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The Case for A-formality in the Formalist City: Reclaiming the Urban Narrative Through a Phenomenological Assessment of Neo-Vernacular Dwellings, Sehb El Caid as a Case Study

Abstract

This paper develops the concept of a-formality as both an analytical lens and a methodological framework to rethink how self-built urban environments are understood, evaluated, and transformed within contemporary planning and architectural practice. Moving beyond the entrenched formal–informal binary that continues to structure urban policy in Morocco and across much of the Global South, the paper argues that such environments are better understood through the lived processes of dwelling (*habiter*) that generate spatial order, social regulation, and material continuity outside formal planning paradigms.

Grounded in phenomenological theories of dwelling, behavioural and environmental psychology, and critical urban theory, the research introduces the Index of Habiter as its primary methodological contribution. The index is proposed as an analytical framework that translates phenomenological, behavioural, and social-scientific insights into operational principles capable of engaging with a-formal urban conditions. Drawing on established theoretical references on phenomenological approaches to space, the index is structured around three organising axis of sociocracy, co-construction, and human scale, respectively anchored in the design principles of solidarity, evolutivity, and appropriability. By intersecting governance, spatial production, and everyday life in the self-built environments, the Index produces a set of operational design guidelines grounded in best practices across architecture, urban sociology, and behavioural sciences that can inform design and policy without erasing resident agency.

The empirical core of the paper is the once largest self-built neighbourhood of Sehb El Caid in the Rabat-Salé metropolitan area. Emerging in the 1960s in the context of accelerated rural-urban migration and chronic housing shortages, Sehb El Caid developed over several decades as a dense,

incrementally constructed urban fabric housing thousands of residents. Based on ethnographic fieldwork conducted between 2014 and 2015, complemented by archival sources, municipal data, journalistic records, satellite imagery, and recent peer-reviewed research, the analysis shows that Sehb El Caid functioned as a coherent dwelling environment structured by a-formal logics rather than regulatory absence. Governance was enacted through proximity-based sociocratic arrangements, space was produced through collective and incremental co-construction, and everyday life was organised at a human scale that enabled appropriation, social interaction, and informal surveillance. These characteristics challenge dominant representations of informal settlements as chaotic or deficient, revealing instead a complex urban system sustained by lived knowledge and social capital.

By applying the Index of Habiter to Sehb El Caid, the paper illustrates how a-formality can be operationalised as a tool for analysis, design, and policy reflection. Rather than advocating the preservation of informality per se, it calls for a reorientation of urban expertise toward dwelling as a source of knowledge. The paper concludes that a critical examination of the outcomes of state interventions, particularly those associated with the *Programme Villes Sans Bidonvilles*, is needed in the specific case of Sehb El Caid. The neighbourhood was largely cleared between 2020 and early 2021, rendering it a closed historical case and opening urgent questions about what was lost through its dismantling. While recent studies of post-relocation trajectories conducted for Sale as a hole examined how former residents experienced housing precarity, economic strain, and social fragmentation following displacement, a closer investigation of the fate of Sehb El Caid former dwellers would provide much needed insight on their post-relocation trajectories.

Keywords
Informal housing, Habiter, urban informality, Sehb El Caid

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[Cover] Front patio of a self-built house in Sehb El Caid. Author, 2015.

Introduction: Beyond the formal/informal divide

The persistence of self-built settlements such as Sehb El Caid cannot be understood without situating them within the broader context of modern architecture and planning as they were exported, institutionalised, and reproduced across postcolonial contexts. Throughout the twentieth century, modernist planning promoted a universalist vision of urban order grounded in functional zoning, standardised housing typologies, and large-scale infrastructural rationality. While these principles were often justified in the name of efficiency, hygiene, and social progress, they systematically marginalised lived practices of dwelling and erased local forms of spatial knowledge.

Modernist Planning, state legibility, and the production of urban formalism

James C. Scott's critique of high-modernist schemes provides a powerful analytical lens through which to read these failures.[1] In Seeing Like a State, Scott argues that modernist planning depends on the simplification of complex social realities in order to render them legible to administrative power. This process of legibility prioritises abstract order, straight lines, grids, and standard units, over situated knowledge that Scott calls Metis,[2] producing environments that may be administratively manageable but socially fragile. When imposed at scale, such schemes often disarm communities instead of empower them to co-live, adapt, and overcome collective challenges.

Colonial urbanism in Morocco exemplified this logic. Planning interventions prioritised spatial segregation, infrastructural control, and visual order, while relegating indigenous modes of dwelling to the margins. Post-independence planning institutions, rather than fully dismantling these paradigms, reproduced them instead under developmentalist narratives. Informal settlements were framed as anomalies to be corrected, rather than as symptoms of structural housing inadequacy and labour-driven urbanisation.

From an architectural perspective, modernism's emphasis on the building as a finished object further contributed to this disjunction. Housing was conceived as a static product delivered to passive users, rather than as a dynamic process shaped by inhabitants over time. The repeated failure of mass housing projects, from Pruitt-Igoe in the United States[3] to large-scale housing estates across the Global South, demonstrates the limits of this approach. These environments often lacked the social density, adaptability, and appropriation necessary to sustain everyday life.

Jane Jacobs's critique remains central in this regard.[4] By observing ordinary streets rather than idealised plans, Jacobs demonstrated that urban vitality emerges from mixed uses, fine-grain morphology, and continuous presence. Her concept of "eyes on the street"[5] highlights how safety and order are produced through everyday social interaction rather than through formal control. Modernist planning, by separating functions and reducing street life, undermined these mechanisms and replaced them with brittle forms of surveillance and regulation.

Similarly, Donald Appleyard's empirical studies on livable streets revealed the social costs of traffic-dominated environments.[6] Streets designed primarily for movement rather than dwelling exhibited lower levels of social interaction, weaker neighbourly ties, and diminished collective responsibility. These findings underscore the extent to which modern planning metrics of flow, capacity and efficiency often conflict with the conditions necessary for social life.

