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Research article

The informal landscape of Greater Tunis: Residents' resilience and the quest for the right to the city

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Abstract: Informal urbanisation has developed in the peripheries of Tunis under specific socio-economic and institutional conditions. Public urban schemes have, at times, inadvertently contributed to the emergence of informal settlements, which were subsequently incorporated into urban plans during later revisions. The unregulated land market, initially a refuge for low-income households, has gradually expanded to include other social groups, attracted by the flexibility of transactions and the relative institutional tolerance. These dynamics reflect the shortcomings of land policies and the determination of residents to secure property ownership, even if it means circumventing formal legal frameworks. However, this situation raises several questions: Is it the result of limited awareness regarding regularisation procedures and costs or of public policies that long turned a blind eye to informal practices, which have since become structural? Despite the formal rigour of housing policies, their numerous shortcomings have enabled the expansion of illegal housing in the Tunisian peripheries. Long perceived as an urban aberration, this phenomenon reveals the capacity of residents to adapt, navigate institutional obstacles, and devise strategies for inhabiting the city. Confronted with ambiguous legal frameworks and governmental inertia, they have developed forms of urban resilience founded on ingenuity, solidarity, and territorial appropriation. This "urbanity of adaptation" is based on self-building, collective organisation, and mobilisation to improve their living environment. To investigate these dynamics, we adopted a systemic and multi-scalar approach connecting metropolitan trends, neighbourhood organisation, and everyday practices. We also mobilised narrative mapping, a qualitative method that links discourse, memory, and spatial representation. Forty open-ended interviews were conducted across four contrasting neighbourhoods, Douar Hicher, Ettadhamen,

Soukra, and Goulette, alongside resident-produced maps identifying frequented, avoided, and problematic spaces. This combination of verbal and graphic data offers insight into spatial perceptions, local participation, and symbolic vulnerabilities. Several questions therefore arise: To what extent have residents succeeded in confronting the administrative and social constraints that marginalise them? Have public authorities, whether consciously or unconsciously, contributed to perpetuating this state of ambiguity? And, above all, how might the paradigm of the right to the city today support these dynamics and transform informal housing into a lever for urban regeneration?

Keywords: informal urbanization; peripheries of Tunis; land policies; urban resilience; right to the city

1. Introduction

Since the 1970s, the concept of informality has emerged as a major axis of reflection on urbanisation, particularly in the cities of the Global South. Long regarded as a sphere of state failure or as a sector operating outside the formal market, informality has gradually gained recognition. It is now seen as a structural component of contemporary urban development. It no longer merely denotes poverty, precariousness, or the absence of planning. Rather, it reflects a systemic logic at the intersection of institutional modes of action. Far from constituting a periphery of the formal system, informality often represents an implicit extension of it. It is produced, tolerated, or instrumentalised according to selective logics that mirror the power relations embedded within urban governance. This ambiguity reveals how states and institutions deploy exception, tolerance, and flexibility as instruments of differentiated territorial regulation. Informality is therefore not a dysfunction of the system but a mode of its operation, grounded in the continuous negotiation between control, adaptation, and legitimation. In parallel, urban studies have, for several decades, focused on forms of housing that fall outside official norms. Analysing urban growth in the metropolises of the Global South, Mike Davis describes these areas as the product of "self-managed" urbanisation. In these contexts, residents construct their own homes beyond any institutional framework [1]. This perspective underscores the inventive capacity and resilience of marginalised populations. They transform informality into a genuine mode of urban production that is both adaptive and offers alternatives to exclusion from the formal market.

Informal housing develops primarily in cities of the Global South in connection with rapid urbanisation and uncontrolled urban sprawl. However, it is not solely the outcome of demographic growth or internal migration; it also reflects profound social and economic inequalities. The absence of effective public housing policies and the prioritisation of projects targeting wealthier populations have further exacerbated this phenomenon. These informal forms of housing vary widely, from precarious constructions made of salvaged materials to more durable buildings erected outside legal frameworks. They reveal residents' capacity to produce their own living spaces despite structural constraints. At the global scale, this conceptual evolution unfolds within a context marked by accelerated urban growth, demographic transitions, and intensifying competition among metropolitan areas in the era of globalisation. Under the pressure of international competitiveness, urban policies have increasingly prioritised large-scale and emblematic projects aimed at enhancing the attractiveness and global image of cities. This strategy, centred on economic performance and global visibility, has

progressively excluded the popular classes from formal circuits of housing and urban production, fostering the expansion of informal settlements. These have become a refuge and a resource; a mechanism of adaptation to housing crises and spatial exclusion. In this sense, urban informality asserts itself as a mode of city-making in its own right. It oscillates between institutional marginalisation and progressive recognition. It illustrates the constitutive tension of contemporary urban societies: Systems that, while promoting regulation, order, and planning, paradoxically rely on exception and transgression to sustain themselves.

In Tunisia, global urban dynamics take on a distinctive configuration shaped by the country's long-standing tradition of centralised governance. The national planning model, inherited from a highly hierarchical state structure, has historically concentrated public investment and policy efforts in central urban areas and emblematic projects. Peripheral zones, by contrast, have been left to evolve through spontaneous and weakly regulated forms of urbanisation. This pattern has produced a fragmented urban landscape; formal and planned at the centre, informal and self-built at the margins.

For decades, informal housing has been perceived primarily as a problem to be corrected rather than as a legitimate urbanisation process reflecting specific social, spatial, and cultural logics. This technocratic and normative vision, shaped by administrative inertia and the absence of participatory mechanisms, has deepened territorial inequalities. It has reinforced a top-down mode of urban management, where planning serves more as an instrument of control than as a framework for inclusion.

It is within this critical perspective that this is situated. Seeking to move beyond a deficit-based understanding of urban informality, we propose a renewed analytical framework. This framework is grounded in the observation of residents' practices, adaptive strategies, and civic claims. By revealing the dynamics of self-organisation and resilience that animate these spaces, the study highlights the constitutive paradox of informal urbanism. These areas are marginalised by institutional and regulatory frameworks, yet they remain essential to the actual functioning of the city. Informal urbanism thus embodies the capacity of urban populations to assert their place and to claim their right to the city.

Given this complexity, we focus on informal housing in Greater Tunis. Its aim is to understand both the morphological and social characteristics, as well as the modes of urban production initiated by residents. We examine how exclusion from the formal housing market, the retreat of public policy, and the self-construction strategies of low-income populations interact to shape the city's peripheral landscapes. From this perspective, informality is understood not merely as a response to housing shortages but as an expression of popular competence and agency in creating and organising urban space beyond official norms.

The study of informal housing in Tunisia requires a spatial, political, and social approach. First, it is essential to examine the heterogeneous peripheries and informal landscapes that constitute the visible and lived expressions of unplanned urban growth. These spaces, products of exclusion and resident creativity, reveal how the city is shaped at the margins of regulatory frameworks. This landscape-based perspective then enables us to trace the structural causes of the phenomenon by examining informal housing within the framework of Tunisian public policies. An analysis of state strategies from independence to the present day highlights the limitations of housing programmes, the progressive disengagement of the state, and the predominance of a liberal development model. These policies have, at times, inadvertently contributed to the emergence and consolidation of unregulated neighbourhoods, which have now become integral components of the urban fabric.

Second, the study interrogates the processes of land production in the peripheries, shedding light on the economic, legal, and social logics underlying informal expansion. Land speculation, complex

property statuses, and the unequal regulation of urban land reveal the contradictions of the system. Access to housing often depends on popular practices of appropriation in response to the shortcomings of the market and state institutions. Finally, we conclude with an examination of urban resilience and residents' mobilisation, analysing forms of solidarity, self-organisation, and collective empowerment that emerge within these neighbourhoods. These practices demonstrate residents' capacity to adapt, assert their place in the city, and produce viable spaces despite precarious conditions and the lack of institutional recognition.

2. Methods and data sources

To analyse the phenomenon of informal housing, we adopt a systemic and multi-scalar approach. We perceive the city as a system of interactions between public policies, land dynamics, and residents' practices. The multi-scalar reading articulates several levels of observation: At the metropolitan scale of Greater Tunis, it situates informal housing within broader dynamics of urban sprawl and segregation; at the neighbourhood scale, it examines spatial organisation and local networks of mutual support; and at the micro-scale, it highlights everyday practices of adaptation and spatial appropriation. This integrated approach connects urban forms to the social and institutional processes that shape them.

In addition, we adopt the methodology of narrative mapping, a qualitative research approach designed to graphically represent the spatial configuration of worlds evoked through narratives. Applied here to the field of urbanism and territorial studies, this method makes it possible to articulate discourse, memory, and space, revealing how residents describe, perceive, and interpret their environment. Territory is thus understood not only through measurement but also through storytelling. In this research, open-ended interviews were combined with narrative maps produced by residents. The aim was to capture perceptions of urban spaces, local participation, and social dynamics across four neighbourhoods with diverse morphological and social characteristics: Douar Hicher, Ettadhamen, Soukra, and Goulette. In total, we conducted 40 interviews, 10 in each neighbourhood. Residents were invited to produce their own narrative maps, illustrating the areas they frequent, avoid, or value, as well as places they consider symbolic or problematic. This approach enabled the collection of verbal and visual data, which are essential for analysing social practices and the morphology of the neighbourhoods. To build the sample, we relied on snowball sampling: The first residents, who were available and willing to participate, directed us towards other individuals active in neighbourhood life, ensuring a diversity of viewpoints. The sample is evenly balanced between men and women (20 men and 20 women) and covers various age groups: 20–30 years (6 participants), 30–45 years (14 participants), 45–60 years (12 participants), and over 60 years (8 participants). Length of residence varies from less than 10 years to more than 25 years, and participants represent various occupational categories, including employees, manual workers, artisans and shopkeepers, retirees, students, and unemployed individuals. This diversity makes it possible to capture a broad range of perspectives on participation, spatial appropriation, and perceptions of symbolic precariousness. Participants were given several instructions: To recount the history of the neighbourhood (including the origin of the plots) to identify problematic areas (such as lacking services), and to express their feelings about the places they represented. We then produced synthetic cartographies for each neighbourhood, making it possible to visualise patterns of spatial appropriation, social tensions, and residents' perceptions. The relevance of narrative mapping for understanding informal neighbourhoods lies in its capacity to reveal space as it is lived, narrated, and imagined, rather than as it is regulated or planned. Where

administrative maps display "voids", narrative mapping uncovers territories of experience and micro-networks of sociability. It highlights that behind so-called "illegal" forms unfolds a genuine resident intelligence; one that produces city, memory, and resilience.

