

THE RIGHT TO THE SAFE CITY: COMMODIFICATION, SPATIAL INJUSTICE AND URBAN VULNERABILITY IN ATHENS

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Abstract

This paper examines the relationship between urban commodification and the erosion of spatial security, situated at the intersection of critical urban theory and environmental criminology. Drawing on Henri Lefebvre's "Right to the City" and David Harvey's framework of accumulation by dispossession, the study argues that processes of commodification do not merely produce spatial injustice in the abstract, but generate concrete conditions of urban vulnerability that undermine residents' sense of safety and erode the social fabric of neighbourhoods.

Through a GIS-based multi-layer spatial analysis of Athens, the research maps four intersecting dimensions of urban transformation: short-term rental density, residential rent levels, green space distribution, and the geography of civic resistance. The findings reveal a consistent spatial logic in which highly commodified neighbourhoods are simultaneously characterised by housing pressure, environmental deprivation, and intensified social contestation, indicating a spatial concentration of vulnerability in the city's central areas.

Due to the absence of neighbourhood-level crime data, the study does not directly measure crime, but instead analyses spatial conditions associated with increased vulnerability, including weakened informal social control, incivilities, and heightened fear of crime. Complementary aggregated data suggest a disproportionate concentration of property crime in central Athens. Building on these findings, the paper introduces the concept of the "Right to the Safe City", extending Lefebvre's framework to include urban safety as a fundamental spatial right.

Keywords: Urban Criminology, Right to the Safe City, Urban commodification, Short-term rentals (STRs), Spatial vulnerability, Right to the City, Environmental criminology

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Introduction

Urban transformations driven by tourism-led development have become a defining feature of post-crisis Southern European cities (Pinto et al., 2024; Musaraj, 2024). In the case of Athens, the rapid expansion of short-term rental platforms (Balampanidis et al., 2019; Gourzis and Alexandri, 2026), rising housing costs (Katsinas, 2021), and the reconfiguration of central neighbourhoods have fundamentally altered the social and spatial fabric of the city. While these processes are often framed within debates on gentrification and urban commodification, their implications for urban safety and perceived insecurity remain underexplored.

Existing research has extensively documented the socio-economic consequences of short-term rental proliferation, including housing displacement (Cocola-Gant and Gago, 2019; Grisdale, 2019; Morales-Pérez et al., 2020), rent inflation (Ardura Urquiaga et al., 2020; Wrede, 2022), and the restructuring of local economies (Albuquerque et al., 2024; Celata and Romano, 2020; Hoffman and Heisler, 2020). At the same time, a parallel body of literature within environmental criminology has demonstrated that urban safety is deeply embedded in the social and physical characteristics of neighbourhoods (Jacobs, 1961; Jacobs, 2020; Zarafonitou and Kontopoulou, 2020), particularly the stability of residential communities (Wilson and Kelling, 1982; Ollenburger, 1981), the presence of informal social control (Taylor and Hale, 1986; Hale, 1996), and the quality of the built environment (Ortigueira-Sánchez, 2016). However, these two strands of research have rarely been brought into direct analytical dialogue (Lanfear and Kirk, 2024).

This paper addresses this gap by examining the relationship between urban commodification and spatial vulnerability through an integrated theoretical and spatial framework. Drawing on the critical urban theory of Henri Lefebvre (2015) and David Harvey (2009), and bridging it with insights from environmental criminology, the study argues that the commodification of urban space does not merely generate abstract forms of spatial injustice, but produces concrete conditions that undermine neighbourhood-level safety. In particular, the paper conceptualises urban vulnerability as the outcome of three interrelated processes: community displacement (Park et al., 2023; Robertson et al., 2020), the erosion of informal social control (Wilson and Kelling, 1982; Jacobs, 1961), and the accumulation of physical and social incivilities (Farrall et al., 2009; Hale, 1996).

Empirically, the study employs a GIS-based multi-layer spatial analysis of the Municipality of Athens (Inside Airbnb, 2025; Hellenic Police, 2025), combining data on short-term rental density, residential rent levels, green space distribution, and civic resistance movements. Through the spatial overlay of

these variables, the analysis identifies areas of compounded urban stress, revealing a consistent spatial pattern in which the most commodified neighbourhoods are also those exhibiting the highest levels of structural vulnerability (Piasek et al., 2022). Drawing on critical social theory, structural vulnerability is understood here as the condition of being at risk through the interface with socioeconomic and political hierarchies (Bourgois et al., 2017). In urban terms, this vulnerability manifests when residents' location within overlapping power structures, such as housing market pressures and tourism-led policies constrains their ability to maintain stable community networks and exercise their right to a safe environment. Importantly, the study does not claim a direct causal relationship between short-term rentals and recorded crime rates, given the absence of disaggregated crime data at the neighbourhood level in the Greek context (Brownlow et al., 2026). Instead, it focuses on the spatial conditions that the criminological literature consistently associates with elevated fear of crime and weakened informal social control (Zarafonitou and Kontopoulou, 2020). In doing so, the paper contributes a spatially grounded interpretation of urban insecurity as a structural outcome of contemporary urban transformation processes (Pinto et al., 2024; Celata and Romano, 2020).

Building on these findings, the paper advances the concept of the "Right to the Safe City" as an extension of Lefebvre's Right to the City (Lefebvre, 2015; Ploger and Lefebvre, 1995), arguing that access to a safe and socially cohesive urban environment must be understood as a fundamental urban right. Athens is thus positioned not only as a case study, but as a representative example of broader dynamics shaping cities under conditions of tourism-led development and post-crisis restructuring (Gourzis and Alexandri, 2026; Musaraj, 2024).

1. Theoretical framework

1.1 Space as a social product: Lefebvre and the Right to the City

This research originated as a spatial justice analysis of urban commodification, defined here as the fair and equitable distribution in space of socially valued resources and the opportunities to use them (Soja, 2010). Spatial justice extends beyond traditional notions of social justice by focusing on how urban processes and policies produce geographic inequalities, specifically concerning the right of residents to inhabit and remain in their neighbourhoods without being displaced by market-driven forces. It was subsequently extended to interpret its implications for urban safety through the lens of environmental criminology. The theoretical foundation of this study rests on Henri Lefebvre's seminal conceptualisation of urban space as a social product (Gerhard, 2014). In *La Production de l'Espace* (Lefebvre, 1981), Lefebvre argues that space is neither a neutral container nor a passive backdrop for social life, but is actively produced through social relations and, crucially, through the logic of capital

that commodifies it. Space, in this reading, is always already political: it encodes power relations, reflects dominant economic interests, and shapes the possibilities of everyday life for those who inhabit it (Ploger and Lefebvre, 1995).

Building on this foundation, Lefebvre's Right to the City (Lefebvre, 2015) articulates a dual demand. The first is the right to use value—the right of inhabitants to access and benefit from the resources, services, and spaces that the city offers. The second, more radical dimension is the right to appropriation and transformation—the right of residents to collectively remake the city according to their needs rather than the imperatives of capital accumulation. Taken together, these two dimensions constitute a challenge to the dominant logic of urban development, which systematically subordinates the use value of space to its exchange value (Psycharis, 2012). The city, Lefebvre insists, must belong to those who inhabit it, not to those who profit from it.

This theoretical provocation remains acutely relevant to contemporary Athens, where the rapid expansion of short-term rental properties (Balampanidis et al., 2019; Katsinas, 2021) and the pressures of post-crisis urban restructuring (Gourzis and Alexandri, 2026) have dramatically shifted the balance between use value and exchange value in residential space. As the findings of this study demonstrate, these processes do not operate uniformly across the city but follow a distinctive spatial logic concentrating their effects in specific neighbourhoods and generating compounded conditions of urban stress.