In postcolonial contexts, these dysfunctions are compounded by structural inequalities. Formal planning systems frequently fail to accommodate the economic realities of low-income households, producing a chronic mismatch between supply and demand. Self-built settlements thus emerge not as deviations from planning, but as adaptive responses to its inadequacies. Yet, rather than prompting a reconsideration of planning paradigms, these environments are often targeted for eradication.

The result is a cycle of intervention in which informality is continuously displaced but never resolved. Clearance and resettlement programmes dismantle existing social networks, disrupt livelihood strategies, and impose housing forms that are ill-suited to inhabitants' needs. As recent research on Moroccan resettlement programmes shows, such interventions frequently generate new forms of precarity rather than durable solutions.

This paper argues that these failures are not accidental but structural. They stem from an epistemological hierarchy that privileges formal knowledge over lived experience, abstraction over practice, and design intent over dwelling reality. Addressing this requires more than participatory rhetoric or incremental policy

1. James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (Yale University Press, 1998).
2. Scott, *Seeing Like a State*, 309–341.
3. Charles Jencks, *The Language of Post-Modern Architecture* Rizzoli, 1977), 23–25.
4. Jane Jacobs, *The Death and Life of Great American Cities* (Random House, 1961).
5. Jacobs, *Death and Life*, 35–42.
6. Donald Appleyard, *Livable Streets* (University of California Press, 1981).

adjustments; it requires a conceptual shift in how urban knowledge is produced.

The concept of a-formality emerges precisely at this juncture and opens space for recognising self-built environments as sites of urban intelligence rather than planning deficits. Through the lens of *habiter*, dwelling is reclaimed as an active process through which space, social relations, and governance are co-produced over time.

2. Conceptual framework – A-formality and Habiter

2.1. Defining a-formality

A-formality designates an urban paradigm in which space is generated through collective action, temporal accretion, and everyday negotiation. A-formal environments operate alongside formal institutions, sometimes in tension, sometimes in tacit collaboration, but are not defined by opposition alone.

The concept draws on James C. Scott's notion of Metis, defined as the practical and experiential knowledge developed outside formalised systems,[7] as well as on architectural theories of incremental and open building articulated by N. John Habraken[8] and John F.C. Turner.[9] In this sense, a-formality emphasises how urban order can emerge without centralised design, through use, adaptation, and shared norms.

2.2. Habiter as an operational concept

Central to a-formality is the concept of *habiter*, retained here in French to preserve its theoretical density. Unlike the English term "inhabiting", *habiter* refers to dwelling as an embodied, relational, and moral practice. Rooted in phenomenological philosophy[10] and architectural theory, it frames space not as a container but as a lived relationship between people, materials, and time.

In this paper, *habiter* is operationalised through observable dimensions: spatial appropriation, temporal adaptability, and micro-governance. These dimensions are synthesised through the Index of Habiter, which translates dwelling experiences into analytical and design-oriented criteria without reducing them to formal regulatory metrics. Its purpose is twofold: first, to make visible the socio-spatial intelligence embedded in self-built environments, and second, to provide planners and designers with a structured yet non-prescriptive tool for engaging with such environments.

3. Genealogy and construction of the Index of Habiter

3.1. Methodology of elaboration

The Index of Habiter was elaborated through a multi-step methodological process grounded in phenomenology, behavioural sciences, and social urban theory. This process prioritised best practices and widely validated concepts, thereby reinforcing the index's analytical legitimacy and transferability.

First, phenomenological theories of dwelling provided the conceptual foundation. Martin Heidegger's formulation of dwelling as a mode of being-in-the-world reframed space as something constituted through everyday use, memory, and identification rather than as a neutral container.[11] Christian Norberg-Schulz further operationalised this approach through the notion of existential space, emphasising orientation, identification, and meaning as spatial qualities.[12]

Second, behavioural and environmental psychology contributed empirical insights into how spatial configurations shape social interaction. Jane Jacobs' concept of "eyes on the street" demonstrated how continuous presence, mixed uses, visual permeability and human scale cues enhance safety through social regulation rather than formal surveillance.[13] Donald Appleyard's experiments on livable streets empirically showed how traffic intensity and street design directly affect social ties, children's play, and neighbourly interaction.[14] Additionally, Amos Rapoport's work further established the relationship between spatial form, cultural practices, and behavioural norms.[15]

Third, social theory informed the index's attention to collective life and governance. Robert Putnam's work on social capital highlighted how spatial and institutional conditions shape civic engagement and mutual trust, providing a conceptual bridge between physical space and social organisation.[16] These insights were reinforced by Global South housing scholarship,

7. Scott, *Seeing Like a State*, 309.
8. N. John Habraken, *Supports: An Alternative to Mass Housing* (Architectural Press, 1972).
9. John F. C. Turner, *Housing by People: Towards Autonomy in Building Environments* (Marion Boyars, 1976).
10. Martin Heidegger, "Building, Dwelling, Thinking," in *Poetry, Language, Thought*, trans. Albert Hofstadter (Harper & Row, 1971), 141–160.
11. Heidegger, "Building, Dwelling, Thinking," 141–160.
12. Christian Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture* (Rizzoli, 1980), 5–22.
13. Jane Jacobs, *The Death and Life of Great American Cities* (Random House, 1961), 29–56.
14. Donald Appleyard, *Livable Streets* (University of California Press, 1981), 1–70.
15. Amos Rapoport, *Human Aspects of Urban Form* (Pergamon Press, 1977), 15–41.
16. Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community* (Simon & Schuster, 2000).

particularly John F. C. Turner's understanding of housing as a process rather than a product[17] and N. John Habraken's theory of open building and supports.[18]

Finally, these theoretical strands were translated into three organising principles explicitly named in the Index of Habiter diagram: sociocracy, co-construction, and human scale. Each principle was paired with one design principle and articulated through three design guidelines, ensuring operational clarity without prescriptiveness.

