers; frequent managerial turnover at the district level; lack of an integrated and coordinated cultural vision for the district; dominance of a purely physical and construction-oriented approach within the municipality's professional bodies; absence of enforceable mechanisms for implementing local development plans; sectoral fragmentation among different municipal departments	Communicative Planning Theory (Habermas; Healey) Good Urban Governance (UN-Habitat) The Production of Social Space (Lefebvre)

projects. Constructing a bridge or paving a street generates better media coverage than addressing urban decay.”	(cultural-social affairs, urban planning, and traffic).	
Interview 1: “For a simple redevelopment project, we have to obtain separate permits from the municipality, the Water and Wastewater Company, the Gas Company, and the Cultural Heritage authorities, and their requirements sometimes contradict one another. It is a complete island of institutional miscoordination.” Interview 2: “We use the detailed plan as the basis for our decisions, but the railway company has its own development plan, which does not fit within our planning framework at all. It is as if two governments were ruling over the same territory.” Interview 8: “The main problem in District 16 is the absence of integrated urban management. Every institution plays by its own rules, and ultimately it is the physical fabric of the district that becomes fragmented.”	Institutional conflicts of interest between the municipality and the railway company over land acquisition; overlapping responsibilities between the Urban Regeneration Organization and District 16 Municipality; lack of coordination among public utility agencies in infrastructure provision; legal ambiguity surrounding ownership of large-scale and abandoned industrial lands.	Urban Regime Theory (Stone) Multilevel Governance and Institutional Capacity Building (Healey)
Interview 3: “There are successful international models, such as local participation bonds and project investment funds, through which citizens can invest in projects in their own neighborhoods and share in the returns. But no such mechanism has been established here.” Interview 6: “The experience of cooperatives has shown that people are willing to participate financially, but instead of recognizing and facilitating this potential, the municipality often treats it as a competitor or a source of complications.”	Dominance of revenue-generating and speculative interests over the cultural objectives of regeneration; weak micro-financing mechanisms for neighborhood-based projects; absence of institutionalized public-private partnership (PPP) platforms; limited willingness of the private sector to invest in deprived and deteriorated areas of southern Tehran; inadequate allocation of cultural budgets relative to the needs of District 16; weak supportive legislation and tax incentives for cultural businesses.	Political Economy of Space and the Entrepreneurial City (David Harvey) Rent Gap Theory (Neil Smith: explaining the limited private-sector investment in deteriorated urban areas)
Interview 3: “These offices are highly effective at the grassroots scale and can activate social capital, but within the broader structure of urban power, they have been defined as marginal actors with limited authority.” Interview 7: “The municipality seeks sustainable revenue through the sale of development rights and density bonuses, developers seek maximum profit through construction, and residents seek open space and quality of life. These three interests are inherently in conflict.” Interview 11: “In every project, the municipality has the final say. From design and implementation to financing and operation, everything depends on the final decision of the mayor or the deputy for urban planning.”	Complex and time-consuming bureaucracy in issuing land-use change permits; failure to recognize the institutional capacity of local development offices and facilitators; resistance within the bureaucratic structure to devolving responsibility and decision-making authority to residents; weak supervision of contractors implementing catalytic development projects; absence of an integrated database of the district’s cultural and industrial assets; inadequate assessment of social impacts prior to project implementation.	Collaborative Planning Theory (Healey)
Interview 1: “The arrival of a new middle class in the area because of relatively affordable housing prices may gradually alter the social and cultural fabric of the neighborhoods and increase demand for higher-quality services.” Interview 14: “Younger people are leaving, and in their place migrant	Risk of gentrification and demographic transformation; risk of involuntary displacement and the out-migration of long-term and low-income residents; residents’ concerns	Gentrification and Displacement Theory (Ruth Glass; Neil Smith)