1.2 Capital, displacement and urban social movements: Harvey's contribution

David Harvey's elaboration of Lefebvre's framework provides a critical bridge between the abstract theoretical concept and the concrete dynamics of urban transformation (Harvey and Paik, 2017). In *Rebel Cities* (Harvey, 2012), Harvey situates the Right to the City within the broader logic of capital accumulation (Harvey, 2009), arguing that the city has historically served as a key arena for the absorption of surplus capital through investment in the built environment. This process, what Harvey terms "accumulation by dispossession" (Fenton, 2019), is not simply an economic mechanism; it is a spatial one. It operates by displacing existing communities, reconfiguring land use, and restructuring the urban fabric in ways that serve capital rather than residents.

In this context, the proliferation of short-term rental properties in Athens represents a particularly acute instance of accumulation by dispossession (Fenton, 2019; Cocola-Gant and Gago, 2019). The conversion of residential properties into tourist accommodation through platforms such as Airbnb (Hoffman and Heisler, 2020; Cristeche and Anguelovski, 2025) extracts exchange value from urban space at the direct expense of its use value for permanent residents: it drives up rental prices (Ardura

Urquiaga et al., 2020; Robertson et al., 2020), reduces the availability of affordable housing (Guth et al., 2025), and accelerates the displacement of lower- and middle-income households from central neighbourhoods (Cocola-Gant and Gago, 2019; Park et al., 2023; Morales-Pérez et al., 2020). Harvey's framework allows us to read these processes not as the unintended consequences of market dynamics, but as the predictable outcomes of a spatial logic that systematically prioritises the interests of capital over those of residents (Harvey and Paik, 2017).

Crucially, Harvey (2012) also emphasises the role of urban social movements in contesting these processes and reclaiming the Right to the City. The spatial distribution of civic resistance mapped in this study protests against the expansion of short-term rental properties (Morales-Pérez et al., 2020; Musaraj, 2024), campaigns for urban green space (Hewitt et al., 2025; Mark et al., 2025) is not incidental. It reflects a direct spatial response to the geography of commodification: residents resist most intensely precisely where the pressures of displacement and environmental deprivation are greatest.

1.3 From spatial justice to urban safety: The criminological bridge

While Lefebvre and Harvey provide the critical urban theory framework for this study, a full understanding of the relationship between commodification and urban vulnerability requires engagement with the criminological literature on the built environment, informal social control, and the fear of crime (Zarafonitou and Kontopoulou, 2020).

The foundational contribution here is Jane Jacobs' *The Death and Life of Great American Cities* (Jacobs, 1961; Jacobs, 2020), which established the relationship between the social fabric of urban neighbourhoods and their safety. Jacobs' concept of "eyes on the street", the informal surveillance exercised by residents going about their daily lives identifies social density and community stability as the primary mechanisms of informal social control. Safe streets, in Jacobs' account, are not produced by policing alone but by the presence of engaged, stable residential communities whose members know one another and take an active interest in their shared environment.

This insight has been substantially developed within environmental criminology through the concept of incivilities, the physical and social signs of disorder that signal a weakening of informal social control and, in turn, generate elevated levels of fear of crime (Wilson and Kelling, 1982; Taylor and Hale, 1986; Ortigueira-Sánchez, 2016; Ollenburger, 1981). Physical incivilities include deteriorating public spaces, abandoned buildings, inadequate lighting, and the absence of green and recreational areas. Social incivilities encompass observable antisocial behaviours in public spaces, such as public drinking, loitering, or aggressive solicitation, which serve as visible markers of social disorder

(Sampson and Raudenbush, 1999). In the context of the present study, these incivilities are closely linked to the breakdown of neighbourly relations, the loss of community networks, and the replacement of stable residential populations with transient ones (Wrede, 2022; Grisdale, 2019). Together, these conditions erode the "eyes on the street" effect identified by Jacobs (1961) and render neighbourhoods more susceptible to disorder and insecurity (Hale, 1996; Farrall et al., 2009).

The connection between the aforementioned urban incivilities and the processes of commodification analysed in this study is direct. The rapid expansion of short-term rental properties in Athenian neighbourhoods (Balampanidis et al., 2019) does not merely raise rent prices, it fundamentally transforms the social composition of residential space (Wrede, 2022), replacing long-term residents and their community networks with a rotating population of short-stay visitors. This substitution dismantles the conditions that make informal social control possible: neighbours do not know one another, community ties are severed, and the sense of shared ownership over public space dissolves (Cristeche and Anguelovski, 2025; Park et al., 2023). The result, this study argues, is not merely spatial injustice in the abstract; it is a concrete geography of urban vulnerability, marked by the proliferation of physical incivilities and the erosion of the collective sense of safety (Zarafonitou and Kontopoulou, 2020).

In this light, the Right to the City (Lefebvre, 2015) must be understood as inherently inclusive of the right to a safe city, one in which residents can inhabit shared space without fear, exercise informal control over their immediate environment, and access the green and public spaces that sustain both physical and social wellbeing. Spatial justice and urban safety are not parallel concerns but deeply intertwined dimensions of the same urban condition. It is this intersection that the present study seeks to map, analyse, and theorise.

2. Methodology

2.1 Research design

This study adopts a dual methodological approach that integrates theoretical analysis with empirical spatial investigation. The research design is structured in two sequential stages. In the first stage, a systematic review of the literature on the Right to the City (Lefebvre, 2015; Lefebvre, 1981) and its relationship to urban safety and spatial justice (Jacobs, 1961) establishes the conceptual framework within which the empirical analysis is situated. In the second stage, this theoretical foundation is applied and tested through the spatial analysis of a single case study: the Municipality of Athens. This case study approach allows for an in-depth examination of the urban dynamics under investigation, providing the analytical depth necessary to trace the relationships between commodification,

environmental deprivation, civic resistance, and urban vulnerability at the neighbourhood level (Piasek et al., 2022). To ensure methodological rigour and bridge the gap between spatial observation and social inference, this second stage adopts a “vulnerability proxy model”. Rather than attempting a direct empirical measurement of individual victimisation or perceived insecurity, data for which is currently unavailable at the micro-neighbourhood scale in Athens, the study maps the structural and environmental conditions that facilitate “criminal opportunity” according to Routine Activity Theory. This approach reframes the findings not as a direct count of incidents, but as a spatial index of vulnerability, thereby avoiding a speculative logical leap from neighbourhood transformation to individual crime rates.

The choice of Athens as the case study is theoretically motivated. The city represents an acute instance of the tensions between post-crisis economic recovery and the Right to the City (Gourzis and Alexandri, 2026): following a decade of severe austerity, Athens has experienced a rapid and spatially uneven process of tourism-led urban restructuring (Balampanidis et al., 2019; Katsinas, 2021), characterised by the proliferation of short-term rental properties, rising residential rents (Ardura Urquiaga et al., 2020), and the displacement of established communities from central neighbourhoods (Cocola-Gant and Gago, 2019). These conditions make Athens a particularly productive site for investigating the relationship between commodification and urban vulnerability, a relationship that, this study argues, has implications for a broader set of Southern European cities navigating similar trajectories (Pinto et al., 2024; Celata and Romano, 2020).

2.2 GIS-based spatial analysis

Due to the lack of official statistical data from state agencies (such as ELSTAT) regarding current rental prices per neighbourhood, this study relied on primary data collection through systematic sampling design. This methodological choice was made to ensure a representative distribution of the housing market data across the study area while minimizing selection bias. The sampling design was implemented through a structured four-step process, beginning with the identification of the initial population, which consisted of the total available set of active residential rental advertisements posted on the leading Greek real estate platforms (Spitogatos, xe.gr) during July 2025. To ensure spatial and temporal consistency, these listings were sorted by neighbourhood and subsequently by posting date. A sampling interval k was then established (e.g., $k=5$) to obtain a statistically significant sample size. Following a random starting point within the first k listings, every k^{th} advertisement was systematically selected for each of the 45 municipal neighbourhoods. The resulting dataset, comprising approximately 400 observations, was used for the calculation of average rental prices per square metre.

For short-term rental data, official records from Inside Airbnb (2025) were utilized, while crime data were sourced from the Statistical Yearbook of the Hellenic Police (2025).