3.2. Structuring principles of the Index of Habiter

The Index of Habiter is structured around three organising principles, sociocracy, co-construction, and human scale, each corresponding to a specific understanding of how space is governed, produced, and experienced. These principles are not abstract ideals but analytical syntheses derived from recurring patterns observed in a-formal environments and corroborated by established theories in the social and behavioural sciences. Each principle is translated into one design principle and three design guidelines, ensuring a clear methodological progression from theory to spatial practice.

a. Sociocracy: Governance as a spatial condition

Sociocracy is mobilised in the index as a mode of governance grounded in consent-based decision-making, distributed authority, and collective responsibility. In a-formal neighbourhoods, governance rarely operates through official institutions; instead, it is embedded in proximity and everyday spatial practices such as neighbourly negotiation, informal leadership, and shared management of resources. These practices form what may be described as a spatialised governance system. In Moroccan self-built neighbourhoods, scholars including Mohamed Belfquih and Abdelkhalek Fadloullah have documented how such arrangements enable communities to function despite limited state intervention.[19]

Bridging everyday practices and formal governance, Alexander's framework provides a shared "language" for both residents and institutions: patterns can inform planning codes, regulatory frameworks, and incremental policy mechanisms.[20] Habraken's open building approach similarly offers an institutional interface by formalizing a separation between fixed structural supports and user-managed infill; his theory aligns professional planning with bottom up resident-led transformation.[21] Gehl's work also supports institutional engagement; his principles have informed municipal interventions worldwide by translating everyday human behavior in public spaces into policy and design guidance.[22]

a.1. Design principle: Solidarity

Solidarity is defined as the spatial capacity to sustain social interaction, mutual recognition, and networks of collaboration. It is not a cultural attribute but a relational condition produced through spatial and social networks, proximity, and repeated interaction.

From an a-formal perspective, sociocracy is not merely a social attribute, it is a spatial necessity produced by density, visibility, and repeated encounter. This insight challenges planning approaches that treat governance as an external layer to be imposed after spatial design, rather than as something co-produced through it.

a.2. Design guidelines:

- *Decentralised proximity governance*: Encourage forms of neighborhood-level governance where decisions are made collaboratively and transparently, and account for spatial arrangements that facilitate local decision-making, conflict resolution, and collective maintenance. Decentralized structures strengthen collective responsibility, improve maintenance, and build a shared culture of stewardship over common spaces and resources.

- *Collective spaces encouraging social interaction*: Establish shared spaces and amenities that cultivate social interaction, mutual support, and collective learning. These hubs operate as anchors of everyday life where residents meet, exchange, collaborate, and build a sense of shared belonging and neighborhood identity.

- *Networks of economic autonomy and solidarity*: Integrate productive activities within the residential fabric to support household economies and neighborhood resilience. Spaces for small commerce, craft, and cooperative initiatives reinforce local value chains and enable residents to generate livelihoods close to home.

b. Co-construction: Space as an incremental process

Co-construction refers to a mode of space production in which inhabitants act simultaneously as users, shapers, and builders of their environment. Designing

17. Turner, *Housing by People*, 3–27.
18. Habraken, *Supports*, 16–25.
19. Mohamed Belfquih and Abdelkhalek Fadloullah, *Habitat populaire et politiques urbaines au Maroc* (INAU, 1996), 45–62.
20. Christopher Alexander et al., *A Pattern Language: Towns, Buildings, Construction* (Oxford University Press, 1977).
21. Habraken, *Supports*.
22. Jan Gehl, *Life Between Buildings: Using Public Space*. Copenhagen: Arkitektens Forlag, 1971. English edition, 6th ed. (Island Press, 2011).

spaces that invite user modification, personalization, and everyday reappropriation is well anchored in Christopher Alexander's *A Pattern Language*.[23] Alexander frames his "patterns" as generative, open-ended modules rather than definitive prescriptions; a design grammar that empowers inhabitants to reinterpret, adapt, and extend their built environment. This approach resonates with the "open building" movement of N. John Habraken, who, in Supports, advocated a clear separation between base structures ("supports") and infill, thereby granting residents a participatory role in the evolution of their homes.[24]

b.1. Design principle: Evolutivity

Evolutivity denotes the capacity of spatial systems to accommodate transformation over time while maintaining functional and social coherence. The notion of incremental, structure-preserving growth is deeply rooted in Alexander's later theoretical work, *The Nature of Order*, where he introduces "structure-preserving transformations" as design interventions that enable built environments to evolve gracefully over time.[25] This temporal flexibility aligns with user-led adaptation: by facilitating small-scale interventions rather than wholesale redevelopment, architecture becomes a living, evolving process.

Evolutivity also integrates continuity over time rather than rupture. Alexander's The Timeless Way of Building deeply roots design in cultural memory: he argues for a "quality without a name", a sense of belonging that arises when spatial forms reflect the shared traditions, rituals, and vernacular practices of a community.[26] This continuity is not nostalgic but generative: patterns transmit cultural wisdom while allowing adaptation, and the collaborative act of building reinforces communal identity.

b.2. Design guidelines:

- *Primacy of use value over market value*: Reframe housing and urban development through the lens of use value rather than market value. This approach limits speculation and focuses on providing spaces that respond to real needs, support adaptability, and enhance long-term wellbeing rather than short-term capital gain.

- *Identifiable and transformable spaces*: Create spatial sequences that are easy to understand, navigate, and emotionally connect to. Clear landmarks, distinctive public spaces, and contextual architectural cues help residents develop a sense of orientation, attachment, and identity within their neighborhood.