workers from other cities are arriving. This change in the demographic composition has affected neighborhood solidarity and security.”	about losing informal and small-scale local livelihoods; intensification of perceived inequalities in access to newly introduced cultural amenities; externally imposed transformation of authentic and everyday neighborhood lifestyles; mismatch between proposed cultural services and residents’ purchasing power.	
Interview 4: “The identities of residents across the neighborhoods of the district are fragmented. The identity of Javadieh is different from that of Naziabad. There is no common glue or shared narrative that connects everyone.” Interview 5: “We want to transform the silos and kilns into luxurious cultural spaces, overlooking the fact that the district’s working-class heritage is incompatible with these imported models. This commodification of nostalgia creates intergenerational conflict over the use of these new spaces.” Interview 10: “Urban management has never sought to draw on traditional social networks such as mosques, religious associations, and local community elders to assess the needs for cultural projects; everything is dictated from above.”	Identity conflict between the district’s working-class heritage and imported/luxury cultural models; reduction of culture to spectacular and short-lived events; neglect of ethnic diversity and migrant subcultures present in District 16; commodification of industrial heritage and local nostalgia; absence of locally grounded narratives in the design of new cultural spaces; intergenerational tensions over the use and acceptance of new public spaces.	Commodification of Heritage (Hewison) Fourth Places (Patricia Albrecht: intergenerational tensions in social interactions) Place Identity and Sense of Place (Relph; Yi-Fu Tuan)
Interview 9: “In neighborhoods such as Javadieh and Khazaneh, people have heard nothing but promises of redevelopment for decades. This historical distrust has reduced the urban management approach to participation to little more than a symbolic gesture, with the decorative presence of young people or women in meetings.” Interview 12: “When regeneration plans are dictated entirely from the top down and residents are not meaningfully involved in needs assessment and design, the natural outcome is the emergence of latent civic resistance. People do not cooperate with imposed interventions because they feel that these projects do not represent their concerns or way of life.”	Latent civic resistance among residents to imposed interventions by urban management; historical distrust among residents of neighborhoods such as Javadieh and Khazaneh toward municipal promises; weak sense of attachment and local identity in some severely deteriorated urban blocks; fear of the securitization of regenerated public spaces; weak social capital and interpersonal trust in marginalized neighborhoods; feelings of social isolation in neighborhoods enclosed by major transport corridors.	Social Capital Theory (Putnam; Bourdieu) Critique of the Securitization of Space (Mike Davis)
Interview 13: “The active presence of religious institutions in these neighborhoods strengthens solidarity and local cooperation. These mosques and religious centers are important not only as places of worship, but also as networks of social and moral support within the neighborhood. Yet they have little role or influence in urban decision-making.” Interview 14: “In the regeneration literature, we talk about community-based development, but in practice, residents of District 16 have no role in defining cultural projects. When needs assessment is conducted by consultants from outside the neighborhood, the citizen’s presence in decision-making is reduced to merely endorsing	Lack of meaningful citizen participation during needs assessment and design stages; failure to utilize traditional social networks (mosques, religious associations, community elders); weak cultural empowerment and civic education programs prior to implementation; tokenistic participation of local women and youth.	Ladder of Citizen Participation (Sherry Arnstein) Community-Based Local Development

predetermined decisions, and this approach effectively undermines the idea of the right to the city in these areas.”

Interview 1: “We are dealing with blocks in which more than 60% of the plots are under 100 square meters and population densities are extremely high. This severe plot fragmentation, combined with the impermeability of streets narrower than 6 meters, has effectively locked any physical intervention intended to introduce cultural uses.” Interview 5: “The fragmentation of plots has turned any attempt at land assembly into a prolonged and almost impossible process. For a 500-square-meter project, we have to negotiate with 30 different owners.”

High degree of residential plot fragmentation (more than 60% below 100 m²); severe urban impermeability and a high prevalence of streets narrower than 6 m; acute structural deterioration and risk of building collapse in surrounding properties; very high population density (more than 700 persons per hectare in some blocks); land-acquisition constraints in plots with multiple heirs or abandoned ownership.

Urban Morphology (Conzen) Life Between Buildings (Jan Gehl: critique of undesirable urban density and its implications for public-space quality)

Interview 8: “District 16 has been fragmented by railway lines and Be’sat Highway. This physical discontinuity, together with the traffic bottlenecks created by the South Terminal and freight businesses, has damaged the spatial structure of the neighborhoods and produced social isolation.” Interview 11: “Warehouses, garages, and metalworking workshops located in the heart of the residential fabric have generated persistent noise and air pollution. Here, the boundary between work and everyday life has disappeared.”