3. Results

3.1. Heterogeneous peripheries and informal landscapes

The French Protectorate introduced a hierarchical and selective form of modernisation that, despite its transformative impact, remained embedded in a colonial logic serving foreign interests and global capitalist agendas. This produced a lasting tension between imposed modernity and unequal urban development. Pre-Protectorate Tunis displayed a spatial hierarchy, with artisanal and agricultural activities pushed to peripheral wetlands, which later became hybrid settlement areas mixing rural and urban forms [2]. With colonial expansion, these margins were absorbed into the growing city: Districts such as Petite Sicile and Petite Calabre, although planned for European labour, rapidly evolved through everyday practices into dense, semi-informal environments marked by self-construction and popular appropriation [2,3]. Colonial planning later sought to erase these peripheral landscapes, freezing the urban form and suppressing the memory of dynamic informal habitats.

This logic persisted in contemporary coastal development, where enclosed tourist complexes created artificial front landscapes [4], while informal neighbourhoods expanded in the interstices, forming resilient counter-landscapes built on proximity, solidarity, and gradual self-construction [5,6]. Since the 1970s, these informal expansions on former agricultural land have reshaped Greater Tunis, generating a urban morphology resulting from intertwined social, economic, and territorial dynamics. They have produced forms of habitation that are coherent in their functioning yet remain outside formal regulatory frameworks [7,8]. Three configurations dominate: Clustered terraced-house neighbourhoods, linear settlements along roads, and dispersed dwellings on northern and southern plains, all contributing to a mosaic of hybrid peri-urban spaces [9].

Despite their informal status, these low-rise territories display structured layouts, "bottom-up" urbanity, and a distinctive aesthetic shaped by incremental building practices and interstitial domestic spaces [6]. They form a city in continuous construction, strengthened by integration into metropolitan road networks, which enhances their visibility and incorporation into the urban fabric [10,11]. Socially, these neighbourhoods are sustained by dense human interactions, solidarity networks, and communal uses of thresholds and alleys that function as everyday convivial spaces [12].

Overall, the informal landscape of Greater Tunis constitutes not a marginal or chaotic urban form. Instead, it reflects an alternative mode of city-making, where spatial production is inseparable from social bonds, local practices, and emerging territorial belonging [13].

3.2. Informal housing within the framework of Tunisian public policies

Understanding peripheral expansion in Tunisian urban areas requires linking national economic policies with institutional reforms in urban management. This expansion results from combined effects of macroeconomic choices, land liberalisation, and the transformation of the state's role in planning [14,15]. It also highlights the need to connect spatial planning with economic and social development in order to anticipate and reduce territorial inequalities [16]. Housing policies in Tunisia

thus reflect broader state transformations, moving from post-independence authoritarian modernisation to current attempts to reconcile urban growth with social justice.

At independence, Tunisia inherited a dual and unequal urban landscape. To eliminate colonial spatial segregation, the state demolished gourbivilles under the decree of 16 March 1957 and relocated their inhabitants to their regions of origin [17]. This centralised and hygienist vision aimed to reshape the national territory through spatial normalisation. During the 1956–1961 period, a liberal housing policy prioritised rural and industrial development, diverting resources away from urban investment. The 180,000-unit programme, launched amid rapid demographic growth, was suspended in 1965 under IMF pressure, leading to a segmented housing market excluding low-income groups [14]. This deficit encouraged the spontaneous formation of informal settlements on city peripheries, shaping the future patterns of Tunisian urban expansion.

By the 1970s, a strategic shift emerged. With economic liberalisation, the state created housing agencies, AFH (1974), SNIT, and SPROLS, to address growing middle-class demand. However, the social crisis and the 26 January 1978 riots exposed the limits of a policy primarily targeting solvent populations.

Confronted with the scale of informal housing, the state adopted a more pragmatic policy. The creation of the Agency for Rehabilitation and Urban Renovation (ARRU) in 1981 marked a shift from a demolition logic to one of integration, supported by international donors such as the World Bank [18]. The 1990s correspond to a new phase of transformation: Economic liberalisation and metropolisation profoundly altered modes of urban production. Institutional reforms, gradual decentralisation, and the rise of the private sector accompanied this dynamic. Urban planning, through master plans and municipal development plans, increasingly reflected openness to international markets. Greater Tunis became a showcase for development, with major urban projects, Berges du Lac, Tunis Sport City, and business districts, demonstrating the desire for global integration [19].

The evolution of Tunisian urbanisation reveals the state's gradual retreat from social housing. Furthermore, peripheral growth, driven by land pressure, speculation, and household precarisation, produced hybrid, largely unregulated spaces shaped by popular initiatives and delayed public action [20,21]. Programmes such as the PNRQP (1990) illustrate an a posteriori mode of intervention aimed at stabilising populations and containing informal expansion, reflecting planning practices more constraining than anticipatory [22]. The 2011 revolution, emerging from these marginalised peripheries, expressed demands for social justice, territorial equity, and citizen participation [6,23]. In this moment, informal neighbourhoods became arenas of collective mobilisation and claims for both decent housing and the right to the city [24]. Post-revolution institutional fragility accelerated informal construction, with unregulated housing rising from 28% to 46%. In response, the State sought to reaffirm its role through initiatives such as the 2016–2020 programme for 50,000 social units, although these efforts did not succeed in overcoming longstanding clientelist legacies [17]. Overall, peripheral expansion reflects enduring tensions between economic forces, regulatory capacity, and social inclusion, illustrating an ongoing and incomplete transition from authoritarian to democratic urbanism.

Informal housing in Tunisia is shaped by multiple historical, institutional, and territorial configurations, which can be grouped into three major generations. The first generation corresponds to the most precarious forms of urban development: Slums lacking infrastructure, revealing an extremely limited capacity for public action. Urban development programmes have sought to address these conditions. Yet, the low integration of these neighbourhoods remains linked to the interplay of physical and socio-economic constraints, where extreme poverty severely limits the capacity for

meaningful use of space. In a context dominated by urgency and survival, residents have very restricted scope for action. This generation therefore offers limited analytical value for understanding how inhabitants construct, claim, or transform the right to the city in the sense of Lefebvre, which is difficult to mobilise under such conditions.

The second generation, by contrast, provides a much richer terrain for observing the tensions, negotiations and reinterpretations that shape a distinctly Tunisian version of the right to the city. These neighbourhoods emerge at the boundaries between the formal and the informal. This occurs at a time when land regulation, sanitation, road networks and urban planning mechanisms struggle to keep pace with faster, more diverse and more inventive resident-driven dynamics. In response to these fait accompli processes, the State primarily intervenes through technical measures. These include land regularisation, supplementary infrastructure, standardisation of street layouts which, while not eliminating informality, interact with it constantly, sometimes in a conflictual manner. This intermediary space allows residents to develop strategies of use, appropriation and legitimisation. In this perspective, Ettadhamen, Soukra, and Douar Hicher are emblematic examples of this second generation: Emerging from clandestine subdivisions. They have been gradually incorporated into public policies through programmes aimed at bringing them closer to urban standards. The third generation, exemplified notably by Goulette, is situated within older or more composite urban fabrics. Public interventions here focus more on urban and heritage rehabilitation, often misaligned with local uses and expectations.

3.3. Informal housing and the land-making of the periphery: Between speculation and institutional failure

Far from planned and prestigious neighbourhoods, the unregulated zones of the Tunisian urban periphery today constitute a genuine social and spatial landscape, revealing the contradictions of contemporary urban production. Often perceived as “non-urban” spaces or as territories invaded by rural populations, these neighbourhoods nonetheless embody the complexity of urban conflicts and invite a rethinking of modes of city-making [2]. Informal housing thus becomes a privileged site for observing how different social strata, particularly the middle class and popular groups, seek to exercise their right to the city [25]. They often circumvent the state or formal institutions when the official market excludes them through prohibitive costs. These neighbourhoods, born from individual and collective self-construction, reflect a bottom-up appropriation of urban territory. Space becomes a domain imbued with identity, intimacy, and social security. Their morphology, often organised in a grid, demonstrates an ability to structure the city without state oversight, revealing a creative and pragmatic urbanity [26]; yet this urban production is inseparable from the dynamics of land speculation. Real estate agents, landowners, and intermediaries operate within a profit-driven logic while shaping the configuration of blocks and the social trajectories of inhabitants [11]. Within this framework, informal developers play a pivotal role as intermediaries in the informal urban process. Operating at the intersection of legality and informality, they include both land grabbers who appropriate state-owned land and sell it at low prices through networks of corruption. They also include private landowner-developers who subdivide and commercialise their own properties, often agricultural or inherited lands not designated for urban use. Driven by speculative and commercial motives, these actors supply non-serviced plots lacking access to water, electricity, and sanitation. Despite these deficiencies, their low cost attracts marginalised households seeking access to land and housing outside

the formal market. Far from being residents of the neighbourhoods they produce, these developers act as commercial intermediaries whose practices shape not only the spatial structure but also the socio-economic fabric of the urban peripheries.

Access to property, even on unregularised land, becomes a vector for social mobility and recognition. This informal urbanisation developed largely on former agricultural land at the city's margins, notably in northern Ariana. Historically, these lands were divided among colonial estates, wakfs, and private properties [9]. The 1957 law on the dissolution of *wakfs* and the 1964 agricultural evacuation transferred much of this land to the state. It was then placed under the supervision of the Office for the Development of the Medjerda Valley and Public Irrigated Perimeters. However, the redistribution carried out by the Office gradually opened the way to speculative transactions, sales of plots to individuals, and the emergence of irregular urbanisation on theoretically agricultural land. The 1969 flood, which destroyed numerous cadastral records, exacerbated land confusion and enabled illegal registrations based on forged certificates [27]. Thereafter, the availability of small plots at modest prices, payable in instalments, facilitated access to property for popular groups excluded from the formal system. Quickly, the informal market expanded to include the middle classes and, later, developers and entrepreneurs seeking to regularise their acquisitions. Thus, illegal urbanisation became a real channel of urban land production, notably in neighbourhoods such as Ettadhamen and Douar Hicher, transforming former agricultural areas into densely built environments.