The empirical component of the study is grounded in Geographic Information Systems (GIS) methodology, implemented through ArcGIS Pro. Spatial analysis was selected as the primary method because it allows for the simultaneous visualisation and analysis of multiple urban variables across geographic space, revealing spatial patterns and correlations that would remain invisible to non-spatial methods (Piasek et al., 2022; Hewitt et al., 2025). The analytical unit is the neighbourhood level within the administrative boundaries of the Municipality of Athens.

Data collection and geospatial processing produced four thematic layers, each capturing a distinct dimension of the urban condition under investigation:

Layer 1-Short-term rental density: The spatial distribution and concentration of short-term rental properties across Athenian neighbourhoods (Inside Airbnb, 2025), reflecting the degree of commodification of residential space (Balampanidis et al., 2019; Hoffman and Heisler, 2020).

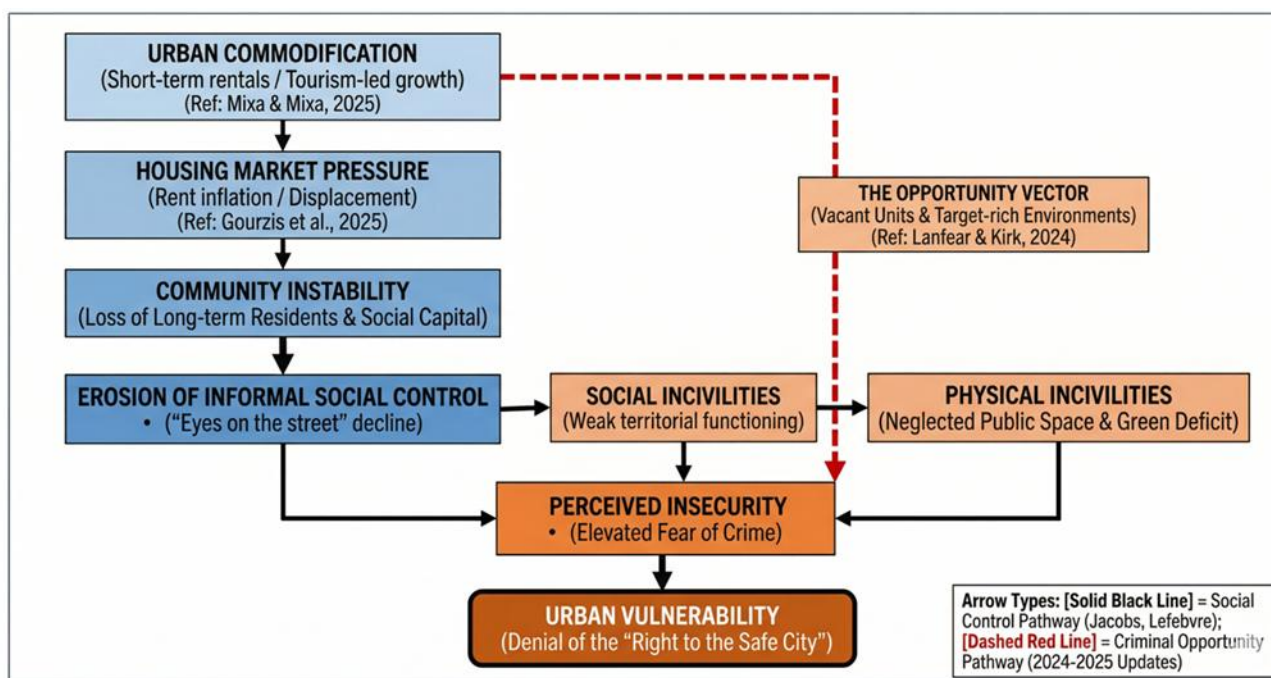
Layer 2-Residential rent levels: Average rent prices per square metre in selected areas, used as an indicator of housing market pressure (Ardura Urquiaga et al., 2020; Wrede, 2022) and the displacement of long-term residents (Grisdale, 2019; Robertson et al., 2020).

Layer 3-Green space distribution: The spatial availability and accessibility of green and public recreational spaces, serving as a proxy for environmental quality and the presence or absence of physical incivilities (Wilson and Kelling, 1982; Taylor and Hale, 1986).

Layer 4-Civic resistance geography: The documented locations of protests, demonstrations, and organised public interventions against the expansion of short-term rental properties (Morales-Pérez et al., 2020; Musaraj, 2024) and in favour of urban green space (Hewitt et al., 2025; Mark et al., 2025), used as a spatial indicator of where residents perceive the Right to the City (Lefebvre, 2015) to be most actively threatened.

These four layers were analysed both individually to identify the internal spatial logic of each variable and in combination, through a composite spatial overlay (Piasek et al., 2022), to identify areas of compounded urban stress where multiple dimensions of vulnerability converge simultaneously. This composite analysis constitutes the study's primary empirical contribution, producing a spatial vulnerability map of Athens that grounds the theoretical arguments of the preceding section in concrete geographic evidence.

Figure 1: Workflow of the study



2.3 Limitations

Several methodological limitations must be acknowledged. First, the absence of publicly available, disaggregated crime data for Athens at the neighbourhood level, a common constraint in the Greek context (Brownlow et al., 2026), means that the study does not directly measure crime rates or victimisation. Rather, it maps the spatial conditions associated in the criminological literature with elevated fear of crime and reduced informal social control (Wilson and Kelling, 1982; Zarafonitou and Kontopoulou, 2020): physical incivilities, environmental deprivation, and community instability. This choice is consistent with the environmental criminology literature, which recognises fear of crime and perceived insecurity as analytically significant urban phenomena in their own right, independent of recorded crime statistics (Hale, 1996; Farrall et al., 2009; Ollenburger, 1981).

Second, the study is limited to a single city and a single point in time, which constrains the generalisability of its findings. Future research should address this limitation through longitudinal analysis and comparative case studies across Southern European cities (Pinto et al., 2024; Celata and Romano, 2020; Musaraj, 2024).

3. Findings: A spatial analysis of urban vulnerability in Athens

Two distinct categories of data were employed in the present analysis. First, official crime statistics from the Hellenic Police (Statistical Yearbook of the Hellenic Police, 2025), which are publicly available at the level of Police Directorate and Subdirectorate. The Athens Property Crime Subdirectorate, the specialised unit responsible for investigating offences against property, recorded 16,695 property crime offences in 2025 (Hellenic Police, 2025), accounting for 39.6% of the total recorded property crime across the entire Attica region. This spatial concentration is disproportionately high relative to the geographic extent of the municipality, and constitutes in itself a first-order indicator of central Athens as the region's primary locus of property crime exposure. Second, point-level short-term rental data were obtained from Inside Airbnb (2025) for the Municipality of Athens, comprising 5,030 active listings distributed across the 45 official neighbourhoods of the municipality.