Severe spatial fragmentation and discontinuity caused by railway infrastructure; physical segregation of neighborhoods due to barriers such as Be’sat Highway; functional incompatibility between the South Bus Terminal and the residential character of the area; traffic bottlenecks and pollution generated by freight companies and stone-cutting facilities; disproportionate and oversized scale of catalytic development projects relative to the capacity of local streets.

Splintering Urbanism (Graham & Marvin) Space Syntax (Hillier: weaknesses in permeability and spatial integration)

Interview 3: “The per-capita provision of recreational spaces and standard plazas in the district is almost zero. Instead of green spaces and high-quality public realms, we are confronted with an abundance of urban residual and defensible spaces and abandoned kilns with high potential for crime, which have undermined spatial legibility.” Interview 4: “An ugly and lifeless urban image erodes the sense of attachment and reinforces indifference toward public space. Such an environment encourages vandalism.” Interview 9: “Visual disorder in façades, poor-quality materials, awkward additions, and dull colors have eroded the visual identity of the district and transformed it into a depressing landscape.”

Severe deficits in the per-capita provision of cultural facilities and standard recreational spaces; critical shortage of neighborhood-scale public green space; abundance of abandoned and poorly supervised urban spaces with high crime potential; severe shortage of parking for cultural uses that attract substantial numbers of visitors; absence of standard plazas and gathering spaces; very poor quality of street furniture, public realm, and sidewalks; severe deterioration of utility infrastructure (water, electricity, and stormwater drainage networks); environmental contamination inherited from abandoned industrial facilities; inadequate access to clean public transport stations (Metro) into the deeper parts of deteriorated neighborhoods; disruption of the

Spatial Justice (Edward Soja) Broken Windows Theory (Wilson & Kelling) Defensible Space (Oscar Newman) The Image of the City (Kevin Lynch)

historical spatial structure and neighborhood morphology through previous piecemeal interventions; rapid deterioration of buildings with industrial architectural heritage value (such as silos and kilns); lack of spatial-structural integration among the six subdistricts of the area; poor spatial legibility and weak urban semiotics/signage within the district's organic urban fabrics.

Phase 3: Searching for Themes

Following the initial open coding, an inductive clustering protocol was operationalized to aggregate codes exhibiting semantic proximity and conceptual convergence. Codes coalescing around a shared latent axis were systematically organized into 13 sub-themes. The analytical objective of this phase was to identify macro-level patterns and higher-order structural relationships within the dataset. For instance, discrete first-order codes denoting administrative miscoordination, conflicting institutional mandates, and juridical-tenorial ambiguities were synthesized under the overarching sub-theme of "Institutional Fragmentation and Inter-Sectoral Incoherence."

Phase 4: Reviewing and Refining Themes

In this phase, to establish rigorous conceptual perimeters and prevent thematic overlap, Patton's (1990) dual criteria of internal homogeneity and external heterogeneity were systematically applied. Methodologically, this necessitated that data units within each individual theme demonstrated high conceptual coherence and logical consistency (internal homogeneity), while the boundaries between discrete themes remained clearly demarcated and mutually exclusive (external heterogeneity). The candidate thematic architecture was critically cross-evaluated against both the extracted coded extracts and the entire qualitative corpus. Consequently, thematic boundaries were recalibrated; specifically, three initial sub-themes—namely "Deficiency in Public Service Per Capita," "Infrastructural Decay Crisis," and "Spatial Legibility Deterioration"—were consolidated into a single, cohesive sub-theme titled "Public Realm Deterioration, Infrastructural Deficit, and the Decline of Landscape Legibility" due to their profound causal entanglement and spatial reciprocity. This structural refinement yielded a parsimonious, non-redundant thematic network characterized by sharp analytical delineation (Table 4).