- *Mechanisms supporting public-interest design*: Anchor all interventions in the collective good by ensuring that design processes respond to shared needs, ecological limits, and long-term community aspirations. Public-interest design promotes inclusive participation, environmental responsibility, and equitable access to quality urban space.

c. Human Scale: Dwelling through the body

Human scale functions as the directing scale for design within the index, privileging bodily perception, proximity, and everyday movement. Environmental psychologists such as Amos Rapoport and Irwin Altman have demonstrated that spatial dimensions directly affect behaviour, privacy regulation, and social interaction.[27]

Alexander's concept of "living structure" offers an ecological foundation for design: he articulates fifteen structural properties, such as "levels of scale", "gradients", and "local symmetries", which, when embodied, foster environments that resonate with natural systems and human sensibilities.[28]

In a-formal neighbourhoods, human scale structures gradients between public, semi-public, and private realms, enabling appropriation and everyday surveillance. This aligns with Jane Jane Jacobs' observations on street life demonstrate how continuous presence and visual contact generate safety and belonging.[29] These insights align with phenomenological accounts of bodily perception and movement as central to spatial experience.

c.1. Design principle: Appropriability

Appropriability refers to the capacity of inhabitants to materially and symbolically take possession of space through use, transformation, and identification. It is not only physical, but functional and experiential, allowing the coexistence of a mix of uses. Integrating productive functions into the domestic realm for example is consistent with Alexander's patterns in A Pattern Language, such as "Home Workshop", which promotes small-scale, street-facing workspaces embedded within residential contexts.[30] By allowing households to produce, work, and exchange value

23. Alexander et al., *A Pattern Language*.
24. Habraken, *Supports*.
25. *The Nature of Order: An Essay on the Art of Building and the Nature of the Universe*. Vol. 1, The Phenomenon of Life. Berkeley, CA: Center for Environmental Structure, 2002.
26. Christopher Alexander, *The Timeless Way of Building* (Oxford University Press, 1979).
27. Irwin Altman, *The Environment and Social Behavior: Privacy, Personal Space, Territory, Crowding* (Brooks/Cole Pub. Co., 1975).
28. Bin Jiang, "Living Structure Down to Earth and Up to Heaven: Christopher Alexander." *arXiv preprint* arXiv:1909.11757 (2019).
29. Jacobs, *Death and Life*, 35–42.
30. Christopher, *A Pattern Language*.

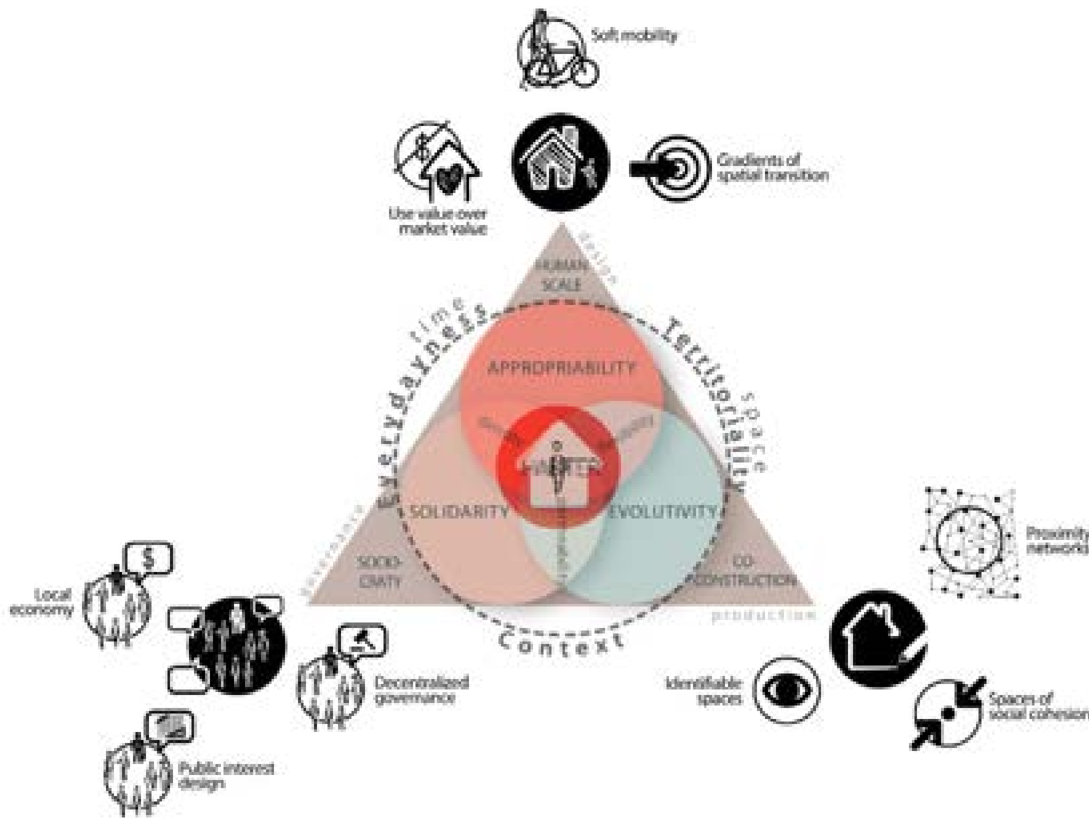

Figure 1. Index of Habiter diagram. Author, 2015.

locally, design supports a more reciprocal, embedded economy that strengthens both autonomy and social infrastructure.

c.2. Design guidelines:

- *Gradients of spatial transition*: Structure public space according to subtle transitions, from public to semi-public to private, to ensure clarity, comfort, and respect for multiple degrees of intimacy. These gradients support appropriation, social interaction, and harmonious coexistence between collective life and domestic privacy.