This dynamic was fuelled by the implicit tolerance of local authorities, who viewed these illegal subdivisions as a pragmatic solution to the housing deficit [27]. Collusion among residents, municipal officials, and land actors reinforced a parallel system in which speculation dominated planning. The construction of new infrastructure, such as roads linking Ariana to Mansoura, paradoxically increased the value of agricultural land, stimulating private investment and accelerating the transformation of the peripheral landscape. Land prices, now detached from agricultural value, became instruments of power and social differentiation [9]. In this context, institutional mechanisms established since the 1970s, such as the 1979 Urban Planning Code, laws protecting agricultural land, and the creation of land agencies, have failed to control unregulated urban expansion. Slow administrative procedures, cadastral complexity, and the limits of decentralisation contributed to frozen development plans, often awaiting approval for more than a decade. This situation favoured the proliferation of unplanned neighbourhoods, where the overwhelmed state intervened a posteriori through regularisation or rehabilitation programmes [26]. Socio-economic constraints further amplify this phenomenon. Predominantly employed in the informal sector, many heads of households cannot access mortgage loans or plots from the Land and Housing Agency (AFH), whose financial conditions and timelines are prohibitive. Faced with these obstacles, self-construction emerges as the only viable strategy. Informal housing, therefore, is not merely a consequence of poverty or institutional neglect: It constitutes a social and territorial response to exclusion, a mode of urbanisation by default but also by invention [6]. Historically, the economic liberalisation of the 1970s–1980s reinforced these logics. By promoting state disengagement and the rise of the private sector, it stimulated land speculation and limited the qualitative impact of public housing policies [27]. Illegal peripheral urbanisation, initially tolerated and later regularised, gradually integrated into the urban system, contributing to the metropolisation of Greater Tunis. The resulting landscape, a mosaic of grids, winding alleys, evolving dwellings, and vacant lots, reflects social inequalities as well as residents' capacity to produce the city despite constraints [2]. Unregulated housing thus emerges as a space of resistance, negotiation, and urban creativity. It exposes the weaknesses of the land system and the limits of urban governance,

while demonstrating the ingenuity of inhabitants in structuring their environment. Confronted with the incapacity of public policies to anticipate and manage urban growth, these informal territories become laboratories of the contemporary city. They redefine the relationship between legality, the right to housing, and the production of the urban landscape [20].

3.4. Resident dynamics and urban resilience: Inventing the informal city

Informal neighbourhoods, often characterised by precariousness, insalubrity, and social exclusion, have been the focus of various rehabilitation operations aimed at improving living conditions and integrating residents into the formal urban fabric. These interventions pursued social and urban objectives: To regulate these spaces, enhance housing conditions, and facilitate the inclusion of these populations within the city. In this context, the State frequently proceeded with the demolition of substandard housing and the relocation of residents into units constructed through public projects, while also installing water, electricity, and sanitation networks. The creation of infrastructure and public facilities aimed to open these neighbourhoods, improve mobility, and strengthen their connection with the rest of the city. These interventions also sought to support local economic activities, improve residents' socioeconomic conditions, and regularise land tenure, thereby legitimising the presence of these neighbourhoods within the urban framework. Furthermore, these neighbourhoods have generated a distinctive urban aesthetic, one of bricolage, self-construction, and the coexistence of disparate elements, reflecting the tension between imposed planning and popular appropriation [3]. This aligns with Lefebvre's conception of the right to the city, which emphasises residents' active role in producing urban space, claiming a share in its use and transformation. It also highlights their ability to assert social and political rights within the urban environment. The right to the city is therefore not limited to access to infrastructure or services. It is expressed through the ability of residents to produce, transform, and appropriate urban space, directly influencing the social, political, and spatial dynamics of the city. In the context of Greater Tunis, this right is particularly evident in informal neighbourhoods. Here, urbanisation arises from a vital need for housing and as a response to structural shortcomings in the real estate market and public policies. It reflects an urbanism based on daily experimentation, in which residents collectively shape the life of the neighbourhood. Thus, it can be asserted that this right to the city does not render informal urbanisation anarchic. On the contrary, it relies on empirical organisation, technical and social skills, and continuous engagement in the production and management of space.

However, these rehabilitation projects were largely managed by public authorities, with the State positioning itself as the central actor in the development and management of informal settlements. Unlike certain international experiences where residents participate in the design and decision-making processes of redevelopment projects, their role here remained highly limited. Decisions were made according to pre-established programmes, and community participation was often absent. Residents sometimes discovered construction work underway without prior notice, reinforcing their exclusion and limiting their engagement in improving their living environment. This top-down approach consolidated a relationship of domination between the State and the residents. Although rehabilitation improved material conditions, it failed to acknowledge local skills or promote residents' involvement in the everyday management of their neighbourhood.

After these interventions, a form of disengagement became apparent: Residents began to delegate tasks they once managed themselves, such as waste collection or the maintenance of shared spaces, to

the authorities. In the interviews, 27 out of 40 respondents (67%) stated that they no longer felt responsible for managing shared spaces, a trend observed particularly in Douar Hicher and Ettadhamen. This passivity reflects a lack of interest in local governance, a direct consequence of the absence of participation in the rehabilitation process. To better understand these practices and perceptions, the narrative maps produced reveal a topography of disengagement and symbolic precariousness in Greater Tunis. They highlight multiple relationships to place, oscillating between intimate attachments, resigned indifference, and mistrust towards any collective action. Residents express a strong domestic attachment and a lack of interest in shared spaces, perceived as outside their sphere of responsibility. In total, 31 respondents (78%) described their house as a "refuge" or "only secure place", while 32 participants (80%) associated outdoor spaces with insecurity or indifference. "*I live here because I had no other choice. I take care of my house; the rest is not my concern*." Behind these words emerges a geography of isolation: Living spaces are confined to the home's interior, while surrounding streets remain without reference points, names, or collective memory. Vacant lots, narrow alleys, and the absence of public spaces reflect a rupture between lived and shared space. The emotional mapping opposes the space of refuge (house, garden, shop) and the space of collective emptiness (streets, squares, abandoned lots). This opposition appeared in 28 of the 40 maps produced (70%), with particularly strong contrasts in Ettadhamen and Douar Hicher. The home becomes a space of individual survival, while the neighbourhood embodies uncertainty, dependency, and a loss of control over the immediate environment (Figure 1). "*Everyone manages their own house. The rest is the State's responsibility*." These words reflect a passive expectation towards the State, perceived as both distant and unavoidable. Nearly two-thirds of respondents (26/40, 65%) explicitly expressed this reliance on the State. The maps show clusters of words such as "waiting", "enduring", or "impossible" around public facilities and administrative zones.

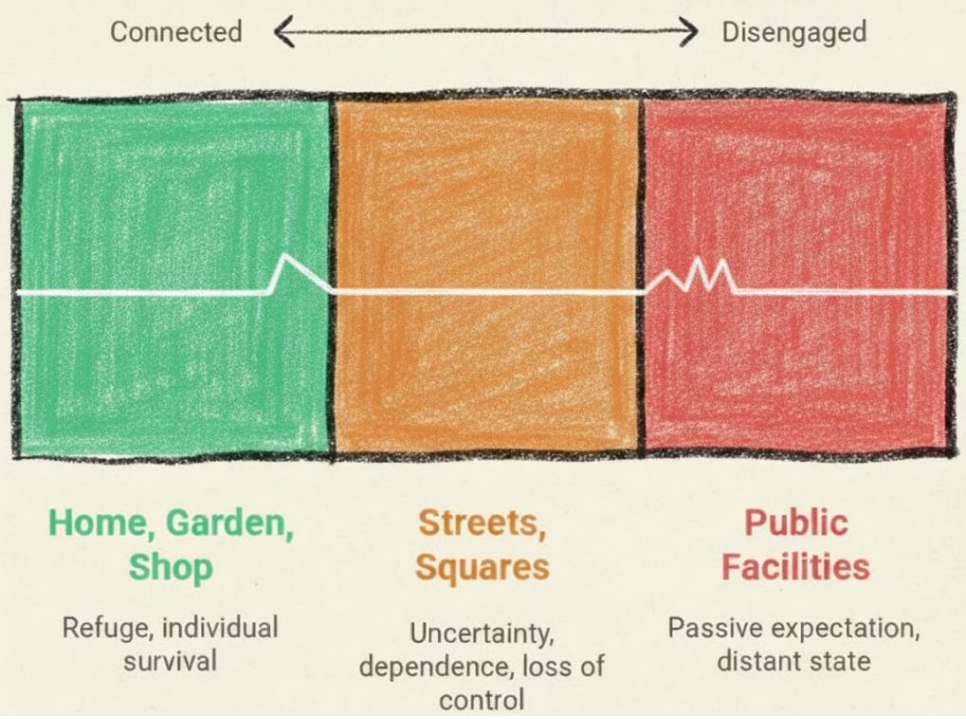

Figure 1. Residents' engagement ranges from intimate connection to complete disinterest.

Another structuring actor emerges in the narratives: The clandestine land dealer, absent from official maps, yet central to the neighbourhoods' history. He is often depicted as the originator of these areas; somewhere between deceit, hope, and pragmatism. In the interviews, 22 out of 40 participants (55%) explicitly mentioned having purchased or known someone who purchased land through a clandestine dealer, especially in Douar Hicher and Ettadhamen. "*We were promised a fully developed neighbourhood, but nothing was ever done*". Continuing with the genealogy of the place, residents drew plots with "blurred boundaries", "nameless streets", and highlighted the absence of property titles. This absence of formal documentation was mentioned by 30 out of 40 respondents (75%), with 18 maps (45%) showing unnamed or partially improvised street layouts. These representations reveal an invisible structure of informality, where unclear borders and improvised pathways reflect deeper dysfunctions than those that are visible on the surface. The maps also helped identify the everyday problematic areas, notably the lack of access to essential services such as water, electricity, sanitation, and certain public facilities. Among the participants, 26 (65%) reported recurrent shortages or interruptions in at least one basic service, and 14 (35%) indicated the absence or malfunction of local public facilities. These shortages correspond to the base of the iceberg, that is, the concrete and perceptible manifestations of the precariousness experienced by residents. Participants were also invited to recount the history of their neighbourhood, particularly through the central role played by informal street vendors. In total, 28 respondents (70%) referred to informal vendors as key historical actors, describing the spontaneous formation of the urban fabric. Their narratives highlighted the spontaneous formation of the urban fabric, perceived as disordered and resourceful, thus revealing the land uncertainty linked to the illegal origin of the plots. This dimension forms the tip of the iceberg, the part that reveals the underlying land disorder at the base of the neighbourhood's development. Residents further expressed their feelings about the spaces represented. The recurring keywords, "precariousness", "illegality", "marginalisation", and "sense of injustice", point to deeper foundations: Legal insecurity due to the absence of property rights, and institutional absence in supporting basic housing needs. These feelings were explicitly expressed by 33 out of the 40 participants (82%), making legal and institutional insecurity one of the most recurrent themes across the four neighbourhoods. This situation reinforces a lasting sense of social injustice.