Table 4. Thematic Network Extracted from the Interviews

Main Theme	Refined Theme	Subtheme	Codes
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Institutional Fragmentation and the Dominance of a Physical–Speculative Approach	Structural Centralization and Weak Integrated Policymaking (<i>emphasis on top-down approaches and the dominance of a physical-development perspective in local development plans</i>)	Weak Governance and the Absence of Integrated Policymaking	Top-down policymaking in the formulation of cultural projects; short-term orientation of urban managers and frequent managerial turnover at the district level; absence of an integrated and coordinated cultural vision for the district; dominance of a purely physical and construction-oriented approach within the municipality's professional staff; lack of enforceable mechanisms for implementing local development plans; sectoral fragmentation among municipal departments (cultural-social affairs, urban planning, and traffic).
—	Institutional Fragmentation and the Crisis of Horizontal/Vertical Coordination (<i>conflicts of interest among major stakeholders—municipality, railway authorities, and government—and the absence of legal-administrative integration</i>)	Organizational Fragmentation and Intersectoral Misalignment	Institutional conflicts of interest between the municipality and the railway company over land acquisition; overlapping responsibilities between the Urban Regeneration Organization and District 16 Municipality; lack of coordination among public service agencies in infrastructure provision; legal ambiguity surrounding ownership of large-scale and abandoned industrial lands.
—	The Hegemony of the Speculative Urban Economy and Fragile Financing Structures (<i>a critique of the dominance of revenue-oriented neoliberal logic in cultural regeneration and the absence of institutionalized PPP mechanisms</i>)	Inefficiency of the Financing System and the Dominance of Speculative Interests	Dominance of revenue-generating and speculative interests over the cultural objectives of regeneration; weak micro-financing mechanisms for neighborhood-based projects; absence of institutionalized public–private partnership (PPP) platforms; limited willingness of the private sector to invest in deteriorated areas of southern Tehran; inadequate allocation of cultural budgets relative to the needs of District 16; weak development of supportive legislation and tax incentives for cultural businesses.
—	Bureaucratic Rigidity and Blocked Local Capacity Building (<i>bureaucratic resistance to decentralization and the marginalization of intermediary institutions such as facilitation offices</i>)	Bureaucratic Barriers and Weak Institutional Capacity for Participation	Complex and time-consuming bureaucracy in issuing land-use change permits; failure to recognize the institutional capacity of local development offices and facilitators; resistance within the bureaucratic structure to devolving responsibilities to residents; weak supervision of contractors implementing catalytic development projects; absence of an integrated database of the district's cultural and industrial assets; weak assessment of social impacts prior to project implementation.
Social Marginalization, Identity Reductionism, and the Erosion of Participation	Threat of Gentrification and Socio-Spatial Exclusion (<i>risk of involuntary displacement of the working class and mismatch between new services and the economic capacity of local residents</i>)	Adverse Socioeconomic Consequences and the Risk of Gentrification	Risk of gentrification and demographic change; risk of involuntary displacement and the out-migration of long-term and low-income residents; residents' concerns about losing informal and small-scale local livelihoods; intensification of perceived inequalities in access to newly introduced cultural amenities; externally imposed transformation of authentic and everyday neighborhood lifestyles; mismatch

			between proposed cultural services and residents' economic capacity.
—	Commodification of Heritage and Identity Reductionism (<i>reduction of the district's indigenous and working-class culture to spectacular and upscale events intended for consumption beyond the local community</i>)	Identity Crisis and the Reductionism/Commodification of Cultural Heritage	Identity conflict between the district's working-class heritage and imported/luxury cultural models; reduction of culture to spectacular and short-lived events; neglect of ethnic diversity and migrant subcultures present in District 16; commodification of industrial heritage and local nostalgia; absence of locally grounded narratives in the design of new cultural spaces; intergenerational tensions over the use and acceptance of new public spaces.
—	Erosion of Social Capital and the Crisis of Institutional Trust (<i>the accumulation of historical distrust toward urban management, civic resistance, and the weakening of neighborhood ties</i>)	Erosion of Social Capital and Institutional Distrust	Latent civic resistance among residents to imposed interventions by urban management; historical distrust among residents of neighborhoods such as Javadieh and Khazaneh toward municipal promises; weak sense of attachment and local identity in some severely deteriorated urban blocks; fear of the securitization of regenerated public spaces; weak social capital and interpersonal trust in marginalized neighborhoods; feelings of social isolation in neighborhoods enclosed by major transport corridors.
—	Reduction of Participation to Tokenistic Practices (<i>absence of a substantive ladder of participation and neglect of traditional local networks in decision-making processes</i>)	Tokenistic Participation and Marginalization of Local Networks	Lack of meaningful citizen participation during needs assessment and design stages; failure to utilize traditional social networks (mosques, religious associations, and community elders); weak cultural empowerment and civic education programs prior to implementation; dominance of a tokenistic approach to the participation of local women and youth.
Morphological Lock-in, Infrastructure Deficits, and Spatial Disintegration	Morphological Transformation and Structural Instability of the Urban Fabric (<i>severe plot fragmentation, non-standard density, and safety crises acting as physical barriers to project implementation</i>)	Morphological Constraints and Acute Physical Instability	High degree of residential plot fragmentation (more than 60% of plots below 100 m ²); severe urban impermeability and prevalence of streets narrower than 6 m; acute structural instability and risk of building collapse in surrounding properties; very high population density (more than 700 persons per hectare in some blocks); land-acquisition constraints in plots involving multiple heirs or abandoned ownership.
—	Spatial Discontinuity and Functional-Scale Mismatch (<i>the islandization of neighborhoods by major thoroughfares and railway lines, and the intrusion of metropolitan-scale functions such as the South Terminal into the local urban context</i>)	Spatial Fragmentation and Functional-Scale Conflicts	Severe spatial fragmentation and discontinuity caused by railway infrastructure; physical segregation of neighborhoods due to barriers such as Be'sat Highway; functional incompatibility between the South Bus Terminal and the residential character of the area; traffic bottlenecks and pollution generated by freight businesses and stone-cutting facilities; disproportionate and oversized scale of catalytic development projects relative to the capacity of local streets.
—	Decline of the Public Realm, Infrastructure Deficits, and the	Deficient Service Provision and	Severe deficits in the per-capita provision of cultural facilities and standard recreational