- *Soft mobility and pedestrian continuity*: Prioritize pedestrian movement and non-motorized mobility by creating safe, continuous, and pleasant pathways. Soft mobility networks strengthen environmental performance, reduce vehicular dominance, and reinforce human-scale spatial experiences that encourage active street life.

- *Networks of proximity*: Design neighborhoods as fine-grained, walkable territories structured around a network of nearby services, amenities, and everyday destinations. This spatial fabric reduces dependency on long-distance trips, strengthens local relationships, and supports a self-sufficient urban ecology grounded in accessible daily life.

At the intersection of sociocracy, co-construction, and human scale, *habiter* emerges as a lived condition produced through time, negotiation, and context rather than through formal design alone. (Figure 1)

4. Sehb El Caid in the urban context of Salé

4.1. Metropolitan and spatial context

Sehb El Caid is located in the commune of Bettana, within the Prefecture of Salé, part of the Rabat-Salé metropolitan region on Morocco's Atlantic coast. Historically, Salé has functioned as both an industrial and residential counterpart to Rabat, absorbing labour and populations displaced by colonial restructuring, post-independence industrialisation, and later neoliberal urban development. [31]

Initially situated at the urban periphery, Sehb El Caid became progressively enclosed by urban expansion, transforming from a marginal settlement into an inner-city enclave (Figure 2). Despite its physical integration into the city, the neighbourhood remained administratively marginal, excluded from comprehensive municipal servicing and tenure recognition. This paradox of spatial centrality, combined with institutional invisibility, is characteristic of many Moroccan self-built neighbourhoods described in urban literature.

31. Koenraad Bogaert, *Globalized Authoritarianism: Megaprojects, Slums, and Class Relations in Urban Morocco* (University of Minnesota Press, 2018), 1–28.

4.2. Origins and historical emergence

The emergence of Sehb El Caid dates back to the 1960s, coinciding with intensified rural-urban migration and the inadequacy of formal housing provision.[32] Journalistic and municipal records indicate that the settlement grew rapidly: approximately 1,523 households were recorded in 1989, rising to 2,321 in 1992 and reaching around 2,544 households by the early 2000s.[33] Using average household sizes employed in resettlement programmes, this corresponds to an estimated population of nearly 15,000 inhabitants. These figures position Sehb El Caid as one of the largest concentrations of self-built housing in the Rabat-Salé agglomeration.

Residents interviewed during fieldwork in 2014-2015 traced their arrival to waves of migration from central and northern Morocco, driven by agricultural precarity and industrial employment opportunities in Salé.[34] As documented by Belfquih and Fadloullah, this period saw the multiplication of self-built settlements across Moroccan cities, often on state-owned or collective land.[35] Sehb El Caid followed this pattern, developing incrementally through plot subdivision, informal transactions, and progressive construction using locally available materials.

32. Mohamed Belfquih and Abdelkhalek Fadloullah, Habitat populaire et politiques urbaines au Maroc (INAU, 1996), 21–40.
33. Le Matin, "Salé : Vers la résorption définitive des bidonvilles Sehb El Caïd," Le Matin.ma, April 2, 2005, 17:59.
34. Author's fieldwork notes and interviews (Aahd Benchaouch, 2014–2015), unpublished ethnographic material.
35. Belfquih and Fadloullah, Habitat populaire, 57–89

4.3. Classification as Habitat insalubre and resettlement operations

From the 1980s onward, Sehb El Caid was officially classified as habitat insalubre, rendering it eligible for inclusion in national slum eradication policies. This classification framed the settlement primarily through its material deficiencies: lack of infrastructure, density, and irregular tenure. Such classifications, as Bogaert argues, function as instruments of governance that legitimise intervention while depoliticising displacement.[36] In the case of Sehb El Caid, they paved the way for large-scale clearance strategies rather than incremental upgrading.

In the early 2000s, Sehb El Caid became a priority site under the Programme Villes Sans Bidonvilles (PVSB).[37] Municipal and press sources reported investments of approximately 400 million Moroccan dirhams, funding infrastructure, serviced plots, and housing developments.[38] A significant portion of residents were relocated to newly built housing in the Lotissement Saïd Hajji, while others were earmarked for restructuring or relocation to peripheral plots.

While the PVSB achieved its numerical targets, its evaluation metrics remained overwhelmingly quantitative. Success was measured through units

36. See Mohamed Belfquih and Abdelkhalek Fadloullah, Habitat populaire et politiques urbaines au Maroc (INAU, 1996); and Koenraad Bogaert, Globalized Authoritarianism (2018), for analysis of classification and policy frames.
37. Kingdom of Morocco, Programme Villes Sans Bidonvilles (PVSB) (Rabat: Ministry of Housing, Urban Policy and City Planning, 2004).
38. Le Matin, "Salé : Vers la résorption…"

Figure 2. Morphological plan view showing Sehb El Caid enclosed by urban expansion. Author based on Google satellite imagery, 2015.

delivered and families relocated, with little attention to lived outcomes. As Belfquih and Fadloullah previously warned, such approaches risk severing social networks and undermining livelihood strategies embedded in self-built neighbourhoods. Ethnographic accounts collected prior to relocation revealed residents' ambivalence: while improved infrastructure was welcomed, fears were expressed regarding affordability, distance from employment, and loss of social networks.

4.4. Post-relocation trajectories and emerging evidence

Recent peer-reviewed research has offered a more critical assessment of slum clearance and resettlement in Salé, specifically regarding evicted residents of Sehb El Caid.[39] Raffael Beier's study, based on interviews with households displaced through PVSB operations, documents how many relocated families were unable to afford construction costs on serviced plots, particularly in peripheral locations such as Bouknadel.