Ultimately, the analysis of these participatory maps shows that the informal neighbourhood is structured like an iceberg: Visible problems mask deeper, structural and invisible causes. On the maps, this figure materialises through zones of land uncertainty; blurred boundaries, improvised streets, and missing property titles. This pattern appears in 29 of the 40 maps (72%), confirming the centrality of land ambiguity in residents' spatial perception. These reveal a structural disorder that shapes daily life, including lack of access to services, legal insecurity, and a pervasive sense of injustice (Figure 2).

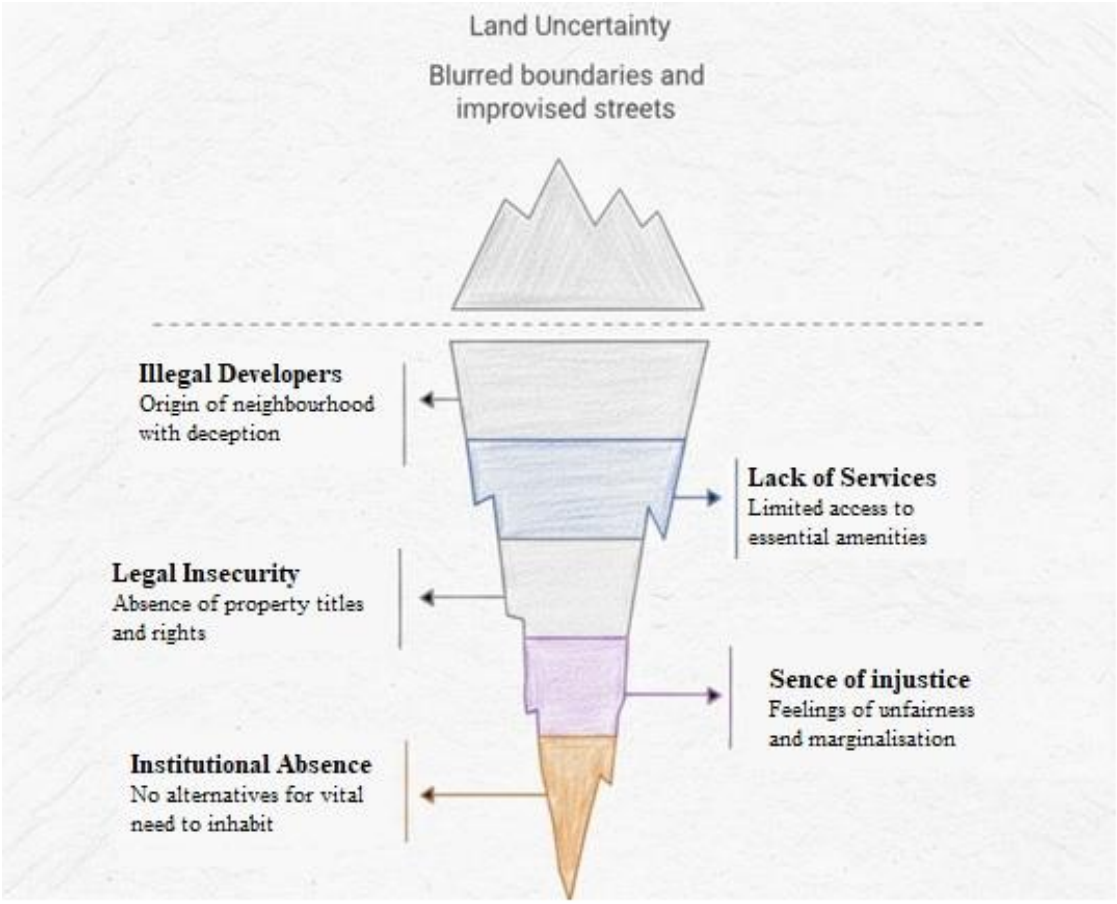

Figure 2. Informal urban fabric: Unveiling the invisible actors.

Through the narrative exercise, participants were invited to recount the history of their neighbourhood revealed practices of self-reliance and self-construction. Across the 40 interviews conducted, more than two-thirds of participants (approx. 68%) described having personally contributed to progressive construction or informal extensions of their homes. The mapped traces highlighted parallel circuits of urban production: Progressive construction and improvised streets in places where official maps showed only emptiness. "*We knew it wasn't official, but we just wanted a piece of land to live in peace*". These accounts situated the genesis of informality between a vital need for housing and the absence of institutional alternatives. Nearly 75% of interviewees explicitly stated that no institutional solution was available at the time of settlement. The relationship with the State was marked by ambivalence: Omnipresent in discourse, it was associated with waiting, disappointment, or helplessness. "*It's not up to us to repair or develop. That's their job, not ours*". In the interviews, these feelings appeared repeatedly, with 31 out of 40 participants (78%) evoking disappointment or distrust toward public authorities. The maps revealed areas where residents no longer identified any potential space for action. These "dead zones of citizenship" materialise the loss of collectivity, reinforced by the absence of meeting places, dialogue, or local participation. More than half the participants (55%) indicated that they could not identify any space in their neighbourhood where collective action could realistically take place. Narrative cartography thus exposes a paradox: Residents are the producers of the informal city and excluded from its recognition (Figure 3). Participants also expressed their feelings regarding their living environment and their relationship with institutions. The keywords noted on the

maps, “expectation”, “disappointment”, “powerlessness”, were particularly associated with administrative zones and areas where the State intervenes symbolically. These three terms appeared in over 80% of the annotated maps, showing their centrality in residents’ narratives. These expressions reflect an ambivalence towards public authorities, combining distrust and dependence: A form of exclusion from formal recognition, where the prospect of improving the neighbourhood seems largely beyond the residents’ control.

By indicating problematic areas in daily life, residents identified spaces lacking essential services and showing little potential for collective action or change. In 26 of the 40 interviews (65%), participants stressed the persistent lack of basic services such as lighting, drainage, or waste collection. The absence of meeting points or spaces for dialogue, such as public squares or community facilities, emerges as a marker of social fragmentation. These “dead zones of citizenship” materialise the loss of community and the renunciation of local civic action, reinforcing the exclusion and marginalisation of residents within their own city. To synthesise the different cartographic drawings, the representation as an “organic hive” illustrates the collective dynamics inherent to informality. The curved and broken lines trace uncertain boundaries, symbolising the lack of recognition and the legal indifference of the State. The empty spaces within the hives are therefore not neutral: They are direct consequences of the absence of institutional acknowledgement, of limited rights and legitimacy, which weaken the very existence of these areas. This perception of institutional absence was mentioned spontaneously in 29 interviews (72%). In contrast, the neutral shades of the hives embody the institutional, legal, and normative framework of urban planning. This graphic opposition reveals the tension between an imposed order and a lived order, where, despite the rigidity of the official system, the hive remains organic, highlighting the inhabitants’ inventiveness, their spatial intelligence, and their capacity to produce territory beyond established frameworks.

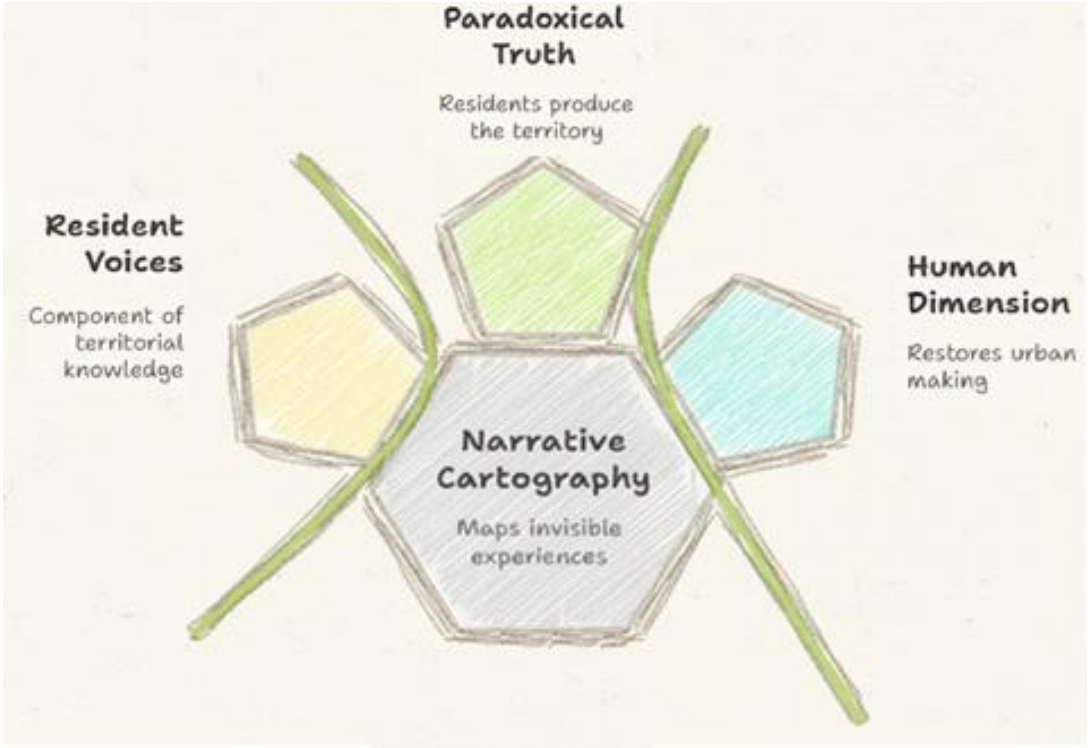

Figure 3. The limits revealed in the informal city.