Erosion of Spatial Legibility (reflecting comprehensive deficiencies in service provision, deteriorated infrastructure, degradation of industrial heritage landmarks such as silos, and the proliferation of defensible and abandoned urban spaces)	Declining Public-Realm Quality; Infrastructure Deterioration and Environmental Challenges; Erosion of Spatial Legibility and Degradation of the Historic-Industrial Urban Structure	spaces; critical shortage of neighborhood-scale public green space; abundance of abandoned and poorly supervised urban spaces with high crime potential; severe shortage of parking for cultural uses that attract substantial numbers of visitors; absence of standard plazas and gathering spaces; very poor quality of street furniture, public realm, and sidewalks; severe deterioration of utility infrastructure (water, electricity, and stormwater drainage networks); environmental contamination inherited from abandoned industrial facilities; inadequate access to clean public transport stations (Metro) into the deeper parts of deteriorated neighborhoods; disruption of the historical spatial structure and neighborhood morphology through previous piecemeal interventions; rapid deterioration of buildings with industrial architectural heritage value (such as silos and kilns); lack of spatial-structural integration among the six subdistricts of the district; poor spatial legibility and weak urban semiotics within the district's organic urban fabrics.
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Phase 5: Defining and Naming Themes: Theoretical Conceptualization of Regeneration Bottlenecks

The fifth phase of the thematic analysis transcends empirical description to achieve higher-order theoretical abstraction. The nomenclature and conceptual framing of the overarching themes were not arbitrary semantic choices; rather, each theme encapsulates the dialectical nexus between the grounded empirical codes derived from District 16 and foundational literature in urban sociology, the cultural political economy of space, and urban morphology. In what follows, the three overarching themes, their theoretical underpinnings, and their constitutive empirical codes are analytically articulated.

Phase 6: Analytical Narrative of Emergent Themes

Below, the multifaceted challenges confronting culture-led regeneration in District 16 are unpacked across the three overarching themes, drawing directly upon the lived experiences and critical perceptions of key informants.

Overarching Theme 1: Institutional Fragmentation and the Hegemony of a Physicalist-Speculative Paradigm

Empirical findings demonstrate that actors perceive the prevailing municipal governance framework as being dominated by a speculative, revenue-generating orientation coupled with severe institutional discordance. Informants underscored that local development master plans

remain structurally unenforceable, while decision-making processes operate through top-down conduits that systematically bypass endogenous community capacities.

