Journal of
Engineering Sciences
Faculty of Engineering
Assiut University
JES
مجلة
العلوم الهندسية
كلية الهندسة
جامعة أسيوط
journal homepage: http://jesaun.journals.ekb.eg

Place Attachment as Spatial Resistance in Informal Settlements: A Case Study of Manshiyat Naser, Cairo.

Received 5 June 2025; Revised 5 July 2025; Accepted 5 July 2025

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Keywords
Place attachment,
Topophilia,
Informal settlements,
Slum upgrading,
Relocation resistance

Abstract: While place attachment is commonly associated to positive experiences of safe or scenic environments, this study investigates how it emerges in stigmatized, marginalized urban spaces. It addresses a critical gap by analysing the emotional, symbolic, and economic dimensions of resistance to displacement, despite hazardous environments with inadequate living conditions and infrastructure. This study investigates how place attachment shapes resistance to relocation in informal settlements by studying Manshiyat Naser (Zabbaleen District) in Cairo as a case study, using Strauss and Corbin's Grounded Theory approach to analyze narratives from publicly available 19 YouTube interviews of Zabbaleen residents. A structured process comprising open, axial, and selective coding was employed to develop an inductive conceptual framework grounded in the lived experiences of participants. Findings reveal that place attachment in Manshiyat Naser is more complex than factors of emotion; it is also functional as well as strategic. That becomes a form of spatial resistance – a way to assert dignity, identity, and agency. The study contributes to urban research by redefining place attachment within degraded environments through an inductively derived conceptual model. It advocates for participatory urban policies wherein communities are actively integrated in the development process and where social forms of displacement are respected through continuity in community identity geography.

1. Introduction

The idea of place attachment, also known as topophilia, was first introduced by Tuan (1974) [1] to describe the deep emotional, cognitive, and social bonds that people develop with their surroundings. Topophilia, meaning "love of place" derived from the Greek words topos (place) and philia (love), refers to the affective connection individuals form with a specific physical setting [1]. Traditionally associated with aesthetically valued or culturally significant sites [2], place attachment has long been considered a positive force that strengthens community cohesion, stability, resilience, and well-being

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https://doi.org/10.21608/jesaun.2025.392466.1539

[3]. However, more recent research has expanded this view by acknowledging that attachment to place can also develop in marginalized, hazardous, or informal urban contexts [4, 5]. In such settings, emotional connection to space may serve as a strategy for survival, resistance, and the preservation of identity under socio-political pressure [6, 7]. Despite this growing recognition, most empirical studies of place attachment have focused on formal or idealized spaces, such as natural landscapes, heritage districts, or stable middle-class neighborhoods [2, 3]. The literature on place attachment has not given much attention to informal settlements, in which residents often face systemic neglect, stigmatization, or the threat of displacement [8, 9]. Typically, these environments are studied through economic or logistical lenses – access to jobs, tenure insecurity, provision of services – these environments reveal a deep layer about their society. Emotional, symbolic, and affective ties to these places are often neglected. This results in urban policies that do not understand why people resist relocation, even when hardships are evident [9, 10].

In Cairo, government-sponsored efforts towards the relocation of people, especially from districts like El-Asmarat and the Al-Mokattam Hills, have been designed to clear informal settlements to allow for urban redevelopment. Many such efforts have met resistance from those residents who have entrenched place-based identities, as with the Zabaleen waste-recycling community in Manshiyat Naser[6,7,11]. Relocation policies in many Global South cities often treat informal dwellers as passive recipients of housing solutions, without acknowledging their active role in place-making and attachment [12,13]. As a result, many relocation efforts fail – not merely due to economic shortcomings, but because they disrupt entrenched spatial meanings, labor systems, and social cohesion. Resistance to relocation must, therefore, be reexamined not only as a rational economic response, but as a complex affective and cultural stance grounded in the lived experience of space [6,14]. To investigate this problem, the study investigates Manshiyat Naser in Cairo as a case study, where residents of the Zabbaleen community have demonstrated long-standing resistance to state-led relocation programs. The study is guided by the following research questions:

- RQ1: What meanings do residents assign to their neighborhood in relation to identity, belonging, and livelihood?
- RQ2: How do informal economic systems (such as waste collection and recycling) reinforce emotional or functional place attachment?
- RQ3: In what ways do residents perceive, resist, or negotiate relocation initiatives and urban policy interventions?

This study aims to examine how place attachment functions as a form of spatial resistance in environmentally and socially marginalized urban settlements. By foregrounding resident narratives and emotional geographies, the research seeks to move beyond traditional economic or infrastructural explanations for relocation resistance. It emphasizes how informal settlers are not merely resisting change, but rather actively defending a place-based identity shaped by meaning, labor, and community continuity.

The study adopted Strauss and Corbin's Grounded Theory approach to analyze 19 publicly available video interviews with residents of Manshiyat Naser. These interviews, sourced from YouTube and community media platforms, offer rich, spontaneous, and affect-laden narratives about daily life, labor, belonging, and displacement. The study centers the residents' voices as interpretive agents capable of articulating their own spatial logic and attachments. This study introduces the concept of place attachment as spatial resistance, demonstrating how non-material forms of belonging – such as religious symbolism, intergenerational work ethics, and moral dignity – function as barriers to relocation in ways that planning frameworks rarely anticipate.It highlights the potential of digital ethnography and video-based narrative analysis as valid and insightful tools for urban research, especially in cases where traditional fieldwork is limited or politically constrained. Together, these

contributions offer a new interpretive lens and conceptual model for understanding informal urban resistance and call for a more nuanced, participatory approach to urban planning in marginalized settings.

2. Method

This study uses Manshiyat Naser (the Zabbaleen District) as its main case study. This informal settlement, located in eastern Cairo, is home to Coptic Christians and is known for having one of the most efficient informal recycling systems in the world, handling around 80% of Cairo's solid waste [8, 9]. The neighborhood's special layout is linked to the work and labor dynamics, family ties, and religious traditions of its residents. This unique layout makes it a compelling site to examine the role of emotional, functional, and symbolic attachments to the place in the resistance to state-led efforts concerning urban renewal and housing displacement during infrastructural abandonment and urban marginalization. The location and urban context of the case study are illustrated in (Fig. 1).