Their relationship to territory unfolds in a constant tension between domestic appropriation and civic disengagement (Figure 4) between individual survival and institutional expectation. The narratives reflect a mode of inhabiting shaped by precariousness, dependency, and disillusionment; materialised on the maps as a fragmented landscape without shared memory, where politics, informality, and lived experience intersect without truly connecting. The rehabilitation of informal neighbourhoods thus illustrates a constant tension between integration and control. On the one hand, the State seeks to improve living conditions, strengthen public facilities, and integrate these areas into the formal urban fabric. On the other, it maintains a logic of control and centralisation that restricts residents' autonomy and limits their active participation. Thirty-two interviewees (80%) explicitly noted this tension when describing their interactions with municipal authorities. This dual movement, inclusive and restrictive, reveals the ambiguities of urban governance: The desire to integrate these neighbourhoods is accompanied by a persistent effort to regulate and monitor them.

Despite these limits, such operations pursue significant social and political goals. Officially, they aim to reduce social divides and ease tensions by providing neighbourhoods with infrastructure and collective amenities. In practice, however, they also enable the State to reinforce control over these territories, ensure security, and enhance the city's image. Informal neighbourhoods thus become strategic territories, at the crossroads of social, political, and urban issues. Local representation mechanisms, such as neighbourhood committees or consultation bodies, introduce a form of mediation between residents and authorities. Yet, only 12 of the 40 participants (30%) reported having any contact with such committees, showing limited effectiveness in fostering participation. In theory, these structures are designed to promote citizen participation and convey local demands. In practice, however, they are sometimes instrumentalised for political or partisan purposes, reproducing logics of control rather than fostering openness. Participation thus becomes symbolic, limited to consultation without real decision-making power, reducing its transformative potential.

Hence, informal neighbourhoods appear as fragile and strategic spaces, where social, political, and urban challenges intersect. They are arenas of collective mobilisation, empowerment, and creativity, but also of state interventions that, while improving material conditions, can limit residents' agency. The analysis of these dynamics shows that for rehabilitation to be truly effective, it must go beyond material improvement. In our interviews, 27 participants (68%) emphasised that physical improvements alone could not compensate for the absence of decision-making power or recognition. It should also integrate genuine participatory mechanisms that foster autonomy, accountability, and the co-production of the city by its inhabitants. Following the 2011 revolution and the introduction of decentralisation, a new participatory space opened for residents. The gradual transfer of competencies to local governments enabled the establishment of mechanisms for consultation and dialogue; for example, through the appointment of representatives to convey residents' demands to municipal councils. These initiatives aim to build trust and recognise local capacities. Nevertheless, participation remains viewed with scepticism, as habits of domination and persistent bureaucratic practices continue to undermine public confidence. More than half the interviewees (23/40; 58%) expressed doubt about the effectiveness of these consultative processes. The genuine recognition of residents' skills and their involvement in decision-making remain limited. The maps produced revealed a clear separation between the domestic space and public spaces, which are mostly perceived as areas of passage or potential conflict. Thirty participants (75%) highlighted streets or squares as zones where no personal agency could be exercised. This representation reflects a pronounced spatial divide, where individual survival takes precedence over any form of collective engagement. Streets, alleyways, and small open

spaces are rarely named and almost never identified as places for exchange or sociability. Twenty-five interviewees (62%) noted the absence of communal meeting points or identifiable public spaces. This lack of structured spaces for interaction reinforces the absence of dialogue and results in weak participation in community life.

Through the feelings expressed, the narratives and annotations illustrate a way of living shaped by precariousness, dependency and disillusionment. The maps do not highlight any positive space associated with the administration: On the contrary, institutional locations are linked to negative keywords such as "waiting" or "impossible", reinforcing a deep mistrust towards public institutions. These negative associations were recorded in 27 out of 40 interviews (68%). This emotional and spatial withdrawal translates into a resident dependence on the State: Collective improvement is perceived as something that can come only from the authorities. Twenty-nine participants (72%) explicitly stated that they no longer attempted to act collectively, relying entirely on municipal or State intervention. However, this belief in the State's capacity is met with a widespread feeling of powerlessness whenever residents attempt to act themselves, leading them to disengage from public space.

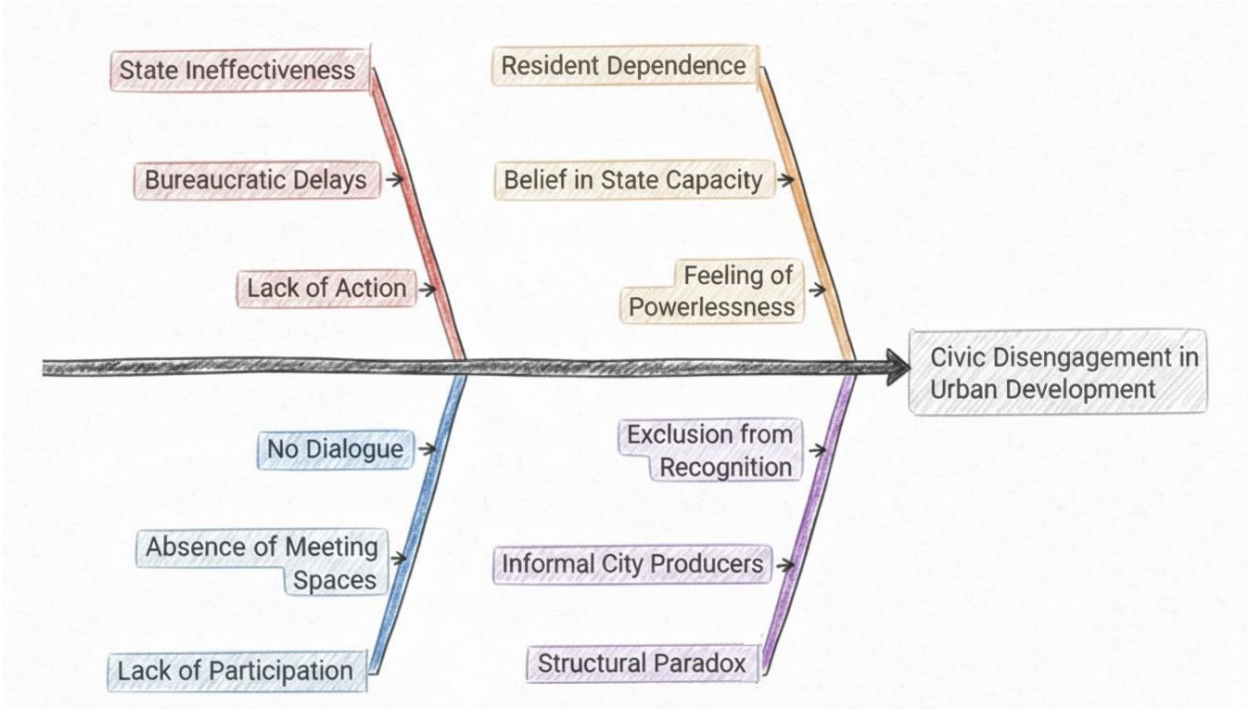

Figure 4. Analysing civil disengagement in urban development.

In this context, informal housing in Greater Tunis extends far beyond the idea of "spontaneous" or anarchic urbanisation. It emerges as a response to the structural shortcomings of the housing market and public policy while revealing intense forms of social resilience and urban creativity. These neighbourhoods, often marginalised institutionally, become true laboratories of self-organisation and civic initiative, where residents act as agents, managers, and innovators of their living environment [6]. Contrary to the image of urban disorder, informal housing reveals a form of inhabitant intelligence and a remarkable capacity for collective action. Excluded from the formal land and housing market, residents mobilise technical, social, and political know-how, transforming marginality into a resource

and precariousness into a lever of resilience. Self-construction constitutes the primary mode of action in this popular urbanisation: residents design, finance, and build their own homes according to practical and proximity-based logics [6].

These practices, far from anarchic, follow a controlled spatial organisation. Many informal neighbourhoods display regular layouts, coherent alignments, and balanced densities, reflecting an empirical yet rational form of planning. Far from being an "urbanism of poverty," this is an everyday urbanism; born of creativity and inhabitants' skills. Thus, residents of informal neighbourhoods are not passive beneficiaries of urban policies. They develop practices and strategies combining resilience, social organisation, and civic mobilisation, actively contributing to the production and management of their living environments. These dynamics are summarised in Table 1.

Table 1. Resident dynamics in informal housing.

Axes of analysis	Forms of action	Observed effects	Encountered limitations
Urban resilience	• Progressive self-construction • Informal networks for access to water, electricity, and sanitation • Self-managed security • Transformation of vacant land into collective-use spaces	• Maintenance of a functional living environment despite precarious conditions • Reduced risks linked to the absence of public services • Reinforced social cohesion during crises (revolution, shortages) • Creation of appropriated spaces (gardens, passages, improvised squares)	• Social fatigue and erosion of solidarities • Fragile materiality and failing infrastructures • Land insecurity preventing long-term investment • Dependence on informal solutions
	Douar Hicher and Ettadhamen display strong informal resilience based on self-construction and solidarity networks. Soukra shows resilience shaped by a peri-urban context in transition, which drives residents to adapt their housing and reorganise access, networks, and circulation to maintain a functional living environment. Goulette combines material resilience with a strong reappropriation of collective spaces.		
Collective empowerment	• Local associations and neighbourhood committees • Petitions, complaints, negotiations with authorities • Self-organisation during crises (security, water, power cuts) • Reappropriation of vacant land for social interaction	• Strengthened social ties • Development of social capital • Greater visibility of claims (right to the city, services, land titles) • Transition from protest to negotiation (in some cases)	• Decline in mobilisation after rehabilitation works • Reduced or symbolic participation • Persistent mistrust towards institutions • Lack of institutional support to sustain collective action
	Mobilisations are well-structured in Douar Hicher and Ettadhamen (petitions, claims regarding public services). More occasional but organised in La Soukra (associations). Centred on collective identity in Goulette (preservation of the urban frontage and the coastline).		