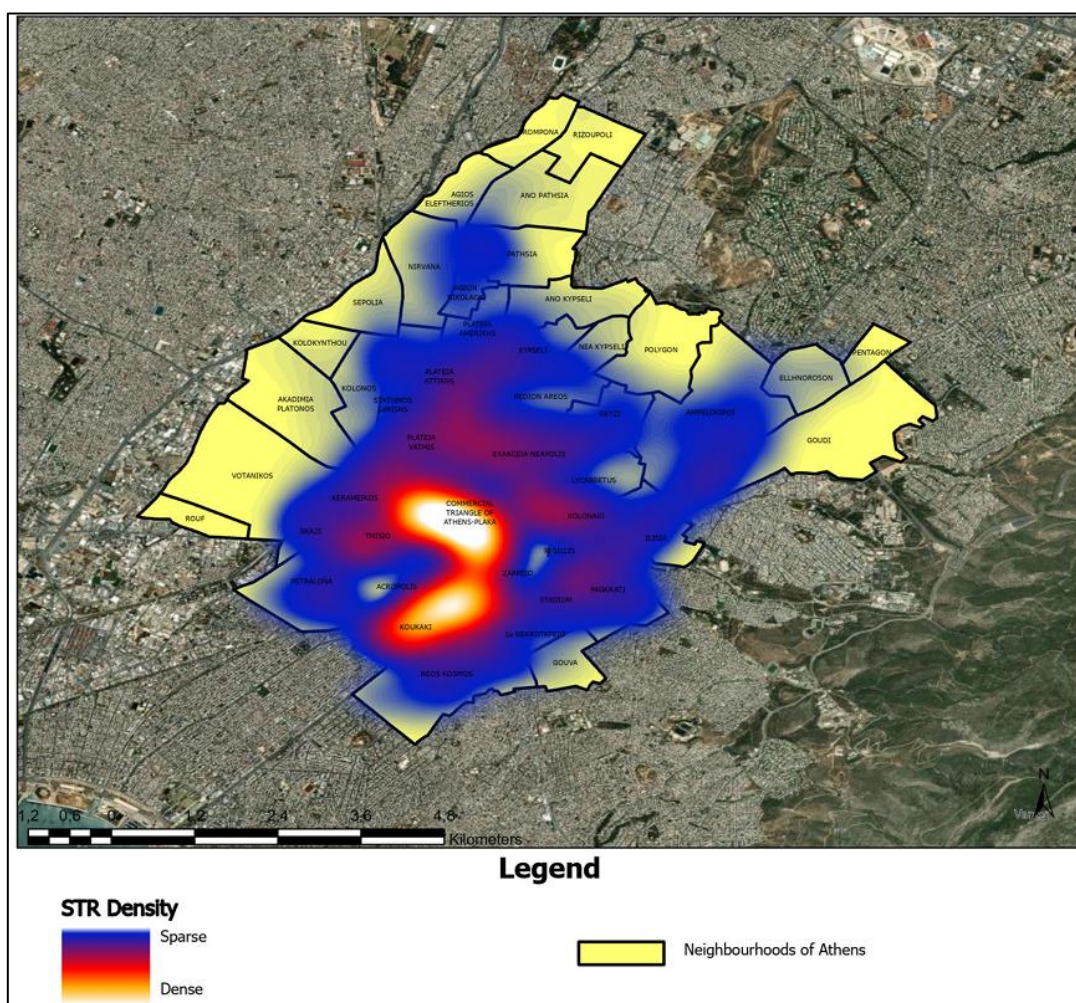
The spatial analysis was conducted within the ArcGIS Pro environment through three sequential operations. In the first step, a Spatial Join was performed between the Airbnb point data (Inside Airbnb, 2025) and the polygon layer representing the 45 municipal neighbourhoods, yielding a count of active listings per neighbourhood. In the second step, a density index (STR_Density) was calculated as the ratio of listing count to each neighbourhood's geographic extent, thereby neutralising the confounding effect of polygon size on raw listing counts (Piasek et al., 2022). In the third and final step, the density index was normalised to the interval [0, 1] using min-max normalisation, producing the Vulnerability_Index. This normalised index constitutes the primary variable for choropleth visualisation and comparative neighbourhood analysis.

It is essential to note that the constructed index does not constitute a direct measurement of crime rates at the neighbourhood level. The absence of publicly available micro-level crime data disaggregated below the Police Directorate, a structural limitation of the Greek statistical infrastructure (Brownlow et al., 2026) renders a direct statistical correlation between STR density and neighbourhood-level crime counts methodologically impossible with existing public data. The Vulnerability Index therefore functions as a spatial indicator of structural exposure to criminal opportunity, grounded in the theoretical framework of Routine Activity Theory (Cohen and Felson, 1979) and the opportunity-driven pathway proposed by Lanfear and Kirk (2024). According to these frameworks, concentrations of high-mobility, low-familiarity occupants, a defining characteristic of short-term rental areas (Wrede, 2022; Grisdale, 2019), generate structural conditions of criminal opportunity irrespective of contemporaneous measured crime rates. This limitation is acknowledged as a direction for future research contingent upon improved data access at the sub-directorate level.

3a. Short-term rental density and the geography of housing commodification

The first analytical layer (Map 1) maps the spatial distribution of short-term rental properties across the Municipality of Athens (Inside Airbnb, 2025). The findings reveal a markedly uneven geography: short-term rental properties are not distributed across the city in any diffuse or random pattern, but are concentrated almost exclusively in the historic and tourist centre, with particularly high density recorded in the neighbourhoods surrounding the Acropolis and extending across Koukaki, Metaxourgeio, Psyrii, and Gazi. These are areas of strong cultural symbolism and high tourist footfall precisely the conditions that attract investment in short-term rental conversion (Albuquerque et al., 2024; Pinto et al., 2024), where the logic of tourism-led capital accumulation (Fenton, 2019; Cocola-Gant and Gago, 2019) transforms residential space into a commodity extracted for exchange value rather than inhabited for use value (Lefebvre, 2015).

Map 1: Short-Term Rental Density Map



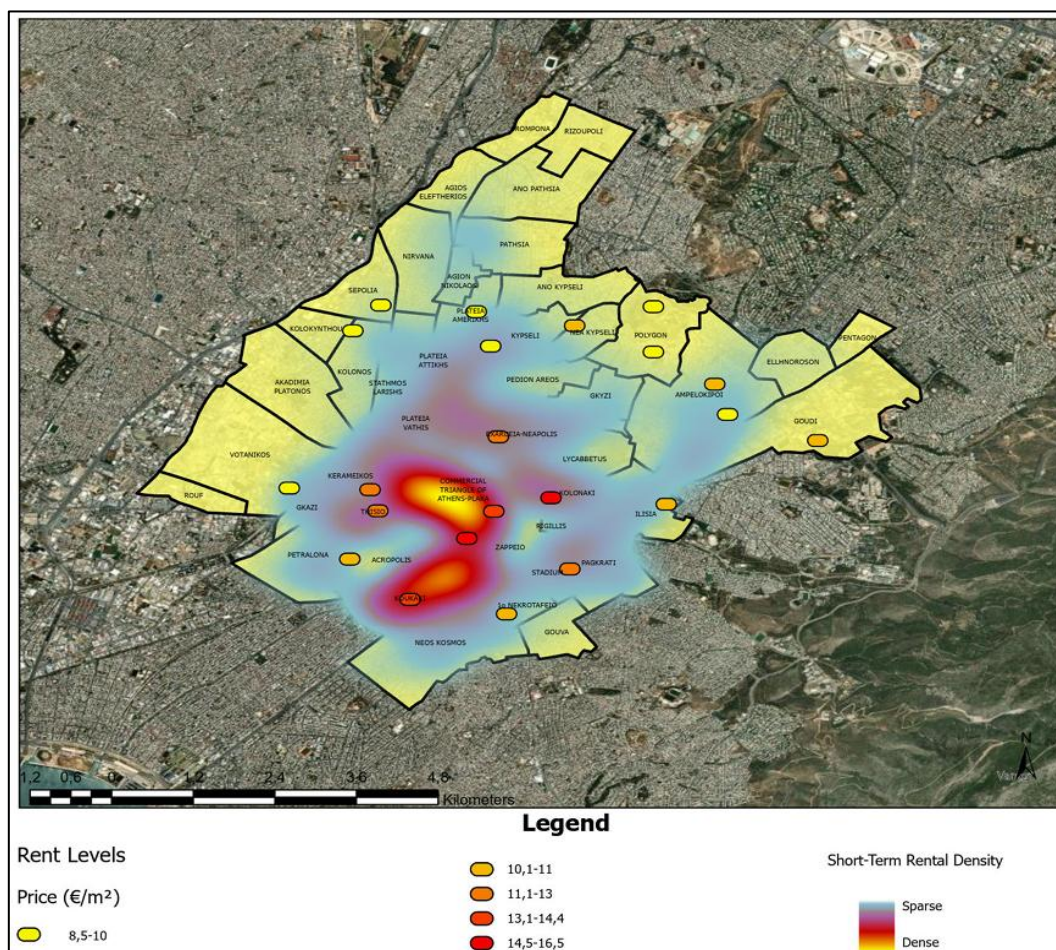
The contrast with the city's peripheral neighbourhoods is equally telling. Areas such as Agios Eleftherios, Ano Patisia, Polygono, Rizoupoli, and Nea Kypseli record low concentrations of short-

term rental properties, retaining to a greater degree their character as zones of permanent residence. This spatial polarisation between a commodified centre and a relatively stable periphery (Ardura Urquiaga et al., 2020; Park et al., 2023) documents the uneven geographic logic through which short-term rental expansion operates, concentrating housing pressure in the city's most culturally significant and economically visible areas while leaving peripheral neighbourhoods comparatively untouched (Balampanidis et al., 2019; Katsinas, 2021). The spatial inequality thus produced is not incidental but structural: it is the direct expression, at the neighbourhood scale, of the accumulation by dispossession that Harvey (2012) identifies as the defining dynamic of contemporary urban restructuring (Fenton, 2019).