Within the sub-theme of "Institutional Fragmentation," conflicting rationalities among powerful institutional stakeholders are salient. As one urban planning expert highlighted:

"While we rely on the detailed urban plan [Comprehensive plan] as our statutory baseline, the National Railway Company enforces its own autonomous development schemes... It is virtually as if two sovereign states are governing a single spatial jurisdiction." [P2]

This institutional dissonance, combined with "Bureaucratic Sclerosis," has paralyzed local capacity-building initiatives. Informants argue that the municipal apparatus overwhelmingly prioritizes short-term, visually tangible physical interventions over long-term, socio-cultural infrastructure:

"Rather than addressing structural, root-cause socio-spatial deficits, urban management chases showcase, flagship projects. Erecting a monumental pedestrian bridge yields far greater political and media traction than methodically unknotting systemic neighborhood distress." [P9]

Furthermore, the prevailing institutional regime fails to cultivate an enabling environment for genuine public-private-people partnerships (4P), an impasse critically examined in the discussion section through the lens of urban rent-seeking and the political economy of space.

Overarching Theme 2: Social Marginalization, Identity Reductionism, and Participatory Atrophy

This overarching theme encapsulates the socio-spatial ramifications of top-down physical interventions on the residents' lifeworld (Lebenswelt). The qualitative synthesis reveals that physical transformations executed in the absence of robust social impact assessments have induced acute spatial alienation, displacement anxieties, and disenfranchisement among indigenous populations.

Under the sub-theme of "Identity Reductionism," informants stressed that the adaptive reuse of industrial heritage into exclusionary, gentrified cultural amenities is profoundly discordant with the district's working-class ethos. A local community expert noted:

"We attempt to convert industrial grain silos into high-end, bourgeois cultural venues, oblivious to the fact that the district's industrial-proletarian heritage cannot absorb such imported cultural consumption models. This fundamentally sparks intergenerational alienation and cultural clash." [P5]

Concurrently, within the dimension of "Participatory Atrophy," the cumulative buildup of historical skepticism toward state-led renewal schemes has precipitated a form of tacit civil resistance and civic withdrawal. As one expert observed:

"In historical quarters such as Javadiyeh, residents have weathered decades of unfulfilled institutional promises. This entrenched mistrust has degraded municipal participatory overtures into mere tokenistic rituals." [P12]

Participants asserted that the institutional neglect of organic, traditional social networks—such as mosque-centered civic associations and local bazaar networks—has effectively peripheralized citizens from upstream decision-making, demonstrating an urgent need to reconfigure citizen engagement along the higher rungs of Arnstein's ladder of participation.

Overarching Theme 3: Morphological Lock-in, Infrastructural Deprivation, and Spatial Severance

Empirical accounts indicate that the physical-spatial layout and morphology of District 16 operate as an ontological barrier to culture-led regeneration, highlighting the structural constraints imposed by spatial determinism.

Within the sub-theme of "Morphological Constraints," extreme grain fragmentation and hyper-dense micro-parcellation were identified as fatal bottlenecks. An urban design specialist elaborated:

"We are dealing with residential urban blocks where over 60% of individual plots are under 100\ m². This hyper-fractionated cadaster and high plot coverage fundamentally deadlock any spatial reconfiguration required to inject cultural and public realm amenities." [P1]

Simultaneously, "Spatial Severance," generated by major infrastructural incisions—predominantly the expansive national railway network and the Besat Expressway corridor—has violently ruptured the integrity of neighborhood urban armatures. Informants argued that this infrastructural fracturing, exacerbated by "Public Realm Decay," has spawned derelict and indefensible urban spaces:

"District 16 is dismembered by railway tracks... This spatial severance, combined with the encroachment of sprawling freight and logistics hubs, has dismantled the morphological armature of our neighborhoods, inducing severe territorial stigmatization and social isolation." [P8]

In the view of participants, profound visual clutter, perceptual illegibility, and acute deficits in cultural amenities have dismantled place attachment (topophilia), cultivating an inhospitable spatial matrix for endogenous cultural flourishing.