Continued on next page

Axes of analysis	Forms of action	Observed effects	Encountered limitations
Resident skills	• Empirical spatial organisation (plots, streets, densities) • Collective management of shared spaces • Technical know-how in improved construction • Ingenious adaptation to constraints (circulation, extensions, networks)	• Urban co-production structured by everyday practices • Production of a coherent "everyday urbanism" • Territorial appropriation and sense of control • Functional improvement of pathways and plots	• Lack of institutional recognition • Incompatibility with formal planning norms • Undervaluation of local know-how in top-down projects • Land insecurity preventing long-term investment
	Spatial ingenuity is highly present in Douar Hicher and Ettadhamen, where residents' skills are mobilised to manage diffuse urbanisation and conflicts of use. In Soukra, it is more oriented towards beautification and optimisation. While in Goulette it is characterised by commercial know-how and adaptation to tourist flows.		
Political mobilisation	• Struggles for the right to the city • Demands for services, land titles, and infrastructures • Post-revolution collective claims and actions • Informal negotiations with authorities and landowners	• Partial recognition by the State • Implementation of interventions (rehabilitation, facilities) • Emergence of active citizenship • Ability to transform protest into negotiatio	• Demobilisation after State interventions • Feeling of powerlessness in the face of bureaucracy • Persistent asymmetrical relations between the State and residents • Participation limited to consultation without real decision-making power
	Douar Hicher and Ettadhamen have a long history of struggles for recognition. Soukra mainly mobilises against the effects of speculation and for land regulation. While Goulette shows an identity- and heritage-based mobilisation aimed at preserving public spaces.		

Morphological and spatial dynamics reveal a strong adaptability to environmental, economic, and social constraints. Neighbourhood layouts, internal circulation networks, housing density, and the placement of collective spaces often result from bottom-up planning, where residents respond to immediate needs while anticipating future uses. This ability to structure a complex urban environment reflects what some authors describe as informal urban resilience. It is the capacity of a social and spatial system to maintain its functionality in the face of structural disruptions [28]. In the absence of public services, residents develop forms of solidarity and self-management to compensate for the shortcomings of the State. The purchase of unserviced land often leads to collective mobilisation for water and electricity connections, the installation of septic systems, or the organisation of local transportation networks. "*We organise among neighbours because we know no one else will do it for us. Water, electricity, roads… we built everything little by little*". From the 40 interviews conducted, 28 participants (70%) reported engaging in collective initiatives to secure basic infrastructure. These initiatives strengthen social cohesion while ensuring the sustainability of the neighbourhood. They illustrate the emergence of community-based governance grounded in the pooling of resources and

informal negotiation with institutions [27]. In 18 interviews (45%), participants emphasised the creation of local associations promoting mutual aid and the establishment of libraries or educational activities. Local associations and social initiatives further reinforce this dynamic. In some neighbourhoods, the creation of local associations encourages mutual aid, the distribution of school supplies, and the establishment of libraries or educational activities. These actions contribute to the construction of social, material, and symbolic capital, helping create spaces of sociability that are essential in often stigmatised contexts [2,11]. They show that informality is not limited to survival but also represents a space of social and civic innovation.

Furthermore, residents' mobilisation is also expressed through the requalification of the living environment. The instructions given to participants aimed to identify the spaces that play a collective role within the neighbourhood. Therefore, the maps produced highlighted places of mutual support and socially invested landmarks: Mosques funded and built by residents, green spaces planted collectively, and vacant lots transformed into social areas. In 25 interviews (62.5%), participants reported direct involvement in these collective actions, with mosques and public spaces co-financed. These initiatives demonstrate concrete efforts to improve the living environment, driven by a structured form of local mobilisation. Through recounting the history of the neighbourhood, participants emphasised that these actions also represent attempts to be recognised as full citizens. They are symbolic and identity-building processes that give meaning to the territory, asserting a shared sense of belonging and collective pride shaped through material action upon the space. "*At first, it was just sand and ruins. Today we've planted trees, built a mosque, and our children play here. We just want the State to see us as citizens*". These practices reflect a civic and emotional appropriation of space, where material construction is accompanied by symbolic and identity-based production of the neighbourhood. The emotions expressed reflect a clear desire for dialogue and legitimacy. The petitions, claims, and mobilisations described show that residents engage in an active political and civic dimension, driven by the will to secure their urban rights. From the 40 interviews, 30 participants (75%) highlighted civic engagement through petitions, claims, or collective mobilisation, especially in Douar Hicher and Goulette. The identification of problematic areas, particularly those linked to conflict or a lack of institutional recognition, illustrates this struggle to assert their presence within the urban landscape. The analysis revealed that, in some cases, contestation has evolved into negotiation, leading to the implementation of rehabilitation programmes or concrete interventions. This dynamic highlights the ability to transform protest into negotiation, confirming the existence of a struggle for recognition and a genuine commitment to shaping urban development (Figure 5).

The political and civic dimension of these dynamics is evident in struggles for recognition and urban rights. Since the 1970s, and even more so during the 2011 Revolution, residents of working-class neighbourhoods in Tunisia have mobilised to claim their right to the city [25]. Across the four neighbourhoods, 27 respondents (67.5%) reported participating in petitions, demonstrations, or local demands to achieve dialogue and legitimacy with the State. Testimonies and collective actions petitions, demonstrations, local demands) illustrate a desire for dialogue and legitimacy vis-à-vis the State. Under social pressure, these struggles have sometimes led to rehabilitation programmes, confirming residents' ability to transform protest into negotiation [21].

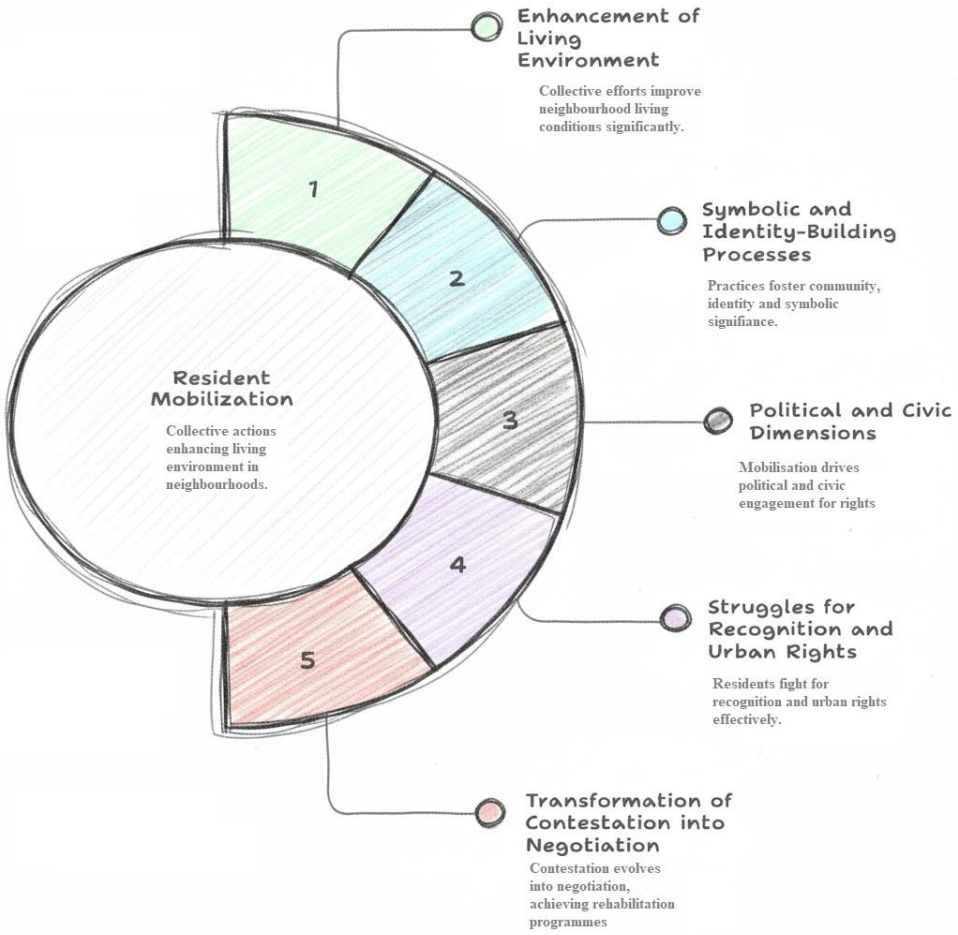

Figure 5. Unveiling resident mobilisation in Tunisian neighbourhoods.

Community resilience becomes especially visible in times of crisis. The maps and narratives highlighted the spontaneous emergence of mutual aid groups, particularly to ensure the security of the neighbourhood during the Tunisian Revolution. This organisation took on a spatial expression through the establishment of self-managed watch points at the neighbourhood's entrances and the monitoring of strategic crossroads where residents gathered. Certain buildings were also used as observation posts, taking advantage of their elevated roofs and balconies. The maps also revealed the routes taken by those who carried out these patrols, forming a genuine relational and solidarity-based network. During the Tunisian Revolution, 32 participants (80%) reported taking part in these self-organised patrols to safeguard their neighbourhoods, notably in Ettadhamen and Douar Hicher. These initiatives reflect a community-based management of resources and a collective protection of the territory. The sudden withdrawal of the State prompted a spontaneous reorganisation of local life: Groups of young people mobilised to ensure neighbourhood security and protect collective assets. "*During the revolution, we were the ones guarding the neighbourhood. No police, no State… but we organised ourselves, we protected our families. We realised that together, we could do anything*".

This mobilisation, driven by a sense of shared responsibility, demonstrates strong social cohesion and a heightened civic consciousness. It illustrates the inhabitants' ability to self-organise in the face of adversity, revealing a form of collective empowerment (Figure 6) based on solidarity, trust, and

mutual support. In this sense, empowerment is not limited to the mere material improvement of housing. In 31 interviews (77.5%), participants emphasised that empowerment also involved active engagement in public life, community initiatives, and defence of rights. It is also expressed through residents' engagement in public life, their ability to organise community initiatives, and to defend their rights. The history of the neighbourhood, as recounted by the participants, reveals that collective mobilisation emerged directly from the need to compensate for institutional shortcomings. Faced with recurring water and electricity cuts, as well as the lack of road maintenance, residents developed provisional yet effective solutions: shared water pipes between neighbours, collective street repairs, and improvised lighting. In 26 interviews (65%), visual timelines captured moments of shortage and the community responses they prompted. The maps help illustrate this spatial ingenuity, notably through a chronomap tracing periods of shortage and the forms of mobilisation activated in response. The cartography also highlights the transformation of vacant land into play areas or spaces of sociability, demonstrating the neighbourhood's ability to convert "neglected zones" into community resources. In 24 interviews (60%), participants identified key places of decision-making and coordination. cafes, shops, or residents' homes, which play a central role in the organisation of actions and informal negotiations with the authorities.