3b. Residential rent levels and the spatial logic of displacement

The second layer (Map 2) maps average residential rent prices per square metre across selected Athenian neighbourhoods, and its findings are unambiguous. The spatial correlation with the short-term rental density layer is striking and consistent: the neighbourhoods recording the highest concentration of short-term rental properties are, without exception, those registering the highest average rent levels. The neighbourhoods of Koukaki, Metaxourgeio, Psyrri, and Neos Kosmos present the highest co-occurrence of short-term rental density and elevated rent prices, while more distant neighbourhoods record both lower short-term rental concentration and lower housing costs.

Map 2: Rent Levels Map



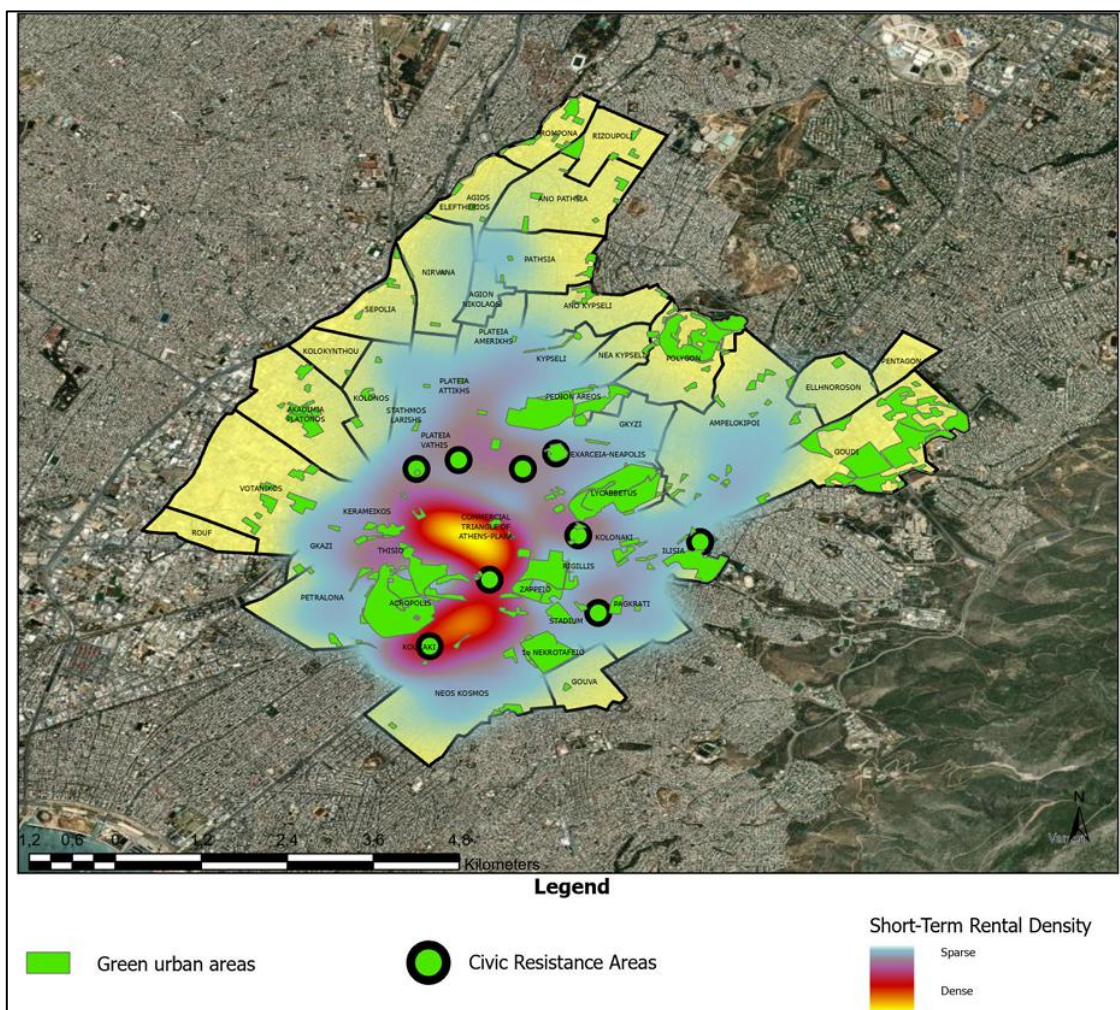
This spatial correlation operationalises Harvey's concept of accumulation by dispossession (Fenton, 2019; Harvey, 2009) at the neighbourhood level with empirical precision. The conversion of residential units to short-term tourist accommodation simultaneously reduces the supply of long-term rental housing and signals the area's attractiveness to further tourism investment, producing a self-reinforcing cycle of rent inflation and residential displacement (Grisdale, 2019; Robertson et al., 2020; Ardura Urquiaga et al., 2020). Long-term residents and particularly lower- and middle-income households are progressively priced out of the neighbourhoods they have inhabited (Cristeche and Anguelovski, 2025; Morales-Pérez et al., 2020; Cocola-Gant and Gago, 2019), replaced by a rotating population of short-stay visitors whose relationship to the local built environment is transactional rather than communal (Wrede, 2022; Hoffman and Heisler, 2020). The social consequence of this substitution, as the criminological literature reviewed in Section 1 would anticipate (Wilson and Kelling, 1982; Jacobs, 1961), is the systematic erosion of precisely those stable residential communities on which informal social control and, by extension, urban safety depends (Zarafonitou and Kontopoulou, 2020).

Taken together, Layers 1 and 2 produce a clear and empirically grounded spatial portrait of commodification in Athens: a geography in which exchange value has been decisively prioritised over use value (Lefebvre, 2015; Harvey, 2009) in the city's most centrally located neighbourhoods, generating conditions of accelerating displacement and community instability that extend well beyond the housing market into the social fabric of urban life (Balampanidis et al., 2019; Gourzis and Alexandri, 2026).

3c. Green space distribution and the double exposure to spatial injustice

The third analytical layer maps the spatial distribution of green and public recreational spaces (Map 3) across the Municipality of Athens, parks, municipal woodlands, and peri-urban ecosystems, in relation to the short-term rental density heatmap. The findings reveal a consistent and analytically significant pattern of environmental injustice: the areas with the greatest concentration of short-term rental properties are simultaneously those with the most limited access to urban green space. The historic centre, Koukaki, Metaxourgeio, Gazi, records both the highest short-term rental density and the most severe green space deficit.

Map 3: Green Urban Areas among with STR's and Areas of Civic Resistance



This co-location of commodification pressure and environmental deprivation constitutes what this study terms a double exposure to spatial injustice: residents facing housing precarity and the threat of displacement are simultaneously denied access to the green infrastructure that sustains physical and psychological wellbeing. Both dimensions of this double exposure map directly onto Lefebvre's (2015) concept of the denial of use value the systematic subordination of residents' right to the city's resources to the imperatives of tourism-led capital accumulation (Fenton, 2019; Celata and Romano, 2020).