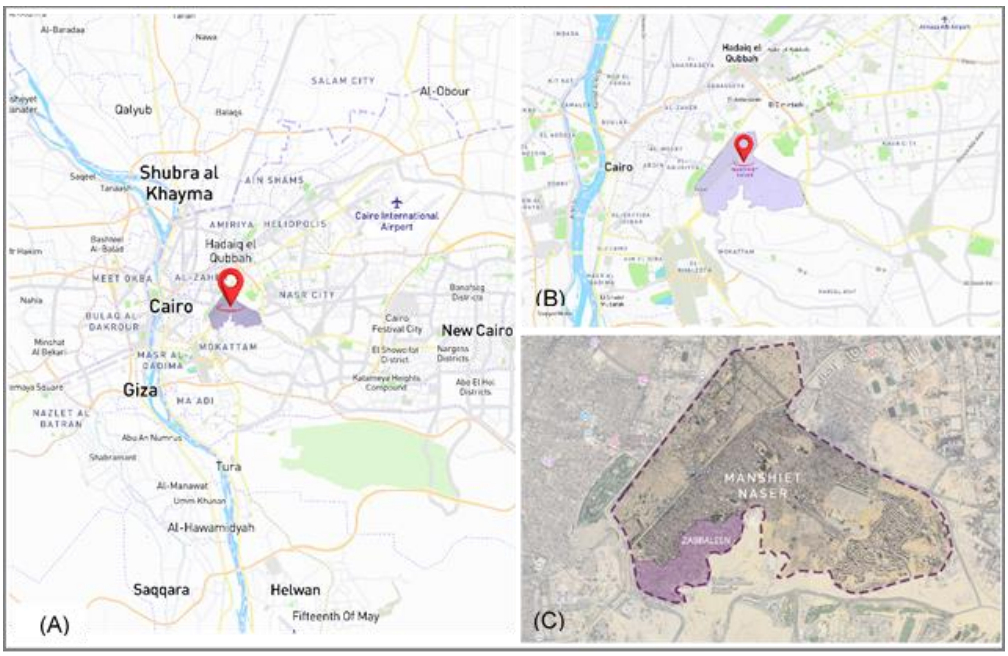

Fig.1: Location of the Case Study: (A) Egypt and Greater Cairo; (B) Manshiyat Naser District; (C) Zabbaleen District. [The Authors]

The choice of the Zabbaleen community was based on its paradigmatic relevance for theorizing place attachment in marginalized urban contexts. Their well-documented resistance to relocation, intergenerational labor patterns, and place-rooted identity offer fertile ground for inductive theory-building using grounded theory (Strauss & Corbin, 1990).

2.1. Research Design and Approach

Grounded Theory has been applied to varying extents in international and domestic contexts of urban planning research, with a particular focus on informal settings. Salimi et al. took a Straussian view to examine social cohesion in Iranian neighborhoods [16], whereas Shafqat et al. used a thematic strategy based on Grounded Theory to evaluate cultural sustainability in Pakistan [17]. Ahmed and

Parry used Grounded Theory analysis in assessing design methods in affordable housing in Egypt, whereas these results demonstrated a lack of connection between urban planners and community members [18]. More recently, Fahmy, Safey Eldeen, and Abdelwahab applied Constructivist Grounded Theory to examine intergroup relations at Digla Square in Cairo, generating themes of multifunctional use, personal appropriation, and communal interaction. The method highlighted the importance of inclusive public space for social cohesion in a fragmented urban setting. [19]. These applications demonstrate the versatility of Grounded Theory in identifying socio-spatial relations and dynamics in under-researched urban spaces.

The present study employed an interpretive grounded theory approach following the analytic procedures outlined by Strauss and Corbin (1990). to understand how Manshiyat Naser residents coped with attachment under conditions of informal settlement and spatial insecurity. The adopted methodology was preferred because it had a systematic yet flexible structure that allowed the researcher to build theoretical knowledge from the data without imposing prior hypotheses. Through successive steps of open coding, axial coding, and selective coding, the research inductively developed a conceptual model of place attachment as a type of spatial resistance.

2.2. Data Collection and Source Material

The data collection process involved a carefully selected group of 19 publicly available videos on YouTube, chosen for their overall ethnographic richness, varied participant groups, and thematic representations of daily life in Manshiyat Naser (Zabbaleen District). The videos featured interviews with local inhabitants, representations of labor tasks, religious and cultural practices, and personal stories about encounters with relocation. This selection allowed for immediate access to stakeholders' spontaneous thoughts and views, especially individuals who had previously expressed unwillingness to be interviewed using standardized methods. A comprehensive overview of the reference materials as shown in Table 1.

- V No. – A title used for analytical and citation purposes.
- Description – The main subject and thematic focus of the video.
- YouTube Link – Hyperlinked source access.
- Interviewer or Video Producer – Identifies the individual, organization, or channel responsible for conducting or publishing the video interview.
- Date – The time since videos' upload or release.
- Duration – The total duration of the video on YouTube.
- ID – A distinct number assigned to different speakers.
- Narrative Characteristics – Narrative's demographic attributes and roles.

This video dataset was particularly valuable due to its visual ethnography format, which captured spatial routines, environmental context, and community interaction—factors often difficult to access through traditional fieldwork.

Table 1: Overview of YouTube Videos Utilized for Data Collection [The Author].

V No.	Descript-son	YouTube Link & (interviewer or Video Producer)	Date	Durat-ion	ID	Narrative Characteristics
1		Link	28/01/2022	~10:00 mins	1	Shehata Al-Moqades, Garbage collectors' union chief.

V No.	Descript-son	YouTube Link & (interviewer or Video Producer)	Date	Durat-ion	ID	Narrative Characteristics
	Daily Labor in Manshiyat Naser	(Karim El Sayd – Egyptian Vlogger)			2	Three relatives who work as garbage collectors. - Residents.
2	Overview of Zabbaleen Culture	Link (Ahmad Diaa – Egyptian Vlogger)	01/03/2025	~10:00 mins	3	Female worker - Resident
					4	Male worker - Resident
					5	Male worker - Resident
3	Spiritual Life in Garbage City	Link (Rasha Gamal – Egyptian Media Person)	12/01/2023	~6:00 mins	1	Shehata Al-Moqades, Garbage collectors' union chief.
					6	Male worker - head of a working family sorting waste - Resident.
					7	Male worker - working in sorting various metal waste - Resident.
4	A Walk Through Manshiyat Naser	Link (Mohamed Al-Magid – Iraqi Vlogger)	07/04/2025	~11:00 mins	8	Young male worker - Works in collecting leftover paper and plastic waste from side streets - Resident.
					9	Old man - Talks about people's social conditions and the problems they suffer from - Resident.
5	Tourist Perceptions vs. Local Realities	Link (Drew Bensky - Foreign Vloggers)	22/02/2025	~24:00 mins	10	Foreign vloggers - Explores the city's components and tries to communicate with the people in order to understand life in the place.
					11	Male local guide - Helps communicate with people, update them and explain what they are doing.
					12	Male worker - Owner of a pig farm that feeds on garbage - Resident.
					13	Old woman - Working in sorting different wastes - Resident.
					14	Male worker - Works in waste sorting, explains the components of a house in the city, talks about the waste collection and sorting process, and the various social problems facing the residents - Resident.
6	Resident Interview on Generations	Link (Omar Anwar – Egyptian Vlogger)	23/07/2021	~13:00 mins	15	Old male worker - Talks about the garbage collectors' neighborhood and the inheritance of the profession from the ancestors, as well as the process of collecting waste from different neighborhoods - Resident.