As a result, some households sold their plots shortly after allocation and entered precarious rental markets, while others experienced prolonged housing insecurity despite formal rehousing.[40] While this research does not isolate Sehb El Caid as a standalone case, it examines resettlement operations conducted within the same institutional frameworks and timeframes, making its findings highly indicative of the trajectories likely experienced by former residents of our neighborhood of interest. Indeed, satellite imagery comparison between 2020 and 2021 (Figure 3) indicates that Sehb El Caid was largely cleared during this period, rendering the neighbourhood a closed historical case. This underscores the urgency of assessing not only the physical outcomes of Sehb El Caid eradication but also its long-term social consequences.

Figure 3. Satellite imagery of Sehb El Caid between 2020 (top) and 2026 (bottom) showing the eradication of the slum units. Google Earth historical imagery, 2020 and 2021.

5. Reading Sehb El Caid through the Index of Habiter

Reading Sehb El Caid through the Index of Habiter makes it possible to shift the analytical focus away from deficiency-based narratives and toward the internal coherence of the neighbourhood as a lived socio-spatial system. Rather than treating the settlement as a malfunctioning fragment of the formal city, this approach reveals how governance, production, and everyday life were organised through a-formal logics grounded in dwelling practices (*habiter*). The following analysis mobilises the three organising principles of the index (sociocracy, co-construction, and human scale) not as abstract categories, but as interpretative lenses through which the neighbourhood's spatial form and social organisation can be understood.

5.1. Sociocracy: Everyday governance beyond formal institutions

In Sehb El Caid, governance did not operate through codified rules, elected bodies, or legally recognised authorities. Yet this absence of formal institutions did not result in social disorder. Instead, regulation emerged through proximity-based, distributed forms of authority embedded in everyday interactions. This corresponds to what the Index of Habiter conceptualises as sociocracy: a mode of governance grounded in consent, mutual recognition, and collective responsibility rather than hierarchical command.

Empirical observations conducted during fieldwork (2014–2015) reveal that conflict resolution and decision-making were largely managed by socially recognised figures, namely long-term residents, elders, and religious figures, or individuals with extended kinship ties.[41] They played mediating roles, while collective norms regulated access, open spaces, and shared infrastructure. Their authority was neither fixed nor coercive; it depended on trust, reputation,

39. Raffael Beier, "The End of Inclusive Resettlement: Experiencing Unaffordability within State Housing Programmes in Salé, Morocco," *Urban Forum* 35 (2024): 529–550.
40. Beier, "End of Inclusive Resettlement," 534.
41. Author's fieldwork notes and interviews (Aahd Benchaouch, 2014–2015), unpublished ethnographic material.

and continued participation in neighbourhood life. This aligns with Robert Putnam's analysis of social capital, in which dense networks of repeated interaction generate norms of reciprocity and informal enforcement.

Spatial configuration played a decisive role in sustaining this governance system. The neighbourhood's fine-grain morphology (narrow streets, frequent intersections, and limited setbacks) produced high levels of pedestrian traffic and continuous mutual visibility. Jane Jacobs's concept of "eyes on the street" is directly applicable here: social regulation was achieved not through policing or surveillance infrastructure, but through the ordinary presence of inhabitants engaged in daily routines.[42] Children playing, proximity commerce, and domestic activities spilling into public space collectively produced permanent self-regulation.

Importantly, sociocracy in Sehb El Caid was not an idealised form of harmony. Conflicts did occur, particularly around noise, encroachment, or access to shared infrastructure. What distinguishes the a-formal condition is not the absence of conflict, but the mechanisms through which it is addressed. Negotiation, mediation, and incremental adjustment prevailed over formal sanction. These processes depended on spatial proximity and the impossibility of anonymity, conditions often undermined in large-scale housing estates.

- *Decentralised proximity governance*: Self-organization has emerged out of necessity. Natural leaders coordinate disputes, collective repairs, and infrastructure improvisations. Women's networks, extended families, and micro-coalitions often ensure daily functioning more efficiently than formal structures. Yet governance remains vulnerable because it lacks legitimacy: the state-appointed Sheikh operates primarily as an extension of central authority, suppressing autonomous organization rather than enabling it. As a result, residents' collective intelligence has no institutional channel to influence decision-making. The weakest dimension remains the settlement's relationship with formal institutions. Lack of tenure security, unreliable utilities, exclusion from municipal plans, and adversarial relations with authorities produce chronic precarity. Resident agency fills governance voids but cannot substitute structural justice, regulatory access, or the technical assistance required for safe, long-term development.

42. Jacobs, *Death and Life*, 35–42.

Figure 4. Use of front-door open spaces for sun drying of wheat, reminiscent of rural practices. Author, 2015.

- *Collective spaces encouraging social interaction*: Even without formal facilities, Sehb El Caid cultivates strong nodes of social interaction: doorsteps, shared courtyards, shaded corners, and local convenience shops double as micro-public squares. Dense kinship and solidarity networks, rotating credit groups, childcare exchanges, and mutual aid enable survival in the absence of the state. Threshold sociability, open-door hospitality, and Friday gatherings anchor the community within a faith-based ethic of neighbourliness. The systematic indoors-outdoors continuity and interdependence via a semi-private or shared courtyard, used for producing sun drying or water harvesting, links the neighborhood to its *rurban* (or rural-urban) origins. (Figure 4) Architecture becomes the vessel of memory. The weakness lies not in cohesion itself, but in the lack of designated collective spaces at the neighborhood's level with state-of-the-art infrastructure for various ages, genders, and needs (equipped and safe playgrounds, shaded seating areas, etc.).

- *Networks of economic autonomy and solidarity*: Domestic and productive realms coexist fluidly. Many homes host workshops, shopfronts, or services, turning the neighborhood into a walkable economic ecosystem. This hybridity fosters resilience and supports pedestrian activity. However, because these activities remain informal, their growth is limited by insecurity: no tenure, no licenses, no physical standards for safer work environments.