5. Discussion

The findings of this study on the challenges of culture-led urban regeneration in District 16 of Tehran provide empirical evidence that supports and extends the study's theoretical framework, which integrates cultural political economy and collaborative governance. The findings demonstrate how physical, institutional, and social challenges operate through an interconnected network to impede the implementation of urban regeneration projects. Based on the interview data,

the morphological decline and physical deterioration of the urban fabric—the third major theme identified in the findings—should not be understood merely as a spatial pathology; rather, they represent the material manifestation of bureaucratic rigidity among responsible institutions and speculative approaches to urban management. Within the geographical context of District 16, characterized by severe plot fragmentation and complex land-tenure conditions, including endowed (*waqf*) and informal contractual properties, Harvey's (1989) entrepreneurial city logic loses much of its explanatory and practical effectiveness. In other words, the empirical evidence indicates that the absence of transparent ownership documentation and barriers to financing have prevented the rent gap (Smith, 1996) from becoming activated in its classical form. Consequently, private investors have refrained from intervening in the urban fabric because of the high level of risk, leaving the district trapped in a self-reinforcing cycle of stagnation and physical deterioration. These findings clearly establish the relevance of the relationship between physical-spatial constraints and institutional challenges—including centralized policymaking and the lack of intersectoral coordination—within the study's theoretical model.

Compared with the existing literature, the findings of this study establish a clear epistemological and analytical distinction from positivist approaches and quantitatively oriented modelling frameworks (Han et al., 2022; Wang et al., 2024; Mahmoudzadeh et al., 1404). These studies generally emphasize the optimal allocation of resources and the spatial identification of underutilized or inefficient lands. In contrast, drawing on the concept of the production of space (Lefebvre, 1991), this study argues that any form of spatial modelling remains ineffective in practice when institutional coordination is absent and powerful stakeholders are divided by competing interests, as illustrated by the conflict between the municipality and the railway company in District 16. At the same time, the findings of this study show strong convergence with recent critical scholarship on the social consequences of regeneration and the emergence of identity conflicts (Earley, 2025; Im & Kang, 2025; Oliveira, 2025). The causal explanation of this convergence within the socio-spatial context of southern Tehran suggests that physical interventions undertaken under the banner of cultural development can, through the commodification of space (Zukin, 1995), generate fears of involuntary displacement and gentrification among low-income groups. The qualitative evidence further confirms that reducing citizen participation to merely symbolic procedures and leaving residents on the lower rungs of the ladder of participation (Arnstein, 1969) contributes to the erosion of social capital and the emergence of latent forms of civic resistance. Consistent with the findings of Bai et al. (2026) and Kurt-Özman and Tasan-Kok (2025), these forms of resistance demonstrate that the absence of collaborative planning (Healey, 2006), combined with the dominance of top-down approaches to integrated urban management, constitutes a critical vulnerability of culture-led approaches in deprived and deteriorated urban fabrics.

From the perspective of the study's theoretical and methodological contributions, this research moves beyond deductive approaches and broad-scale indicator-based assessments by addressing an existing gap in the literature on regeneration in developing metropolises through a qualitative

and inductive approach. The study's principal theoretical contribution is an interpretive model demonstrating how morphological decline and the breakdown of the urban structure, drawing on the works of Jacobs (1961) and Lynch (1960), are dialectically intertwined with the political economy of space and the residents' socio-cultural alienation. This analytical perspective advances understanding of the mechanisms underlying the stagnation of urban regeneration and demonstrates that physical quality is not an independent variable; rather, the built environment constitutes the material field in which institutional frictions and identity-based conflicts become spatially and physically manifested.

Finally, the present analysis is subject to several limitations that should be considered when interpreting the transferability of its findings. The study relies primarily on the perspectives of experts, facilitators, and urban policymakers; consequently, the data do not necessarily capture the full range of lived and everyday experiences of marginalized groups and local residents. Moreover, the focus on a single geographical context characterized by distinctive and complex patterns of land ownership—District 16—requires caution in directly transferring the findings to other historical or marginalized urban fabrics. Accordingly, future research should employ urban ethnographic approaches and conduct in-depth interviews with marginalized and underrepresented groups to investigate the micro-dynamics of local resistance to regeneration schemes and citizens' lived experiences of spatial inequality across other metropolitan areas of Iran.