V No.	Descript-son	YouTube Link & (interviewer or Video Producer)	Date	Durat-ion	ID	Narrative Characteristics
					16	Old male worker - Talks about social conditions and professional life - Resident.
					17	Male worker - Talks about collecting, sorting and preparing plastic waste for recycling - Resident.
7	Elders Reflect on Scocial Change	Link (Mekameleen TV)	09/09/2018	~12:00 mins	1	Shehata Al-Moqades, Garbage collectors' union chief.
					18	Old male worker - Talks about his day from morning till evening and his role in collecting glass waste - Resident.
					19	Male Worker - Talking about the process of sorting and collecting waste - Resident.
					20	Male Worker - Business owner who sells various products and also collects and sorts waste - Resident.
8	Youth in the Recycling Economy	Link (Luis - Foreign Vloggers)	03/08/2022	~20:00 mins	21	Luis - Foreign vloggers - Talks about the garbage collectors' neighborhood, their culture, beliefs, and work.
9	Footage of Zabbaleen Families at Work	Link (News Gate – Egyptian TV Channel)	10/02/2014	~3:00 mins	22	Male worker - Talks about the process of collecting and sorting waste as well as the various problems they face in their work - Resident.
10	Children and Waste Education	Link (Vetogate - Arabic news portal)	29/09/2023	~8:00 mins	23	Child worker 12 years old - Talks about his work collecting waste, the problems he faces, and the reasons for his work - Resident.
					24	Child worker 15 years old - Talks about his work, dreams, education and desires for the future. - Resident.
11	Stories of Risk and Danger	Link (VideoYoum7 - Egyptian YouTube Channel)	18/03/2021	~4:00 mins	1	Shehata Al-Moqades, Garbage collectors' union chief.
12	Daily Routine and Association Role	Link (Hamdi Rizk – Egyptian Interviewer/ TV Shaw on Sada El-Balad)	13/10/2016	~10:00 mins	1	Shehata Al-Moqades, Garbage collectors' union chief.
					25	Old male worker - Talks about his factory in preparing and processing plastic waste in preparation for recycling it again and the returns from this process - Resident.

V No.	Descript-son	YouTube Link & (interviewer or Video Producer)	Date	Durat-ion	ID	Narrative Characteristics
13	Old Documentary on the Zabbaleen	Link (VideoYoum7 - Egyptian YouTube Channel)	21/09/2022	~22:00 mins	1	Shehata Al-Moqades, Garbage collectors' union chief.
14	The Role of the Zabbaleen Union	Link (Hamada Zidan - YouTube content creator)	10/09/2023	~13:30 mins	1	Shehata Al-Moqades, Garbage collectors' union chief.
15	Architecture and Home Spaces	Link (Seif Tamer – Egyptian Vloggers)	16/04/2021	~4:15 mins	26	Local vloggers - Talking about the garbage collectors' neighborhood and its history.
					27	Old man - Talks about the garbage collectors' neighborhood and he owns a shop that sells hardware and plastics - Resident.
16	Women in the Waste Sector	Link (Dr. Doria Sharaf El-Din – Egyptian TV Interviewer/ Channel 1 EG)	28/07/ 2022	~4:00 mins	28	Dr. Layla Eskander - Public female figure - Explains the location of the garbage collectors' neighborhood and its development over time.
17	Unusual Christians	Link (Emad Dabour – Egyptian TV Interviewer/ Sat7 Egyptian TV Channel)	06/11/ 2013	~60:00 mins	29	Father Boutros Roshdy - Male Religious figure - Talks about the religious character of the place and how the Christian call arose in the neighborhood - Resident.
					30	Old resident male christian worker - It talks about the history of the neighborhood, how people moved here, and the impact of different political events on the neighborhood.
					31	Two old male residents & christian workers - They talk about their move to the place, their living conditions, and their social and religious conditions.
					32	Resident female christian worker - From her home, talks about the nature of her work, her life, and her children's religious lives.
					33	Male christian worker - He talks about his work collecting and sorting waste and his social life - Resident.
					34	Male christian worker - He talks about his work collecting and

V No.	Descript-son	YouTube Link & (interviewer or Video Producer)	Date	Durat-ion	ID	Narrative Characteristics
						sorting waste and his social life - Resident.
18	Problems and Perseverance	Link (Jaber Al-Qarmouti – Egyptian TV Interviewer/ Al-Nahar TV Channel)	23/03/ 2017	~30:00 mins	1	Shehata Al-Moqades, Garbage collectors' union chief.
					35	Old resident male christian worker - Talks about the nature of his work collecting and sorting waste.
					36	Male worker - Talks about economic problems and confrontations with local authorities while doing their work - Resident
					37	Old resident male christian worker - Talks about the nature of his work collecting and sorting waste.
					38	Old resident male christian worker - Talks about the nature of his work collecting and sorting waste.
19	Revival Road	Link (Noran Salam – Egyptian TV Interviewer/ BBC News AR Channel)	04/05/ 2019	~15:00 mins	1	Shehata Al-Moqades, Garbage collectors' union chief., TV interviewer

2.3. Sampling Criteria

Videos were selected through purposive sampling based on the following criteria:

- Including resident accounts instead of using only external views.
- Thematic relevance to labor, identity, residential issues, resistance, or relocation.
- Diverse demographics are represented: age, gender, occupation, and religious background.
- Clear audio-visual quality is provided to enable accurate interpretation and transcription.

To ensure wide-ranging diversity, the selection of videos included material from both national and international documentarians, featuring perspectives from waste management employees, youth, older men, religious authorities, and members of non-governmental organizations.

Nineteen videos were selected through purposive sampling for their rich themes, diverse participant demographics, and depth of context. A total of 38 different speakers appeared in these videos. The collection of data and coding was done through constant comparison, along with memoing. After 32 participant narratives, saturation was reached, as no new conceptual labels or relationships emerged during open and axial coding. In order to confirm theoretical saturation, six more participants were analyzed, which only served to reinforce existing categories without offering new conceptual insights. This approach supports Strauss and Corbin's (1990) suggestion to continue sampling after saturation is reached in order to reinforce theory [20].

2.4. Data Processing and Transcription

The videos that underwent manual transcription had originally been recorded in Arabic and then been translated into English by researchers who carefully took into account tone, emotional nuance, and contextual appropriateness. This process followed Strauss and Corbin's (1990)[20] guidance on data familiarization and open coding of transcripts. The transcripts were formatted with speaker identifiers (i.e., ID1, ID2) to improve coherence and facilitate thematic tracking, as indicated by the quotations. The most important quotes were highlighted during transcription according to their emotional weight, thematic relevance, and repetition. This permitted a more directed transition to the subsequent step of selecting keywords and codes.