From an environmental criminology perspective, the findings of this layer are equally significant. The absence of accessible, well-maintained green and public recreational spaces in the most commodified neighbourhoods constitutes a measurable concentration of the physical incivilities that the literature consistently associates with elevated fear of crime and reduced perceptions of neighbourhood safety (Taylor and Hale, 1986; Wilson and Kelling, 1982; Zarafonitou and Kontopoulou, 2020). Deteriorating or absent public space signals the weakening of informal social control and the retreat of community life from shared urban environments, conditions that, as Jacobs (1961; 2020) established, are directly

linked to the erosion of the "eyes on the street" effect that makes neighbourhoods safe (Ortigueira-Sánchez, 2016).

The green space deficit in these areas is not, therefore, a neutral environmental condition. It is a spatial expression of the same logic of commodification that drives short-term rental expansion: public space, like residential space, is progressively subordinated to tourism and commercial interests (Albuquerque et al., 2024; Pinto et al., 2024), leaving permanent residents with diminished access to the shared urban commons that sustain community life, social cohesion, and informal safety (Hewitt et al., 2025; Mark et al., 2025).

3d. Civic resistance and the spatial politics of the Right to the City

The fourth layer maps the documented locations of organised civic resistance movements (Map 3) in Athens that protest against the uncontrolled expansion of short-term rental properties (Morales-Pérez et al., 2020; Musaraj, 2024), community campaigns for urban green space (Hewitt et al., 2025; Mark et al., 2025), and public interventions asserting residents' claims to shared urban space. This layer is analytically distinctive in that it captures not a condition of urban stress but a response to it, the active spatial politics through which residents contest the erosion of their Right to the City (Lefebvre, 2015) in practice.

The spatial correlation between this layer and the preceding three is the most theoretically significant finding of the study. Protests against short-term rental expansion are concentrated in precisely the neighbourhoods where short-term rental density is highest: Exarcheia, Koukaki, Metaxourgeio, Neos Kosmos, and Petralona. Similarly, campaigns for urban green space are most active in the areas recording the most severe green space deficits. The map of civic resistance is not a random distribution of discontent it is a spatially precise negative image of the map of commodification (Morales-Pérez et al., 2020; Musaraj, 2024), tracing its contours from the perspective of those who bear its consequences most directly.

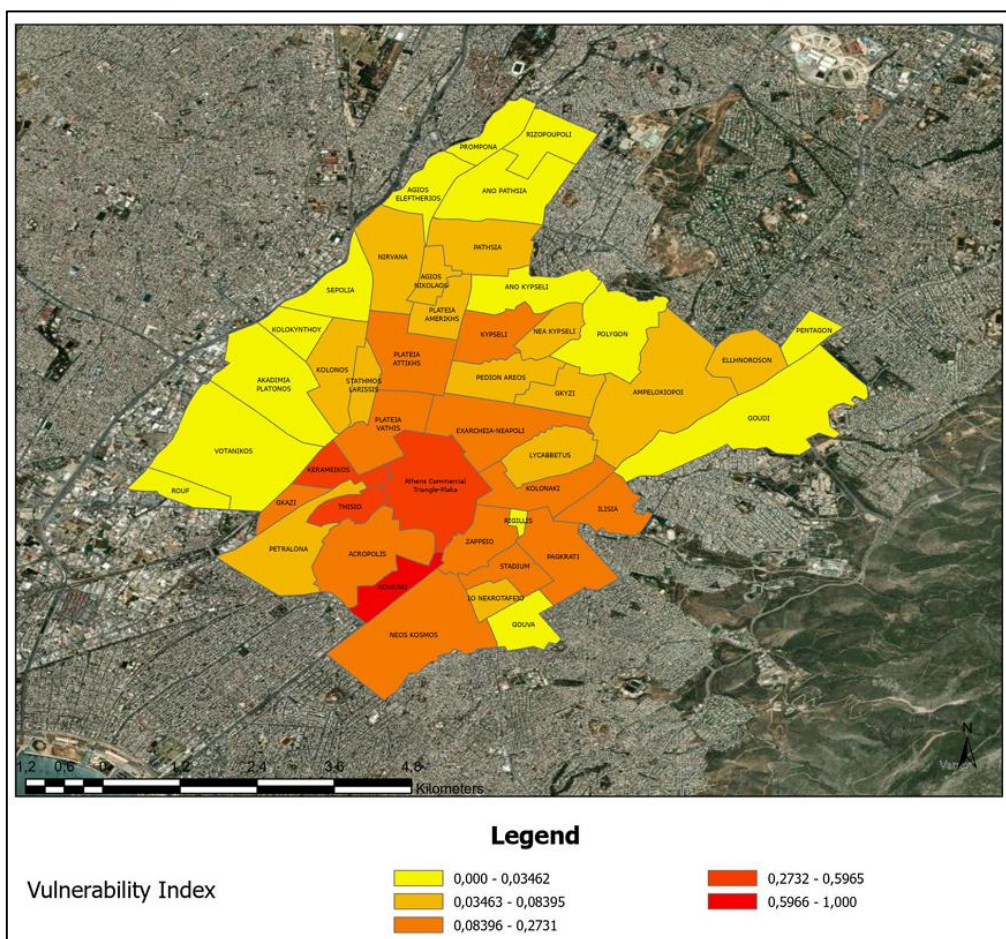
This finding directly and empirically confirms Harvey's (2012) theoretical argument that urban social movements are spatially structured responses to the concrete geography of dispossession (Harvey and Paik, 2017; Fenton, 2019). Residents resist most intensely precisely where the pressures of displacement, rent inflation, and environmental deprivation are most acute (Gourzis and Alexandri, 2026; Balampanidis et al., 2019). Civic resistance, in this reading, is not a symptom of disorder but an assertion of order, a collective exercise of the Right to the City (Lefebvre, 2015) that seeks to reclaim informal control over shared urban space from the logic of commodification that has eroded it (Cristeche and Anguelovski, 2025).

Exarcheia presents perhaps the most complex instance of civic resistance in the study area: a neighbourhood where protests against short-term rental expansion intersect with organised opposition to the disruption of Exarcheia Square caused by the construction of Metro Line 4, a large-scale infrastructure intervention that has physically fragmented the neighbourhood's primary public space and accelerated processes of gentrification already set in motion by tourism-led commodification (Gourzis and Alexandri, 2026). The convergence of these pressures, short-term rental proliferation (Balampanidis et al., 2019), infrastructure-led displacement (Mark et al., 2025), and the physical dismantling of communal space, makes Exarcheia an acute site of contested urban space and a paradigmatic case of the multi-dimensional denial of the Right to the City (Lefebvre, 2015; Musaraj, 2024).

3e. Composite spatial vulnerability: Mapping the geography of urban insecurity

The most analytically powerful finding of the study (Maps 4,5) emerges from the overlay of all four layers into a composite spatial vulnerability analysis (Piasek et al., 2022). This composite identifies the areas of Athens where multiple dimensions of urban stress converge simultaneously: high short-term rental density (Inside Airbnb, 2025), elevated rent levels (Ardura Urquiaga et al., 2020), limited green space availability, and concentrated civic resistance (Morales-Pérez et al., 2020). The result is an empirically grounded geography of compounded urban vulnerability, concentrated primarily in the historic centre and the immediately surrounding neighbourhoods of Koukaki, Metaxourgeio, Psyri, Gazi, Exarcheia, Neos Kosmos, and Petralona.