5.2. Co-construction: Incremental production and collective intelligence

Co-construction constitutes the second organising principle of the Index of Habiter and is particularly evident in Sehb El Caid's built fabric. Housing units were not delivered as finished products, but emerged through incremental processes shaped by household needs, financial capacity, and social norms.

Free from prescriptive regulations, the residents maintained control over construction decisions, allowing them to adapt their dwellings in response to changing circumstances. While material conditions

were often precarious, the capacity for transformation constituted a form of resilience lacking in many formally planned environments. Co-construction extended beyond individual dwellings to collective infrastructure. Residents organised informal connections to water and electricity, negotiated shared access paths, and collectively financed or executed improvements such as street paving and drainage. These practices demonstrate that a-formal production operates at multiple scales, producing not only buildings but also social and technical networks.

From the perspective of the Index of Habiter, co-construction reveals a form of collective intelligence embedded in everyday building practices. This intelligence is often rendered invisible or illegitimate by formal planning regimes, despite its demonstrated capacity to produce durable urban environments.

- *Use value*: Sehb El Caid is built according to lived needs, not speculative logic. Homes grow incrementally with life cycles, spaces adapt to changing family structures, rebar and unfinished rooftops signal anticipated futures rather than stagnation. (Figure 5) The challenge is that use-value-driven growth, when unregulated, can intensify overcrowding and reduce structural safety. Additionally, the low commodity value of houses compromises the willingness of their owners to upkeep and maintain their properties to increase their market value.

- *Identifiable and transformable spaces*: The older core exhibits strong spatial identity: material textures, thresholds, and local craftsmanship narrate the area's rural-urban memory. Residents can orient themselves through sensory cues, familial clusters, and commercial activity. However, the lack of essential street furniture, such as light posts, signage, landscaping, and broader streetscaping elements, which normally serve as cognitive anchors within the urban environment, cannot be ignored. Without these navigational and identity-forming cues, public space becomes visually fragmented, diminishing wayfinding clarity and reducing the capacity of residents and visitors to perceive the area as a coherent, readable urban landscape.

Figure 5a. Example of a housing unit developed over the years based on need. Author, 2015.

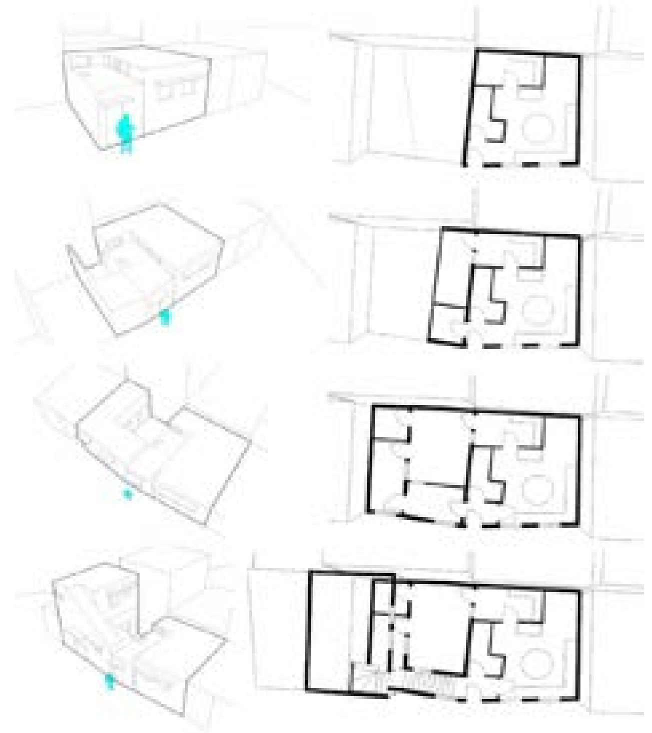

Figure 5b. Drawing representation illustrating the increment of a housing unit. Author, 2015.

- *Public interest design*: What Sehb El Caid most lacks is structural support aligned with public interest: legal recognition, technical assistance, and investment in safe infrastructure. Residents' ingenuity substitutes for absent institutions but cannot compensate for poor drainage, fragile electricity networks, or the risk of demolition. A framework of public-interest design, one that respects the settlement's lived intelligence while improving safety, accessibility, and ecological performance, remains entirely missing yet crucial for future upgrading.

5.3. Human Scale: Appropriation, thresholds, and bodily experience

Human scale functions as the directing scale of design within the Index of Habiter and is central to understanding how Sehb El Caid was experienced and appropriated. The neighbourhood's morphology prioritised pedestrian movement, short distances, and bodily perception. Streets were proportioned to walking flow rather than vehicular speed, enabling frequent interaction and reinforcing social regulation through familiarity.

Morphologically, Sehb El Caid was characterised by narrow streets, irregular plot boundaries, and a fine-grained built fabric. Far from being chaotic, this morphology reflected negotiated adaptations

Figure 6. Street photo of Sehb El Caid exemplifying the concept of eyes on the street and human-scale traffic. Author, 2015.

to topography, social relations, and everyday needs. Semi-public spaces (doorsteps, thresholds, and widened intersections) played a crucial role in daily life, enabling informal commerce, social interaction, and collective oversight.

Appropriability, the capacity to take possession of space materially and symbolically, was evident throughout the neighbourhood. Residents personalised façades, extended domestic activities into public space, and repurposed streets for economic, social, and religious uses. Such practices fostered a strong sense of ownership and adaptability.