2.5. Coding Procedures and Theoretical Development

To align with Grounded Theory as developed by Strauss and Corbin (1990)[20], the analysis process was conducted through three main phases to present the conceptual model of the Selective Coding, Axial Coding and Open Coding as shown in figure 2:

1. Open Coding: The first stage of the coding process started with a careful line-by-line coding technique, where a detailed scrutiny of every sentence drawn from the raw video transcripts was conducted. Key words and phrases that expressed ideas of attachment, memory, or resistance were given conceptual codes. For instance, statements like "We have been in this profession for 100 years" and "passed down from our fathers and grandfathers" were coded as "Inherited Profession." These single codes, established through successive comparisons, were then grouped into subcategories named "Intergenerational Belonging."
2. Axial Coding: During this phase, the subcategories developed during open coding were examined and linked depending on their contextual relationships, then grouped under category. For example, subcategories "intergenerational belonging" and "Familiarity and Everyday Comfort" were grouped under Category 01: "Emotional Attachment," based on their common contextual features.
3. Selective Coding: Utilizing an iterative comparative approach with corresponding theoretical memoing, the categories that emerged were integrated into a single core category—"place attachment as spatial resistance"—comprising different emotional, symbolic, and economic aspects, perceptions associated with relocation, institutional processes, and community goals for development. This, in turn, provided a complete conceptual foundation for examining residents' resistance to displacement. This core category proved substantial explanatory power and enabled theoretical coherence across the dataset.

2.7. Ethical Considerations

Since all the videos used were publicly available through YouTube and did not involve direct interaction with the participants, formal approval from the Institutional Review Board (IRB) was not required. Nonetheless, the following ethical measures were still put in place:

- Excluding any identifiable personal data from the test.
- Expertly situating participant quotes to preserve their actual meaning and environment.
- Identifying and respecting the cultural, religious, and societal nuances of data analysis.

2.8. Trustworthiness and Rigor

Trustworthiness was determined using several qualitative validation approaches:

- Triangulation: Cross-validation of emerging concepts and categories across various videos-maintained consistency and representativeness of the findings.
- Reflexivity: Analytical and theoretical memos were kept consistently throughout the coding process to reduce researcher bias and and ensure transparency in category development.
- Audit Trail: Maintained thorough and transparent records of coding decisions, category formulation, memoing, and axial connections was maintained to ensure dependability and confirmability.

3. Findings

The grounded theory analysis led to the identification of one core category and five main categories, each of which is supported by two to three subcategories. These categories are presented visually in the conceptual model (see Fig. 2) which illustrates the analytical structure developed through open, axial, and selective coding. The core category – "Place attachment as spatial resistance: We don't just live here; we fight for it" – appropriately captures the underlying mechanism that binds emotional, symbolic, and economic aspects, as well as residents' perception to relocation and community preferences of Manshiyat Naser residents to their resistance to relocation. Nearly all participants expressed a deep attachment going beyond material conditions. They eloquently described how daily proximity, routine established at workplaces, and a sense of belonging in the neighborhood combined to create a deep attachment to their neighborhood.

Even as residents noted the regional challenges – congestion, pollution, and poor infrastructure – they consistently described the region as a vital source of identity, economic promise, and self-esteem. The idea of moving out of the region was often described, not as an improvement but as a disruption to the delicate fabric of personal and collective continuity.

The quote below captures the duality of attachment being practical and effective:

"Some people come here and smell garbage. But for others, it's the scent of success because garbage gives this place life. We love the profession of garbage collection; we grew up in it, and it is our livelihood. It is a permanent profession." (V1, ID2)

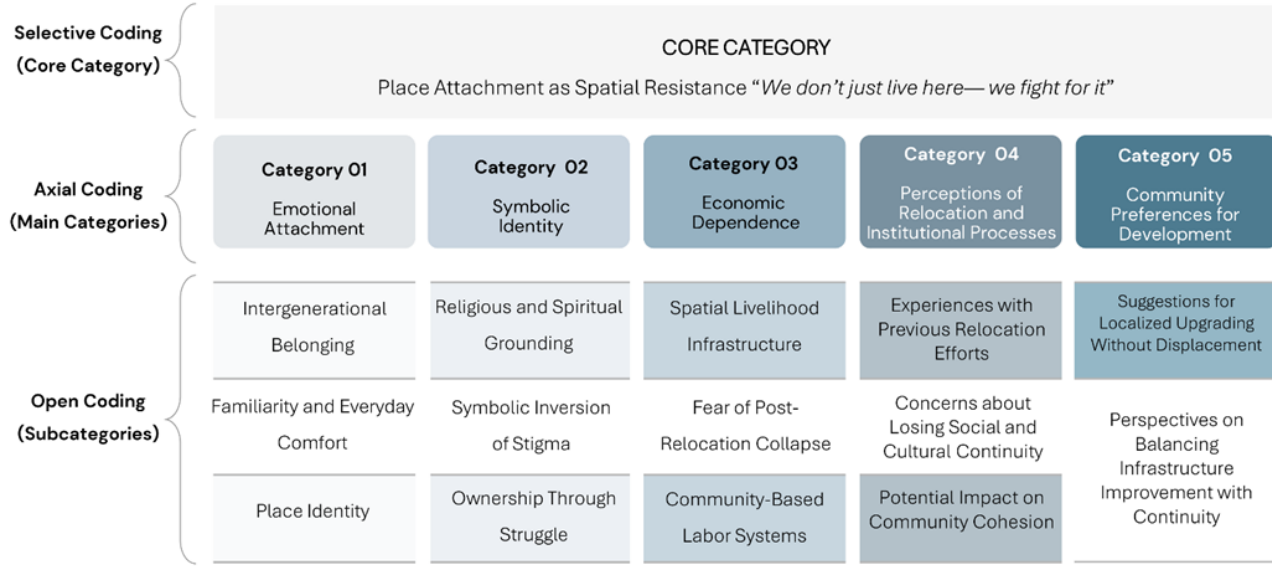

Fig. 2: The conceptual model of the Selective Coding (core category), Axial Coding (main categories) and Open Coding (subcategories) [The Authors]

3.1. Main Category 1: Emotional Attachment

The category reflects the emotional dimension of place attachment expressed by long-term residents of the Zabbaleen neighborhood in Manshiyat Naser. Emotional connections were a recurring aspect of the participants' narratives and covered three unique subcategories: intergenerational belonging, familiarity and everyday comfort, and place identity as illustrated in (Fig. 3), this category was broken down into three subcategories, each inductively derived through a process of open coding and labeling.

These subcategories reflect the effectiveness and importance of space in the everyday lives of the participants. Although they acknowledged the physical challenges in their residential situation, residents regularly pointed out that their emotional connections to the people, history, and everyday routines made the possibility of relocation both unnatural and undesirable.