6. Conclusion

A practical response to the main research question indicates that the failure of culture-led regeneration policies in District 16 of Tehran stems from the dialectical intersection of three fundamental and structural challenges, which can be directly understood within the framework of the political economy of space and the absence of collaborative governance. At the macro level, the predominance of the speculative logic of the entrepreneurial city, coupled with intense conflicts of interest among powerful institutional actors—most notably the municipality and the railway authorities—has resulted in bureaucratic rigidity and obstructed the formation of durable coalitions. This institutional fragmentation, intersecting with reductionist approaches to identity, has reduced the district's authentic working-class heritage to an imported and performative commodity. By deliberately overlooking indigenous social networks, these interventions have generated not social cohesion, but latent forms of civic resistance and growing fears of displacement and gentrification. At the same time, these intertwined institutional and social crises encounter the district's morphological realities and culminate in a physical impasse, where severe plot fragmentation, deep spatial discontinuities generated by major through-routes, and critical deficiencies in basic infrastructure have eroded the capacity of the existing urban fabric to absorb further interventions. Ultimately, the fundamental problem underlying these interventions is the reduction of the complex and multidimensional process of space production to showcase-oriented physical projects that, in the absence of resolving property-rights conflicts and containing rent-gap dynamics, effectively reproduce and deepen existing spatial inequalities within the area.

A practical response to the main research question concerning the fundamental challenges of culture-led urban regeneration in District 16 of Tehran demonstrates that the failure of these projects is not an abstract phenomenon, but rather the tangible outcome of the intersection of three empirically documented challenges in the research field: bureaucratic fragmentation, socio-local exclusion, and acute physical constraints. The empirical findings indicate that culture-led intervention in this urban fabric has effectively stalled due to the predominance of a speculative approach and the lack of operational integration among the responsible institutions, particularly conflicts of interest among the municipality, the Endowment Organization, and the railway company. The absence of transparent ownership documentation for a substantial proportion of plots, together with legal disputes over vacant and underutilized land, has significantly increased investment risk and undermined the possibility of forming any durable coalition capable of implementing catalytic development projects.

At the socio-cultural level, the field evidence demonstrates that the imposition of top-down cultural projects, without an adequate understanding of the lived realities of southern Tehran, has fostered fears of gentrification and involuntary displacement rather than strengthening local cohesion. Local residents and indigenous businesses perceive these interventions not as mechanisms for improving quality of life, but as threats to their social networks and livelihoods. The neglect of endogenous cultural assets has consequently contributed to the emergence of latent forms of civic resistance, deep distrust toward urban governance, and, ultimately, the further marginalization of local communities.

From another perspective, these institutional and social challenges confront the district's morphological realities and culminate in a physical deadlock. Physical constraints, including severe plot fragmentation—with many plots measuring less than 100 square meters—limited urban permeability, and deep spatial discontinuities caused by railway lines, have effectively diminished the capacity and carrying threshold of the urban fabric to accommodate new and population-attracting land uses. The findings show that introducing large-scale cultural functions into an urban fabric already suffering from severe deficits in basic service provision and infrastructural weakness not only fails to generate urban vitality, but may also exacerbate traffic congestion and intensify the spatial isolation of neighborhoods.

Operationally, overcoming the regeneration impasse in such urban fabrics requires a shift away from large-scale, showcase-oriented, and externally imposed projects toward fine-grained strategies grounded in endogenous assets. Given the structural, institutional, and budgetary constraints facing municipalities, three sequential priorities are proposed to enhance the prospects for successful culture-led regeneration in District 16:

Priority 1 – Short-term, community-oriented actions: Rebuilding residents' trust through tactical and small-scale interventions. Because these measures require relatively limited funding and do not entail direct confrontation with complex legal barriers, they offer the highest degree of

implementability for urban management authorities while also providing a mechanism for stimulating local participation.

Priority 2 – Medium-term, infrastructure-oriented actions: Upgrading basic local infrastructure in accordance with the carrying capacity of the existing urban fabric. This step falls directly within the core responsibilities of the municipality and constitutes a prerequisite for any additional functional or activity loading.

Priority 3 – Long-term, cross-sectoral actions: Resolving inter-institutional property-rights conflicts. Since addressing the legal disputes among the municipality, the Endowment Organization, and the railway authorities requires higher-level governmental coordination and lies beyond the independent implementation capacity of the district municipality, this is regarded as the final yet indispensable step for consolidating catalytic development projects.

Otherwise, if this prioritization is disregarded, culture-led regeneration risks being reduced to an ineffective policy that not only fails to revitalize the area but also reinforces and deepens existing spatial inequalities.

Author Contributions

All authors had an equal role in the conceptualization, methodology, analysis, and writing of this article.

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Conflict of Interest

The authors declare that there are no actual or potential conflicts of interest regarding the publication of this article.

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