Human scale also shaped mobility patterns. The dominance of walking reinforced social encounter and local economic exchange, while limiting the intrusion of high-speed traffic. This condition aligns with Donald Appleyard's findings on the relationship between traffic intensity and social life: streets that prioritise movement over dwelling erode social ties, whereas those scaled for human movement reinforce them.[43] (Figure 6)

- *Gradients of spatial transition*: In the older, consolidated core, spatial transitions from commercial street to semi-public alley to domestic threshold are legible and socially negotiated. People intuitively know when they are entering a shared, semi-private, or intimate space. But in areas where overcrowding pushed residents to occupy site boundaries, these gradients collapse: One accesses the neighborhood directly onto narrow alleys without buffer zones, compromising privacy, safety, and the subtle choreography of public-private life.

- *Soft mobility and pedestrian continuity*: Prioritize pedestrian movement and non-motorized mobility by creating safe, continuous, and pleasant pathways. Soft mobility networks strengthen environmental performance, reduce vehicular dominance, and reinforce human-scale spatial experiences that encourage active street life.

- *Networks of proximity*: Sehb El Caid organically functions as a micro-territory of short distances: shops, workshops, homes, and informal services sit only steps apart. This proximity reduces reliance on motorized trips and reinforces walkability and everyday sociability. However, the most peripheral areas which are more exclusively residential lack the same density of services, creating uneven access to daily needs and pushing some households into spatial isolation.

Taken together, sociocracy, co-construction, and human scale reveal Sehb El Caid as a coherent dwelling environment, structured by a-formal logics. Through the lens of the Index of Habiter, the settlement appears

43. Appleyard, *Livable Streets*, 33–70; Amos Rapoport, *Human Aspects of Urban Form*, 50–88.

not as a failure of planning, but as an alternative urban order grounded in lived practice.

6. Design and policy implications: Toward a-formal urban interventions

Recognising a-formality as a legitimate mode of urban production carries profound implications for planning, architecture, and public policy. The case of Sehb El Caid demonstrates that self-built settlements are not empty sites awaiting correction, but complex socio-spatial systems whose destruction can produce new forms of precarity. The challenge, therefore, is not whether to intervene, but how.

State-led clearance and resettlement programmes, such as Villes Sans Bidonvilles, have primarily evaluated success through quantitative indicators: number of units delivered, families rehoused, or hectares cleared. While these metrics are administratively legible, they obscure the social costs of displacement. Such relocation often entails increased housing costs, loss of livelihood proximity, and fragmentation of social networks.[44] From the perspective of a-formality, these outcomes are not incidental failures but structural consequences of an approach that treats housing as a product rather than a process. By dismantling a-formal environments without preserving their social and spatial logics, resettlement policies risk reproducing informality elsewhere or generating new forms of vulnerability.

6.1. Implications for Architectural Practice: The Index of Habiter as a diagnostic and projective tool

For architects, engaging with a-formality requires a shift from authorship to facilitation. Design becomes less about producing finished forms and more about creating frameworks that enable dwelling over time. This includes designing open systems, adaptable structures, and spaces that invite appropriation. Such an approach challenges dominant professional norms but aligns with a growing body of practice concerned with participatory design, open building, and community-led development. Importantly, it does not imply the absence of expertise, rather, it demands a different deployment of it.

The Index of Habiter offers an alternative approach by reframing intervention as engagement with existing dwelling practices. As a diagnostic tool, it allows planners and designers to identify the socio-spatial capacities already present in a neighbourhood, mechanisms of governance, adaptability, and appropriation, rather than focusing exclusively on deficits. As a projective tool, the index can inform incremental upgrading strategies that reinforce rather than erase these capacities. For example, instead of replacing fine-grain street networks with wide vehicular roads, interventions could enhance pedestrian continuity and public thresholds. Rather than delivering fixed housing typologies, policies could support adaptable structures that allow households to build incrementally.

44. Beier, "End of Inclusive Resettlement".

7. Limitations and future research

The application of a-formal principles is not without limits. Institutional frameworks, land tenure regimes, and political interests often constrain the scope of incremental or participatory approaches. Municipalities may lack the capacity or mandate to engage in fine-grain upgrading, while legal frameworks may reject a-formal practices. Acknowledging these constraints is essential to avoid romanticising informality. A-formality is not proposed as a universal solution, but as an analytical and methodological lens that can inform more context-sensitive interventions within existing political realities.

This study faces several limitations. First, publicly accessible census data does not disaggregate Sehb El Caid with sufficient precision, constraining demographic analysis. Second, detailed archival records on land tenure, infrastructure provision, and municipal decision-making remain difficult to access, limiting longitudinal institutional analysis. Third, while recent studies document post-relocation outcomes, systematic oral histories of long-term residents prior to displacement are scarce.

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The apparent clearance of Sehb El Caid between 2020 and early 2021, as suggested by satellite imagery, makes such questions especially urgent. Future research should investigate where former residents currently live, under what tenure conditions, and how their present dwelling environments compare to those they previously inhabited. Such work would enable a longitudinal assessment of how displacement reshapes social networks, spatial appropriation, and everyday governance, core dimensions captured by the Index of Habiter.

More broadly, these gaps point toward future research directions including longitudinal ethnographies of a-formal neighbourhoods, comparative studies across Moroccan cities, and deeper archival work on planning institutions. Together, these approaches would further refine the analytical power of a-formality and strengthen the methodological robustness of the Index of Habiter.

8. Conclusion: Toward a shift in urban knowledge and production paradigms

Sehb El Caid demonstrates that self-built settlements are not merely spaces of lack but repositories of spatial intelligence forged through lived practice. By articulating the concept of a-formality, this paper contributes to a growing body of work that challenges formalist urban paradigms and recentres dwelling as a foundation of urban theory.

Ultimately, the contribution of this paper lies in repositioning dwelling (*habiter*) as a source of urban knowledge. By articulating a-formality and operationalising it through the Index of Habiter, the paper argues for a shift from eradication toward recognition, from imposed solutions toward co-produced urban futures. This shift is as epistemological as it is practical, challenging planners, architects, and researchers to reconsider how urban expertise is constituted.