Axial Coding (Main Categories)	Category 01: Emotional Attachment		
	Subcategory 01 Intergenerational Belonging	Subcategory 02 Familiarity and Everyday Comfort	Subcategory 03 Place Identity
Open Coding (Subcategories & Coded phenomenon "Labelling")	- Born into labor system (V18, ID38) - Inherited profession (V12, ID25) - Generational continuity (V11, ID1) - Spatial rootedness through ancestry (V18, ID38) - Resistance linked to family legacy (V11, ID1) - Lifelong immersion in place (V11, ID1)	- Place-based predictability (V4, ID8) - Environmental familiarity (V4, ID8) - Spatial rhythm and routine (V1, ID2) - Daily sensory continuity (V1, ID2) - Neighborhood intimacy (V4, ID8) - Place as structure of livelihood (V1, ID2)	- Work as identity marker (V11, ID1) - Moral dignity through labor (V11, ID - Spatial identity and pride (V7, ID20) - Community-based recognition (V11 - Reversal of marginalization (V11, ID - Belonging through contribution (V7, ID20)

Fig. 3: Open and Axial Coding Structure for Emotional Attachment. [The Authors]

3.1.1. Subcategory 1: Intergenerational Belonging

Many interview participants described Manshiyat Naser not just as a place to live, but rather as a site of family resilience. Generational continuity in the provision of homes, ways of living, and habits of everyday life has created a deep emotional tie to the area. Respondents linked the sense of security with being "born into" the neighborhood, often in the same household or along the same streets. The continuity of family presence was a powerful factor in their reluctance to leave, even when offered improved housing options elsewhere.

"We have been in this profession for 100 years. I am 73 years old, and, Your Honor, this profession has been passed down from our fathers and grandfathers – I was born into it." (V18, ID38)

We are like fish – if taken out of the water, we will die. That is our life. (V11, ID1)

3.1.2. Subcategory 2: Familiarity and Everyday Comfort

The inhabitants of Manshiyat Naser claimed that their concerns over the displacement issue are not just about the effects on their jobs, but mainly on the disturbances associated with the social and cultural interactions that are essential to create a sense of emotional well-being in their daily lives. They claimed that local customs, religious practices, community ties, and environmental senses of place are genuine, and cannot be replicated in a constructed housing complex.

"I go out like this every single day; everyone knows me.''(V4, ID8)

"This place, with its familiar smell, the sound of our daily movement, and our work." (V12, ID25)

"Each corner has a certain type of garbage, collected in big sacks, each with stories from the workers collecting, sorting, and recycling. In every street and alley, you'll find kids, women, and men working like a beehive, preparing their goods to be sent to more than 7,000 people working in recycling factories." (V1, ID2)

3.1.3. Subcategory 3: Place Identity

Respondents often linked their individual identity with the neighborhood itself. Living in Manshiyat Naser meant more than just geographic placement; it was a core part of their identity. A number of participants expressed deep pride in their identification with the Zabbaleen heritage and the values of hard work, independence, and recycling. The interviewees believed that their identity had long been misunderstood or even neglected by outsiders and policymakers.

"I have built an empire in the field of garbage. Garbage collectors used to be marginalized, but today they have value. We have managed to prove to the world that we are important people." (V11, ID1)

"My profession is beautiful, rewarding, and lasting, and I feel that I have a role in society. (V19, ID1)

"It's what we grew up with and gained our experience and work from." (V17, ID34)

"Garbage isn't shameful ... it's a profession, and we're preserving the country through it." (V11, ID1)

3.2. Main Category 2: Symbolic Identity

This Category displays the deep symbolic meaning that the residents of Manshiyat Naser grant their environment. The relation extends beyond emotional comfort and physical infrastructure; it includes the way people develop their social worth, communal pride, and moral identity through their engagement with space. The symbolic aspect of this relation supports resistance against relocation, not just as a response to physical change but as a way of maintaining significance. This category has three subcategories: religious and spiritual grounding, symbolic inversion of stigma and ownership through struggle as illustrated in (Fig. 4), this category was broken down into three subcategories, each inductively derived through a process of open coding and labeling.

Axial Coding (Main Categories)	Category 02: Symbolic Identity		
	Subcategory 01	Subcategory 02	Subcategory 03
	Religious and Spiritual Grounding	Symbolic Inversion of Stigma	Ownership Through Struggle
Open Coding (Subcategories & Coded phenomenon "Labelling")	- Baptized in local church (V10, ID13)	- Working city pride (V2, ID1)	- Built without help (V8, ID1)
	- Burial connection (V14, ID1)	- Suits vs. dignity (V08, ID1)	- Sweat in every brick (V11, ID1)
	- Prayer not transferable (V14, ID1)	- Trash as value (V12, ID1)	- Fixed homes ourselves (V8, ID1)
	- God's presence in streets (V13, ID1)	- Garbage protects Egypt (V11, ID1)	- Survived fire/flood (V07, ID1)
	- Church is soul (V10, ID13)	- No shame in work (V12, ID1)	- No state support = strength (V14, ID
	- Faith grounded here (V13, ID1)	- Home = workplace (V2, ID1)	- Laid each stone (V11, ID1)

Fig. 4: Open and Axial Coding Structure for Symbolic Identity. [The Authors]

3.2.1. Subcategory 1: Religious and Spiritual Grounding

To many people, the community possessed deep spiritual or religious importance. Churches, cemeteries, and religious rituals specific to the community were consistently emphasized as the core of community living. Seen this way, displacement would interfere with their ability to carry out religious practices and celebrate memories worth honoring from a religious perspective.

"The church is now active and reaching out to people, and Father Samaan is a strong struggler – he built our church and monastery, and honestly, we love him very much." (V17, ID31)

"Father Samaan made the area safe. He's the one who developed it. He built the monastery and made it grand after working hard on it, right." (V17, ID32)
"The celebrations in the church were filled with prayer and love." (V17, ID29)

3.2.2. Subcategory 2: Reclaiming Stigmatized Space

A number of participants conveyed their frustration with the outside perceptions of Manshiyat Naser as being filthy, chaotic, and criminal. On the contrary, the inhabitants described the neighborhood in proud terms, describing it as organized, productive, and moral due to their hard work. By this redefinition, the participants rebuild their spatial identity in their own terms, defying the negative labels imposed by exterior perceptions.
"Sure, of course, the smell of the work isn't pleasant. When the government sees the garbage trucks, they treat us badly, as if we are thieves. But this work is honorable; everyone has been blessed by God with it. There should be better treatment. This is not trash, this is a job. This is an economic cycle." (V7, ID20)
"The unknown soldier who cleans, sorts, and recycles in silence, with no one adequately appreciating that effort. The Zabbaleen neighborhood is not just a neighborhood … It's a system that keeps Cairo clean, provides jobs, and saves the environment. Behind it stand thousands of people working every day in silence so that this country can continue standing on its feet." (V2, ID1)

3.2.3. Subcategory 3: Identity through Resilience and Struggle

Living in Manshiyat Naser was often narrated not as a burden but as a point of pride. Participants described how hardship itself – working in waste, surviving without state support, and building homes with their own hands – had shaped a unique identity rooted in resilience and independence. For some, relocation risked erasing this identity.
"We stood on our feet again and moved forward. Foreign companies and garbage collectors established 7,200 investment companies. We increased the number of mechanical trucks and managed to regain control." (V14, ID1)
"I feel important, like a king from within. I feel like I'm the one cleaning people, like a giant. I feel very proud of myself, like I'm serving Egypt. It's like I'm on the frontlines, holding a weapon, defending Egypt by keeping it clean in the eyes of others. It's a very noble job." (V6, ID17)
"It used to be clay ground; we turned it into buildings and housing." (V17, ID31)

3.3. Main Category 3: Economic Dependence

This category shows the deep influence of localized economic systems in shaping residents' attachment to place. This category was broken down into three subcategories, each inductively derived through a process of open coding and labeling: spatial livelihood infrastructure, fear of post relocation collapse, and community-based labor systems as illustrated in (Fig. 5).
Manshiyat Naser is not only a neighborhood but rather a spatially embedded economic ecosystem for many participants. Social dignity, independence, and identity, as much as financial profits and income, are obtained through people's labor, and this is organically linked with the physical space of the area. These subcategories collectively reflect how daily labor is inseparable from the spatial and social fabric of the neighborhood, forming an economic system that is locally rooted and collectively maintained.