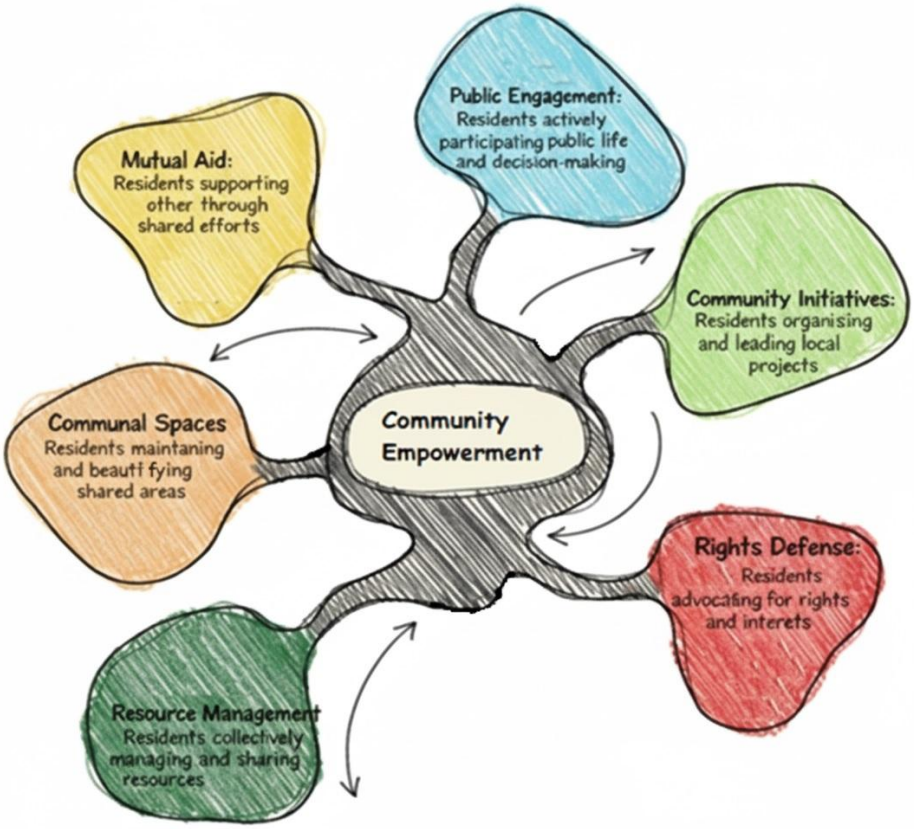

Figure 6. Empowerment through community action.

Informal neighbourhoods appear as genuine spaces of emancipation and creativity, where residents develop organisational, social, and political skills to meet daily needs. Through their initiatives, they progressively transform their environment, influence local orientations, and challenge

institutional power relations. This capacity for action reflects growing autonomy and a collective appropriation of the right to the city. However, the durability of this empowerment and resilience remains fragile, and it largely depends on how these dynamics connect with public policies and existing institutional frameworks. "*We do what we can, but without documents or support, everything could stop tomorrow. We need the State to recognise what we've built*". Economic constraints were mentioned in 28 interviews (70%), while insecure land tenure and lack of legal recognition were highlighted in 31 interviews (77.5%) as major obstacles to sustaining local initiatives. Economic constraints, insecure land tenure, and lack of legal recognition continue to hinder local initiatives and expose residents to vulnerability. Without clear State support, these efforts remain limited in time and scope. The role of the State is therefore crucial in turning these citizen initiatives into sustainable levers for inclusive urban development, by consolidating the social and spatial achievements generated by local dynamics [6,27]. The maps produced in 32 interviews (80%) revealed areas of land tenure uncertainty, failing infrastructure, and neglected open spaces. This spatial diagnosis fuels a sense of instability. However, the narratives also show that, in response to physical and institutional constraints, residents have developed subtle yet structuring resilience strategies. The first of these lies in collective mobilisation, triggered when environmental or health risks become too visible. This is complemented by the sharing of material and human resources, arising from unequal access to services. The accounts also highlight the importance of informal negotiations with landowners or local authorities to enable the use and adaptation of vacant plots. Residents also suggest creating local associations to demand more lasting improvements. Overall, 33 interviews (82.5%) highlighted the role of these practices in building social capital and coordinating neighbourhood actions, even under precarious conditions. This social capital does not eliminate the vulnerabilities revealed by the maps, but it mitigates their effects and provides an organisational foundation for future transformations (Figure 7).

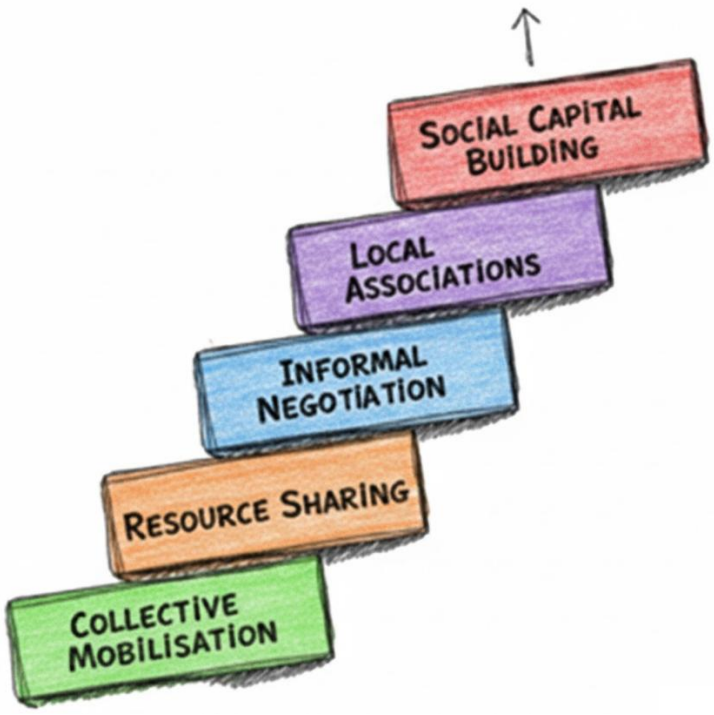

Figure 7. Building community resilience.

Thus, informal housing in Greater Tunis can be viewed as a genuine laboratory of resilience and social innovation. Residents mobilise creativity, solidarity, and organisational skills to face marginalisation and meet essential needs. In 30 interviews (75%), participants emphasised that these neighbourhoods are spaces of social and urban production, where strategies of survival, resistance, and collective emancipation coexist with the challenges of institutional neglect. These territories demonstrate that marginality is not solely a condition of deprivation but also a fertile ground for social and urban production, where strategies of survival, resistance, and collective emancipation are developed. Institutional recognition was mentioned in 27 interviews (67.5%) as a decisive factor that could transform local practices into sustainable levers for inclusive and participatory urban development.

4. Discussion

The urban history of Tunisia reveals a selective modernisation, inherited from colonial logics and perpetuated by often centralised public policies. This trajectory has produced a fragmented city, where the margins were long excluded from planning before being tolerated as spaces of social regulation. These territories, shaped by resourcefulness and popular initiative, do not represent an "urbanity of absence". Instead, they reflect an "urbanity of adaptation", where informality becomes a way of living and a means of producing space.

Rehabilitation policies, intended to correct these imbalances, have indeed improved material conditions; yet, they have not always succeeded in achieving the social and symbolic integration of residents. Often focused on the built form and infrastructure, they have neglected the lived dimension of dwelling. Residents' narratives reflect this ambivalence: The acknowledgement of tangible improvements coupled with distrust towards a State perceived as distant. Informal land production, far from being a mere circumvention of rules, expresses its own rationality; one shaped by bureaucratic inertia and the scarcity of affordable land. Within this system of ongoing negotiation, inhabitants actively contribute to making the city in their own way. The narrative patterns of residents reveal the sensitive and political dimensions of this urban fabrication.

Lefebvre's concept of the right to the city takes on its full meaning in the context of the informal settlements of Greater Tunis. These areas, often stigmatised and marked by precariousness, are not merely spaces of survival but also laboratories of social and urban innovation, where residents develop practices of co-construction, mobilisation, and local governance. Self-building, the collective reorganisation of space, the creation of associations, and the mobilisation to improve services illustrate how residents assert their presence, claim access to urban resources, and shape their environment. These actions reflect a tangible and symbolic appropriation of the city, corresponding to the core dimension of the right to the city as defined by Lefebvre: The possibility for all inhabitants to actively participate in the production of urban space.

However, this right is not fully realised in this context. Top-down state interventions, the centralisation of rehabilitation processes, land insecurity, economic constraints, and the lack of institutional recognition all limit residents' autonomy, reinforcing civic disengagement and dependence on public authorities. The right to the city thus materialises in an ambivalent way: It is simultaneously affirmed through residents' practices and constrained by structural limitations. The analysis of narrative mapping reveals this complex balance between informal creativity and the limits imposed by official planning.

The domestic space appears as a refuge, a site of emotional and identity investment, while public space remains marked by disengagement, mistrust, or indifference. The relationship to the city recentres around the home, around individual efforts of maintenance and improvement, as the sense of collective belonging erodes. This withdrawal is not merely spatial: It reflects a crisis of citizenship, fuelled by the growing distance between the State and its citizens. Yet, within this disillusionment, discreet forms of resistance persist: Neighbourhood solidarities, improvised arrangements, practices of mutual aid. These ordinary gestures express a silent resilience, where survival and dignity are negotiated day by day within an uncertain institutional framework. Thus, the Tunisian urban landscape emerges as the product of unequal modernisation and inventive informal urbanisation. Between planning and improvisation, between control and circumvention, the peripheries are built as hybrid spaces where the State, the market, and the inhabitants co-produce, often without recognising one another, the contemporary city. This reading also questions the relationship to land and property: How can tenure security be ensured without exclusion or immobilisation? How can practices of tinkering and self-construction be recognised as forms of sustainability and resilience rather than anomalies to be corrected?