Map 4: Final Map of Vulnerability Index



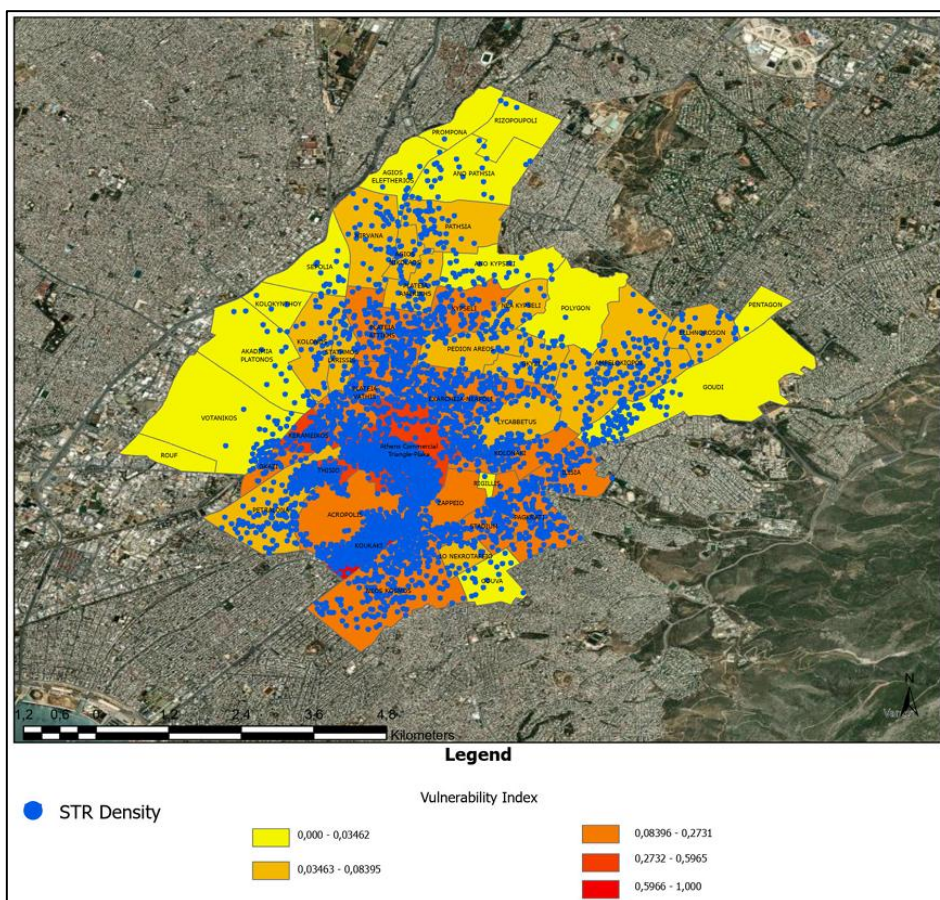
These areas of convergence represent the spatial crystallisation of the processes theorised in Section 1. They are, simultaneously, zones of maximum commodification where exchange value has most thoroughly displaced use value (Lefebvre, 2015; Harvey, 2009) and zones of maximum community instability, where the displacement of long-term residents (Cocola-Gant and Gago, 2019; Grisdale, 2019) and the proliferation of short-stay tourism populations have most severely eroded the social fabric that sustains informal social control (Wilson and Kelling, 1982; Jacobs, 1961; Zarafonitou and Kontopoulou, 2020). They are also, not coincidentally, the areas where the physical environment is most deficient in the green and public spaces that sustain community life and signal collective investment in shared urban space (Hewitt et al., 2025).

From the perspective of environmental criminology, this composite geography maps precisely the conditions associated with elevated fear of crime and diminished urban safety (Hale, 1996; Farrall et al., 2009; Zarafonitou and Kontopoulou, 2020): the concentration of physical incivilities produced by environmental neglect (Taylor and Hale, 1986; Ortigueira-Sánchez, 2016), combined with the social incivilities generated by community instability, population transience (Wrede, 2022), and the erosion

of neighbourly networks (Wilson and Kelling, 1982). The composite vulnerability index does not measure crime directly for the reasons discussed in Section 2.3 (Brownlow et al., 2026) but it charts, with empirical rigour, the spatial conditions that the criminological literature consistently identifies as the structural antecedents of perceived insecurity, weakened informal control, and reduced community resilience (Ollenburger, 1981; Farrall et al., 2009).

The composite map thus serves as the empirical bridge between the study's two theoretical registers. Where the Right to the City (Lefebvre, 2015) is most actively denied, where commodification is most intense (Fenton, 2019), environmental quality lowest, and community stability most thoroughly eroded (Balampanidis et al., 2019; Gourzis and Alexandri, 2026) urban vulnerability is most acute. The geography of spatial injustice and the geography of urban insecurity are, this study argues, not merely correlated but causally connected: the former produces the latter through the mechanisms of social fabric erosion, informal control dissolution (Wilson and Kelling, 1982; Jacobs, 1961), and physical incivility accumulation that environmental criminology has documented across a range of urban contexts (Zarafonitou and Kontopoulou, 2020; Taylor and Hale, 1986).

Map 5: STR points, spatially, over the Vulnerability Index layer



Among these areas, Exarcheia warrants particular analytical attention as a case of compounded vulnerability that extends beyond the four-layer framework of this study. In addition to short-term rental pressure (Balampanidis et al., 2019) and civic resistance, the neighbourhood is currently subject to infrastructure-led displacement through the construction of Metro Line 4, which has physically disrupted Exarcheia Square, the primary communal and public space of one of Athens' most historically significant residential communities (Gourzis and Alexandri, 2026). This infrastructural intervention compounds the erosion of informal social control (Wilson and Kelling, 1982) already produced by short-term rental expansion, creating a situation in which the neighbourhood's spatial commons are simultaneously commodified from above and dismantled from below (Musaraj, 2024). Exarcheia thus exemplifies a broader dynamic that future research should examine systematically: the intersection of tourism-led and infrastructure-led gentrification as compounding vectors of urban vulnerability (Gourzis and Alexandri, 2026; Cristeche and Anguelovski, 2025).

4. Discussion

4.1 The spatial logic of urban vulnerability: Connecting the layers

The findings presented in Section 3 reveal a spatial logic of urban vulnerability that is both empirically consistent and theoretically coherent. Across the Municipality of Athens, the same neighbourhoods that record the highest concentration of short-term rental properties (Inside Airbnb, 2025) also register the highest residential rent levels (Ardura Urquiaga et al., 2020; Wrede, 2022), the most severe green space deficits, and the most intense civic resistance (Morales-Pérez et al., 2020; Musaraj, 2024). This four-way spatial convergence is not coincidental, it is the geographic expression of a single underlying process: the systematic subordination of residential space to the logic of tourism-led capital accumulation (Fenton, 2019; Harvey, 2009), and the compounded consequences of that subordination for community stability, environmental quality, and urban safety.

The theoretical framework developed in Section 1 provides the interpretive key for this spatial logic. In Lefebvre's (2015) terms, the neighbourhoods identified in the composite vulnerability analysis represent the sites where the tension between use value and exchange value has been most decisively resolved in favour of the latter, where the city has, in effect, ceased to belong to those who inhabit it. In Harvey's (2009; 2012) terms, they are the frontlines of accumulation by dispossession (Fenton, 2019): the zones where the conversion of residential space to tourist accommodation (Cocola-Gant and Gago, 2019; Balampanidis et al., 2019) has most thoroughly extracted exchange value at the expense of the social fabric that sustained community life. And in the terms of environmental criminology, they are the areas where the conditions for informal social control have been most

severely eroded (Wilson and Kelling, 1982; Jacobs, 1961; Zarafonitou and Kontopoulou, 2020) where the "eyes on the street" have been replaced by the revolving door of short-stay tourism (Grisdale, 2019; Wrede, 2022), and where the physical environment signals neglect rather than collective investment (Taylor and Hale, 1986; Ortigueira-Sánchez, 2016).

4.2 Exarcheia as a paradigmatic case

Among the areas of compounded vulnerability identified in the composite analysis, the neighbourhood of Exarcheia merits particular attention as a paradigmatic case, one that concentrates, within a single urban space, the full range of pressures that the study has examined (Gourzis and Alexandri, 2026; Balampanidis et al., 2019). Exarcheia faces not one but three simultaneous processes of spatial dispossession: the proliferation of short-term rental properties in its surrounding streets (Inside Airbnb, 2025), the acceleration of gentrification driven by rising property values and changing neighbourhood demographics (Gourzis and Alexandri, 2026; Cristeche and Anguelovski, 2025), and crucially the ongoing disruption of its central public space through the construction works associated with Athens Metro Line 4.