3.3.1. Subcategory 1: Spatially Embedded Livelihood

The participants highlighted that their work, mainly the collection, separation, and recycling of waste, is inherently linked with the spatial and social layout of Manshiyat Naser. The spatial proximity of homes, workshops, and collection routes facilitates their daily practices and is rooted at the same time in the informal economy that pervades the area. Changing this spatial arrangement has been described as a serious threat to their livelihoods.

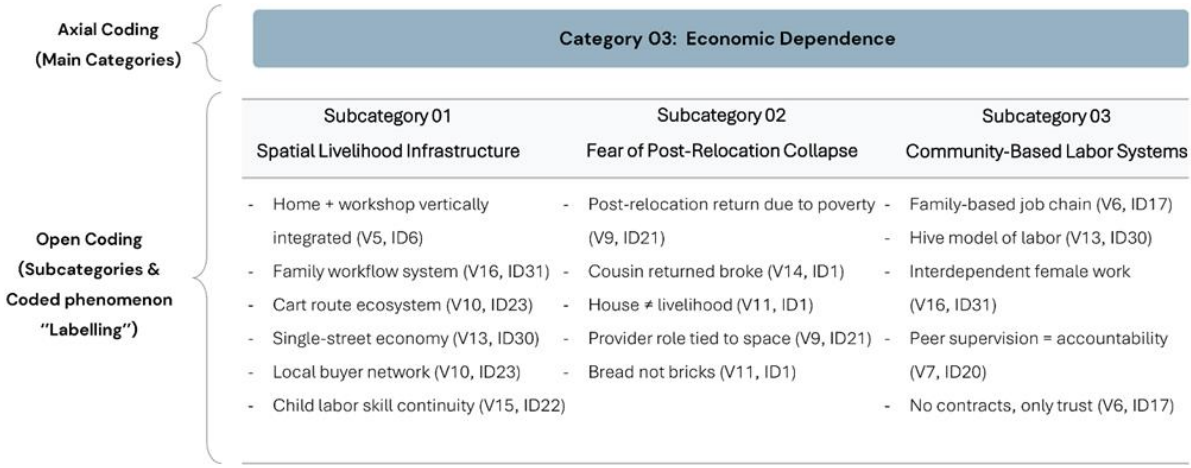

Fig. 5: Open and Axial Coding Structure for Economic Dependence. [The Authors]

"It's absolutely not possible to just move the activity from here and close it there. We simply won't work anymore. Even if you give us land for free, it won't work because my son and my wife work right in front of the house." (V12, ID25)

"Manshiyet Nasser was built with good intentions and as a message from God. We, the garbage collectors, are people who work and love activity, work, and love, and we care for everyone. … These carts collect garbage from below and transport it; then we sort it and carry it to the landfill, and then to the "Shaq al-Thuban." This is the garbage. It comes from all over Cairo to this entire area." (V17, ID31)

"Yes, we check what paper, even tin is in the bins – like bottles,. There's treasure in that. It gets estimated and sold. It's crushed separately and then sold." (V10, ID24)

3.3.2. Subcategory 2: Fear of Economic Disruption Post-Relocation

Many participants expressed deep concern that relocation would lead to unemployment or economic insecurity. In their view, previous relocation efforts did not consider the unique needs of informal workers. Participants described cases of residents who took government-offered housing but then came back, having been unable to sustain themselves economically in the new environment.

"If we lose this job, what would we do? We'd end up as thugs." (V4, ID9)

"Electricity? You have to take care of it. Someone was fined 600,000 pounds. Where is he supposed to get that money? Sell his house? The government should help me, not harm me. If I close my place, the garbage will be thrown in the streets." (V20, ID19)

"He's 22 years old and has five children – three daughters he needs to feed and take care of. Where would he get work from? Of course, from us, the scavengers. Surely, you tell him to make money and work. I see poor people, people in need; someone like him isn't educated. If he loses this job, what else will he work at? And even if he does work, he'll earn 2,000 or 3,000 pounds – will that be enough for him?" (V4, ID9)

3.3.3. Subcategory 3: Community-Based Labor Networks

The economic organization in Manshiyat Naser is managed through family and community-based networks. Work responsibilities are shared among neighbors, relatives, and along gendered roles – a system that is difficult to transfer to other contexts. These cooperative mechanisms promote adaptability and trust among participants, while the participants feared that these networks would collapse in formal housing contexts.

"My children who work, my sister's children, and my wife who sorts these things – families like ours won't work otherwise." (V12, ID25)

"Every street and every alley you meet children, women, and men working like a beehive preparing their goods that will be sent to more than seven thousand workers in a recycling factory." (V1, ID2)
"Garbage collector's income? From 5 to 6 thousand pounds per month, not more. But he's not working alone – his wife sorts, his children help. And this work will exist as long as people throw things away." (V6, ID15)

3.4. Main Category 4: Perceptions of Relocation and Institutional Processes

This category includes residents' thoughts toward past efforts at relocation, distrust of government-led upgrading programs, and the public fears triggered through displacement. Instead of seeing relocation as a possible advantage for development, participants viewed it as a potential loss of cultural continuity, economic stability, and sociability. The three subcategories summed up in this group are experiences with previous relocation efforts, concerns about losing social and cultural continuity and potential impact on community cohesion as illustrated in (Fig. 6), this category was broken down into three subcategories, each inductively derived through a process of open coding and labeling.