However, we present certain limitations that must be acknowledged. The first concerns the geographical scope of the research, focused on a limited sample of informal neighbourhoods in Greater Tunis. While these areas offer a nuanced understanding of local dynamics, they do not enable the full generalisation of the findings at the national scale, where political, land, and social contexts differ significantly. The second limitation relates to the temporality of the investigation: The collected narratives reflect situated perceptions, sometimes tied to specific moments of crisis or disengagement, without always capturing the long-term evolution of residents' trajectories. Furthermore, the method of narrative cartography, though innovative and fruitful, relies on a strong interpretative dimension; it requires constant reflexivity to avoid over-interpreting discourses and representations.

In addition to these limits are those related to the conceptualisation of resilience, whose widespread use in urban policies and academic discourse calls for critical examination. First, resilience sometimes tends to naturalise precariousness by celebrating people's capacity to adapt without questioning the structural causes of their vulnerability [29,30]. This ideological shift can transform everyday coping mechanisms into civic virtues, thereby masking governance failures and the State's responsibility in producing urban inequalities [31]. On the social level, resilience does not manifest homogeneously. It remains deeply unequal, depending on the resources, networks, and social capital available to residents. What is often presented as adaptive capacity may in fact represent social fatigue; a constrained endurance in the absence of institutional support [32]. The individualisation of survival strategies, moreover, tends to weaken collective solidarities, reinforcing domestic withdrawal and the loss of trust in collective action. Under such conditions, resilience becomes a practice of everyday life rather than a collective project. On the political level, resilience is sometimes mobilised as a tool of governance, transferring the burden of survival to residents and legitimising State withdrawal [30]. Behind the participatory discourse often lies an implicit delegation of public responsibility, where local autonomy serves as a substitute for structural policies. This paradox feeds a crisis of civic trust: Inhabitants, accustomed to unfulfilled promises and partial regularisations, develop a resilience of mistrust rather than participation. Local dynamics of mutual aid and self-management thus reveal both a collective strength and a silent resistance to political marginalisation.

5. Conclusion

In conclusion, the study of informal housing in Tunisia, particularly in Greater Tunis, reveals a complex urban phenomenon deeply rooted in the country's social, economic, and political dynamics. Far from being merely the outcome of housing shortages or poverty, informality constitutes a genuine mode of city-making, driven by the agency of residents. Through the appropriation of space and the development of collective forms of organisation, these populations create a lived urbanity grounded in solidarity, proximity, and resilience. This reality invites a rethinking of the boundaries between "formal" and "informal" urban areas, recognising Tunisian peripheries as hybrid spaces where interactions between actors, institutions, and inhabitants are constantly negotiated and redefined. Rather than marginal zones, these neighbourhoods emerge as laboratories of urban experimentation, capable of informing innovative approaches to governance and planning. A crucial question therefore arises: To what extent can informal neighbourhoods become laboratories of participatory urbanism, where the co-production of space by residents, local authorities, and institutions reshapes planning and governance models in Tunisia? Such a perspective opens the path towards a more inclusive urban vision; one grounded in the recognition of popular practices, spatial justice, and the social sustainability of urban territories.

Use of AI tools declaration

The authors declare they have not used Artificial Intelligence (AI) tools in the creation of this article.

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Conflict of interest

The authors affirm that this research was carried out without any commercial or financial affiliations that could be perceived as potential conflicts of interest.

Author contributions

Abir Messaoudi: Conceptualization and writing original draft. Pr. Boudjemaa Khalfallah: Supervision and reviewing the original draft.

References

1. Davis M (2006) Planet of Slums, London: Verso.
2. Berque J (2001) Medinas, new towns, and slums, In: *Opera Minora*, Volume II, Paris: Editions Bouchène, 238–272. Available from: https://www.amazon.fr/Opera-Minora-Coffret-volumes-d%C3%A9colonisation/dp/2912946271.

3. Lefebvre H (1996) *The Right to the City*, Oxford: Blackwell, 147–159. Available from: https://theanarchistlibrary.org/library/henri-lefebvre-right-to-the-city.
4. Miossec A (2004) *Coasts between Nature and Planning*, Paris: Armand Colin, 192. Available from: https://www.dunod.com/histoire-geographie-et-sciences-politiques/littoraux-entre-nature-et-amenagement.
5. Tarrius A (2002) *Globalization from Below: The New Nomads of the Underground Economy*, Paris: Balland.
6. Bayat A (2010) *Life as Politics: How Ordinary People Change the Middle East*, Stanford University Press.
7. Roy A (2005) Urban informality: Toward an epistemology of planning. *J Am Plann Assoc* 71: 147–158. https://doi.org/10.1080/01944360508976689
8. Roy A, AlSayyad N (2003) *Urban informality: Transnational perspectives from the middle East, Latin America, and South Asia*, Lexington Books. Available from: https://books.google.tn/books?id=mf0eAAAAQBAJ&printsec=frontcover&hl=fr&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false.
9. Sethom N (1992) Industry and tourism in Tunisia: A study of development geography. *Publications de la Faculté des sciences humaines et sociales de Tunis*, 635. Available from: https://search.worldcat.org/fr/title/29754715?oclcNum=29754715.
10. De Boeck F, Plissart MF (2014) *Kinshasa: Tales of the Invisible City*, Leuven University Press, 13–23.
11. Lemenorel A (1997) *The Street, A Place of Sociability? Streets Encounters*, Rouen: Presses Universities. Available from: https://www.amazon.fr/rue-lieu-sociabilit%C3%A9-Rencontres-colloque/dp/2877752046?utm_source=chatgpt.com#detailBullets_feature_div.
12. Yiftachel O (2009) Theoretical notes on "Gray Cities": The coming of urban apartheid? *Plann Theory* 8: 88–100. https://doi.org/10.1177/1473095208099300
13. Roy A (2009) Civic governmentality: The politics of inclusion in Beirut and Mumbai. *Antipode* 41: 159–179. https://doi.org/10.1111/j.1467-8330.2008.00660.x
14. Ben Letaief M (2008) Urban policies in Tunisia. *Métropoles*. https://doi.org/10.4000/metropoles.3492
15. Chabbi M (1986) A New Form of Urbanisation in Greater Tunis, Paris: University of Val de Marne. Available from: https://books.google.tn/books/about/Une_nouvelle_forme_d_urbanisation_%C3%A0_Tun.html?id=R80dzwEACAAJ&redir_esc=y#:~:text=L'HABITAT%20SPONTANE%20PERI%2DURBAIN%20(HSPU)%20APPARU%20AU%20COURS,MIS%20EN%20OEUVRE%20ENTRE%201960%20ET%201980.
16. Camau M (1984) The Tunisian state from tutelage to disengagement: Scope and limits of a trajectory. *Monde Arabe* 103: 8–38. https://doi.org/10.3917/machr1.103.0008
17. Chabbi M (2013) Housing policies and development models: The case of Tunis (1960–1984). Habitat, State, Society in the Maghreb, Annuaire de l'Afrique du Nord, CNRS Editions, 37–65. Available from: https://books.openedition.org/editionscnrs/781?lang=fr.
18. Legros O. *Governing popular neighbourhoods: Space production and political regulation in informal areas of Dakar and Tunis*. Ph. D. thesis, University of Tours, Tours, 2003. Available from: https://theses.hal.science/tel-00129096v1.

19. Semmoud N (2015) Governing informal urbanisations or questioning governance: Case of Maghreb cities. Paris: Karthala, 1–13.
20. Deboulet A (2007) Restructuring precarious housing: Accounts of "best practices". *Space Soc* 131: 67–83. https://doi.org/10.3917/esp.131.0067
21. Belguidoum S, Mouaziz N (2010) Informal urbanism and the paradoxes of the Algerian city: Urban policies and social legitimacy. *Space Soc* 143: 101–116. https://doi.org/10.3917/esp.143.0101
22. Chabbi M (1991) *Urbanization and Population in Tunisia*, Tunis: FNAUP. Available from: https://irmcmaghreb-bib.org/cgi-bin/koha/opac-detail.pl?biblionumber=5166.
23. Dalala H (2007) Metropolisation and territory recomposition of the North-East of Tunisia. *Cyberge*. https://doi.org/10.4000/cybergeo.13863
24. Harvey D (2015) The right to the city, In: *The City Reader*, Routledge, 314–322.
25. Lefebvre H (1974) *The Production of Space*, Oxford: Blackwell. Available from: https://iberian-connections.yale.edu/wp-content/uploads/2020/04/The-production-of-space-by-Henri-Lefebvre-translated-by-Donald-Nicholson-Smith.pdf.
26. Miossec JM (2002) *Housing Policy in Tunisia Since Independence*, Paris: CNRS Editions, 17–35. Available from: https://books.openedition.org/editionscnrs/779.
27. Tayachi H (1988) *Programmed Popular Housing: A Solution to Spontaneous Housing in Tunis*, Tunis: FSHS. Available from: https://irmcmaghreb-bib.org/cgi-bin/koha/opac-detail.pl?biblionumber=1776.
28. Meerow S, Newell JP, Stults M (2016) Defining urban resilience: A review. *Landscape Urban Plann* 147: 38–49. https://doi.org/10.1016/j.landurbplan.2015.11.011
29. Joseph J (2013) Resilience as embedded neoliberalism: A governmentality approach. *Resilience* 1: 38–52. https://doi.org/10.1080/21693293.2013.765741
30. Fainstein S (2015) Resilience and justice. *Int J Urban Reg Res* 39: 157–167. https://doi.org/10.1111/1468-2427.12186
31. Davoudi S, Shaw K, Haider LJ, et al. (2012) Resilience: A bridging concept or a dead end? "Reframing" resilience: Challenges for planning theory and practice interacting traps: Resilience assessment of a pasture management system in Northern Afghanistan urban resilience: What does it mean in planning practice? Resilience as a useful concept for climate change adaptation? The politics of resilience for planning: A cautionary note. *Plann Theory Pract* 13: 299–333. https://doi.org/10.1080/14649357.2012.677124
32. Cretney R (2014) Resilience for whom? Emerging critical geographies of socio-ecological resilience. *Geogr Compass* 8: 627–640. https://doi.org/10.1111/gec3.12154

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