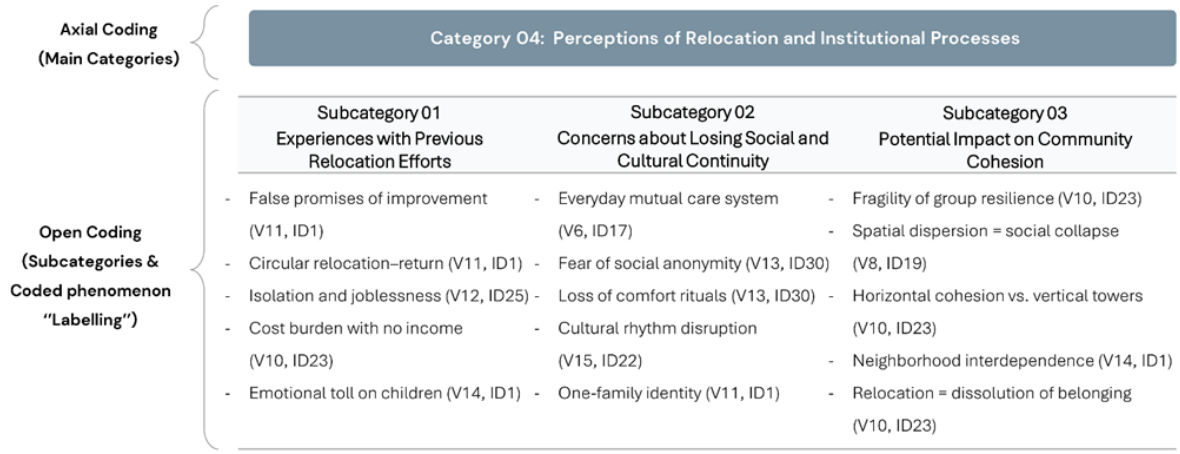

Fig. 6: Open and Axial Coding Structure for Economic Dependence. [The Authors]

3.4.1. Subcategory 1: Experiences with Prior Relocation Programs

Many participants reported ineffective or unsatisfying experiences with government relocation programs. Various people had come back to Manshiyat Naser after being resettled in areas that lacked work opportunities or social links. Others described neighboring people who complied with the relocation but suffered economically or socially, creating a collective warning memory.
"When they moved us and took us to new places, maybe they said it would be better. No, we were in a place that felt like just walls, nothing more." (V15, ID27)
"Life was hard, and there was no work we knew how to live from." (V9, ID22)

3.4.2. Subcategory 2: Concerns about losing Cultural and Social Continuity

Citizens of Manshiyat Naser communicated their concerns about the disruptions that relocation would bring, including not just their jobs, but the social and cultural interactions of everyday life that gave them emotional strength. They discussed how local customs, religious celebrations, communal connections, and spatial familiarity are things that cannot be replicated in formal settlements.
"The whole neighborhood loves each other. Everyone is working; no one is idle – everyone works to live. Here, we have both Muslim and Christian people, and we are all united as one." (V17, ID31)
"Here, we feel safe, and the people are like brothers; we all work together as one." (V18, ID37)

3.4.3. Subcategory 3: Risk of Community Fragmentation

Participants expressed concern for the possible danger of formal relocation, potentially causing the breakup and disintegration of communal relations. They viewed their community as a cohesive group based on mutual dependency, a shared history, and communal strength – features that are believed to be put at stake through the threat of dispersal.

"We go down to the streets of Cairo early in the morning, spreading out to collect residential garbage. We bring it for our children, wives, and siblings. They are our strength, the strength of our children, and our livelihood. What's in front of you here is everything." (V18, ID73)

"Our home and livelihood are here among our family and neighbors." (V17, ID34)

3.5. Main Category 5: Community Preferences for Development

This category discusses the progressive visions that residents have for the development of Manshiyat Naser. Rather than resisting all forms of development, participants often had clear preferences for improvements that respect social structures and preserve communal autonomy. The interviewees voiced their views with insistence on the possibility of neighborhood improvements that do not require forced relocation. This category includes two subcategories: suggestions for localized upgrading without displacement and perspectives on balancing infrastructure improvement with continuity as illustrated in (Fig. 7), this category was broken down into two subcategories, each inductively derived through a process of open coding and labeling.

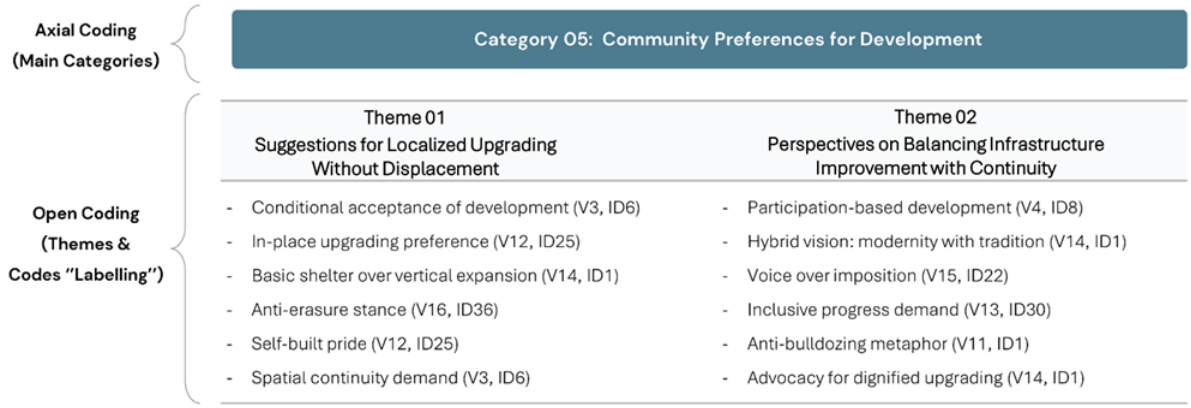

Fig. 7: Open and Axial Coding Structure for Economic Dependence. [The Authors]

3.5.1. Subcategory 1: Imagining Upgrading without Displacement

Many residents expressed willingness to accept development if it did not require them to move. Participants proposed possible improvements, including better transportation systems, wastewater treatment facilities, and safer housing, while making it clear that these could be achieved in situ. They were not resisting progress per se, but their exclusion from it.

"Fix the roads, yes. Give us clean water, yes. But let's stay. Don't erase what we built with our own hands." (V7, ID19)

"All we wish for is to improve our simple housing and living conditions here in our area and provide the basic services we need. That's enough for us and more important than any massive projects that don't suit the nature of our lives and work, which is our source of livelihood and survival." (V1, ID1)

3.5.2. Subcategory 2: Negotiating Modernity

Some of the respondents considered the possibility of modernization alongside the existing traditional systems. They envisioned the incorporation of such a model to expand and enhance the infrastructural

base while preserving the labor and social structures of the neighborhood. This suggestion included a request for more respectful discussion with the government.

“"We feel completely marginalized. You were supposed to involve us, guys. What was your plan?” (V19, ID18)

“The appearance of the houses inside, the look of the streets … Give us, for example, some trees – some humanity.” (V7, ID20)

4. Discussion

This study investigates the phenomenon of place attachment as spatial resistance within the Multidimensional dynamics of informal settlements, with the Zabbaleen community in Manshiyat Naser, Cairo. The research investigates how labor, identity, memory, and social structures manifest as resistance against state-led efforts at relocation. By using grounded theory through the analysis of 19 publicly available videos, the study inductively identified five correlated categories from the subcategories of place attachment as spatial resistance. The identification highlighted the realization that attachments are not just static emotions, but dynamic constructs driven by survival, meaning, and continuity that cut across generations.

The findings reveal that resistance to relocation is not driven solely by fear of economic disruption but stems from a layered attachment system that includes emotional habits, symbolic belonging, and spatially embedded labor. These attachments form adaptive infrastructures that sustain dignity, memory, and identity, offering an alternative to conventional planning paradigms. This reinforces the view that residents are not passively attached to place but actively inscribe meaning onto it as a strategy of spatial agency.

In contrast to earlier work on Manshiyat Naser Fahmi & Sutton (2006), Didero (2012), and Wiącek (2020) [8, 11, 13], which primarily emphasized economic and policy failures, this study focuses on how meaning is reproduced symbolically and spiritually in everyday routines.

This manuscript's analytical framework, built on the paradox of topophilia, offers new insight into how place attachment functions not just as emotional bonding but as adaptive spatial infrastructure: a deliberately constructed and evolving system where memory, intergenerational labor, ritual, and spatial routines merge into a logic of resilience. Rather than viewing space as a vacant backdrop, residents actively transform it into a storehouse of lived experience. Homes and highways become matrices of memory that allow for cultural practices to persist and continue.

One key finding is that the place attachment demonstrated by the Zabaleen is performative and symbolic, as opposed to purely utilitarian. Intergenerational labor, sensory familiarity, and religious continuity are frequently cited by residents as reasons for staying. When one participant states, “we grew up in it, and it is our livelihood. It is a permanent profession” (V1, ID2), this underscores that place familiarity is not just convenience. This stands as the embodiment of memory. Such routines are a type of continuity-based resistance, an act of daily survival and staying as an expression. This contributes to emerging discussions on "slow resistance" and "everyday politics" in urban marginality.

The study also reveals that economic dependence cannot be separated from social cohesion. Residents’ livelihoods are embedded in spatially defined, intergenerational labor networks. These are not just economic circuits, they are memory-saturated infrastructures passed down through routine and habit. Quotes such as, “Built with good intentions and as a message from God. We, the garbage collectors, are people who work and love activity, work, and love, and we care for everyone.” (V17, ID31), show that resistance is not only economic but symbolic: a defense of memory-rich geographies.

Also, the research shows that resistance from the residents must not be interpreted as being opposed to development but rather as a reactive spatial response for preserving social meaning. Displacement is not just a change of place; it endangers the continuity of identity, tradition, and deep-seated community practices. “The government is supposed to help me, not harm me. If I close down my place, the garbage will be thrown out into the streets.” (V7, ID20) signals a vision of modernity that integrates heritage and function. Their resistance promotes continuity within transformation, reinforcing the value of participatory, bottom-up planning rooted in lived experience. This also demonstrates the validity of the chosen method. Despite the use of secondary video data, the results yielded through grounded theory show a significant similarity with the findings deduced from earlier ethnographic and field studies regarding the Zabbaleen community as discussed by Didero (2012) and W. Fahmi & Sutton (2010) [6, 7]. Repeated occurrence of important patterns from different sources supports the use of grounded theory for digital narratives as a consistent and flexible tool for recording everyday lives and formulating theoretical frameworks in informal urban space. Compared to earlier policy-driven studies on the Zabbaleen by W. S. Fahmi & Sutton (2006) and Gebre (2014) [8, 20], this research foregrounds narrative expression, moral symbolism, and spatial ritual, validating digital narrative analysis as a robust and participatory method.

This paper affirms prior findings from Adewale et al. (2020) [4], who showed that emotional bonds in Nigerian slums override infrastructure deficits. Bandauko et al. (2022) [14] work supports the importance of place identity and aligns with Ramkissoon et al. (2024) [5] findings on the value of sensory familiarity. Although Ramkissoon et al. (2024) [3] also focused on territorial identity, the present work expands the conceptual scope by embracing both economic and symbolic meanings in spatial practices. The findings validate and extend critiques by Didero (2012) and W. Fahmi & Sutton (2010) [6, 7], who explored Zabbaleen’s resilience, by showing how these narratives are encoded in spatial memory and moral symbolism. Iskandar & Tjell (2009) and Maher (2017) [21, 22] addressed structural governance and planning failures, and this research complements them by surfacing emic understandings and symbolic vocabularies that give depth to spatial resistance.

Unlike John et al. (2019) [24], who viewed relocation as top-down failure, this study shows how residents see bottom-up development and resist displacement not out of nostalgia but through pragmatic moral frameworks. This view aligns with the research of Wiącek (2020) [11], who highlighted the autonomy embedded in the Garbage City model, and Soopramanien et al (2023) [13]. The research explores the influence of place attachment and social norms on civic activity in urban environments. The research provided here builds upon the earlier foundational studies conducted by Cornish (2020), DeMoss-Norman (2015), and Nikuze et al. (2021) [24, 25, 26] that looked at the idea of displacement from the perspective of a pre-displacement model with a focus on emotional infrastructure. Place attachment is, therefore, determined as a pivotal spatial factor in urban planning that goes beyond being just a nostalgic barrier.

5. Limitations

Despite its important findings, the study has inherent limitations. The study is based upon a single-case study and utilizes qualitative methods that rely upon secondary video data, and therefore potentially lacks the richness of varied perspectives among the population. A lack of direct involvement limits the ability to ask further questions. The sample size was relatively small, and further research is required to validate and expand upon the findings. Future studies can extend the

results by incorporating field-based surveys, participatory geographic information systems, or cross-case analysis to improve generalizability across varied contexts.

6. Conclusions

This research provides a new conceptual framework – place attachment as spatial resistance — grounded in the lived experiences of Zabbaleen residents. Far from being merely emotional nostalgia, this is an adaptive framework shaped by routine behaviors, historical context, and social bonding. Grounded theory for digital narratives utilized dynamics effectively, showing the suitability and relevance of this approach for tackling spatial subjectivities.

The study further conceptualizes place attachment as a form of spatial resistance, particularly in marginalized and stigmatized urban contexts. Based on the everyday experience of the Zabbaleen as a socially and materially displaced community in Cairo's Manshiyat Naser, the paper reinterprets resistance to relocation as not entering into opposition to urban development, but enacting an everyday assertion of spatial continuity, symbolic meaning and moral purpose as visible acts of agency. The analysis shows how emotional familiarity, inherited labor practices, religious ritual, and symbolic reinterpretations of space establish a deeply rooted logic for remaining in place.

Rather than viewing displacement as merely a logistical or technical challenge, this paper frames it as a rupture in spatial memory and collective identity. The resistance exhibited by residents is derived from their everyday practices that inscription dignity, survival, and belonging into the material and symbolic realities of the settlement. While these meanings contest municipal urban planning paradigms, they also amplify the failings of top-down models of relocation that negate lived spatialities.

The research contributes to urban theory by advancing an emic, affective, and moral understanding of informality and spatial justice. It calls for policy approaches that move beyond viewing marginalized areas through lenses of deficiency and instead recognize the value of symbolic infrastructures, social relations, and grassroots urbanism. Furthermore, the study demonstrates how grounded theory — paired with digital narrative analysis — can offer meaningful theoretical engagement with silenced or overlooked voices, developing theory from below.

Future research could expand on this model by applying it to cross-cultural case studies or integrating participatory tools such as mapping and digital storytelling. In contexts like Manshiyat Naser, these methods offer a more refined and ethically responsive way to study resistance as an embodied, storied, and affective urban experience.

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