This last pressure deserves specific analytical attention. The temporary but severe disruption of Exarcheia Square, the neighbourhood's primary site of community gathering, civic life, and informal social interaction, constitutes a form of infrastructurally-induced spatial injustice (Mark et al., 2025; Musaraj, 2024) that compounds the market-driven pressures of short-term rental expansion and gentrification. The square has historically functioned as the spatial anchor of community life in Exarcheia: the site where informal social networks are maintained (Jacobs, 1961), where the "eyes on the street" effect is most concentrated (Jacobs, 2020), and where residents exercise collective ownership over shared urban space (Lefebvre, 2015; Harvey, 2012). Its disruption accelerates the dissolution of precisely the community bonds and informal control mechanisms that sustain neighbourhood safety (Wilson and Kelling, 1982; Hale, 1996).

Exarcheia thus illustrates, in concentrated form, the central argument of this study: that spatial injustice and urban vulnerability are produced not by any single process in isolation, but by the convergence of multiple pressures, market-driven commodification (Fenton, 2019; Cocola-Gant and Gago, 2019), environmental deprivation, and infrastructural disruption that together erode the social fabric and informal control capacity of residential communities (Zarafonitou and Kontopoulou, 2020). It is no coincidence that Exarcheia is simultaneously the neighbourhood with the most intense history of civic resistance in Athens (Morales-Pérez et al., 2020): the spatial pressure is greatest, and the community's

response most organised. Harvey's (2012) argument that urban social movements arise where dispossession is most acute (Harvey and Paik, 2017) finds its clearest Athenian expression here.

4.3 Commodification, social fabric erosion, and the fear of crime

The central theoretical contribution of this study lies in the causal chain it proposes between the processes of urban commodification and the conditions of urban vulnerability, a chain that, this discussion argues, operates through three sequential mechanisms.

The first mechanism is community displacement. The conversion of residential properties to short-term tourist accommodation (Hoffman and Heisler, 2020; Cristeche and Anguelovski, 2025), and the associated inflation of residential rents (Ardura Urquiaga et al., 2020; Grisdale, 2019), displaces long-term residents from the affected neighbourhoods (Cocola-Gant and Gago, 2019; Park et al., 2023). This displacement is not merely an economic event, it is a social one. Long-term residents carry with them the accumulated social capital of neighbourhood life: the networks of mutual recognition, the informal norms of shared space, the collective investment in the immediate built environment that constitutes what Jacobs (1961) called the "intricate ballet" of street life. When these residents leave, they take this social capital with them (Wrede, 2022). The neighbourhood does not simply change its population it loses its capacity for informal self-regulation (Wilson and Kelling, 1982).

The second mechanism is social incivility accumulation. As stable residential communities are replaced by transient populations of short-stay visitors (Grisdale, 2019; Robertson et al., 2020), the social conditions of informal social control deteriorate. Neighbours do not know one another; shared norms of public space use dissolve; the sense of collective ownership over the immediate environment, what Taylor (1988) terms "territorial functioning" weakens. These are the social incivilities that the environmental criminology literature identifies as key mediators between neighbourhood change and elevated fear of crime (Wilson and Kelling, 1982; Taylor and Hale, 1986; Ollenburger, 1981): not the absence of policing, but the absence of community (Jacobs, 1961; Zarafonitou and Kontopoulou, 2020).

The third mechanism is physical incivility concentration. The green space deficit documented in Layer 3 of the spatial analysis represents not merely an environmental inequity but a physical incivility in the criminological sense: the absence of well-maintained, accessible public space signals to residents and visitors alike a neighbourhood where collective investment in the shared environment has broken down (Ortigueira-Sánchez, 2016). This signal, the literature consistently shows, elevates perceptions of disorder and insecurity independently of actual crime rates (Wilson and Kelling, 1982; Hale, 1996; Farrall et al., 2009). The physical environment becomes, in effect, a legible text of urban vulnerability

(Zarafonitou and Kontopoulou, 2020), one that both reflects and reinforces the social processes of community erosion that commodification has set in motion (Balampanidis et al., 2019; Gourzis and Alexandri, 2026).

Together, these three mechanisms constitute the causal pathway through which the Right to the City (Lefebvre, 2015), when denied, produces not merely spatial injustice in the abstract, but concrete conditions of urban insecurity. The geography of commodification mapped in this study is, simultaneously, a geography of vulnerability: a spatial portrait of the areas where community displacement (Cocola-Gant and Gago, 2019), social incivility accumulation (Wilson and Kelling, 1982), and physical incivility concentration have converged to produce the conditions strongly associated with elevated fear of crime and diminished informal social control (Hale, 1996; Zarafonitou and Kontopoulou, 2020).

4.4 The Right to the Safe City: Towards a synthetic concept

The findings of this study invite a theoretical extension of Lefebvre's (2015) original formulation. The Right to the City, as Lefebvre articulated it, encompasses the right to use urban resources and the right to transform urban space according to residents' collective needs (Ploger and Lefebvre, 1995; Gerhard, 2014). This study proposes that a third dimension must be made explicit: the right to safety understood not as the right to policing, but as the right to the social and physical conditions that make informal community safety possible (Jacobs, 1961; Zarafonitou and Kontopoulou, 2020).

This is the Right to the Safe City: the right of residents to inhabit a built environment that sustains community networks, provides accessible public and green space (Hewitt et al., 2025; Mark et al., 2025), and maintains the conditions of informal social control on which neighbourhood safety fundamentally depends (Wilson and Kelling, 1982; Taylor and Hale, 1986). It is a right that is denied, this study argues, wherever the logic of commodification displaces stable residential communities (Cristeche and Anguelovski, 2025; Park et al., 2023), erodes the physical fabric of shared public space (Ortigueira-Sánchez, 2016), and subordinates the use value of the city to the exchange value extracted by tourism-led capital accumulation (Fenton, 2019; Harvey, 2009).

Athens, in this light, offers not merely a case study in urban transformation (Balampanidis et al., 2019; Gourzis and Alexandri, 2026) but a spatial argument: that the erosion of the Right to the City (Lefebvre, 2015) and the production of urban vulnerability are not parallel processes but a single one, operating through the mechanisms of community displacement, social fabric erosion, and physical environment degradation that the spatial analysis has mapped (Zarafonitou and Kontopoulou, 2020). The city's most

commodified neighbourhoods are its most vulnerable, not despite their economic dynamism, but because of it.

The spatial analysis reveals a pronounced geographic asymmetry in the distribution of structural vulnerability across the Municipality of Athens (Piasek et al., 2022). Neighbourhoods registering the highest Vulnerability Index values are concentrated within the central urban fabric, most notably Koukaki-Makrigianni, the Athens Commercial Triangle-Plaka, and Kerameikos, forming a zone of maximal exposure that spatially coincides with areas of highest tourist demand and short-term rental market penetration (Inside Airbnb, 2025; Balampanidis et al., 2019). Conversely, peripheral neighbourhoods (Votanikos, Sepolia, Kolokyntou) record values proximate to the index minimum, reflecting their substantially lower STR density (Katsinas, 2021). A single neighbourhood was found to concentrate over 21% of the total STR pressure in the municipality (Inside Airbnb, 2025), generating an extreme spatial concentration of opportunity conditions. This finding is consistent with the position advanced by Lanfear and Kirk (2024) regarding the spatial clustering of criminal opportunity in areas of tourist over-concentration, and is further corroborated by the macro-level finding of Athens' disproportionate representation in Attica's property crime statistics (Hellenic Police, 2025). Taken together, the two levels of analysis converge on the same spatial pattern: the commodification of central Athens (Fenton, 2019; Cocola-Gant and Gago, 2019) produces a geography of urban vulnerability that mirrors, and may structurally reinforce, the observed regional concentration of property crime.

4.5 Opportunity vs. social control: A contemporary criminological debate

The synthesis of the aforementioned spatial layers suggests that the commodification of the Athenian urban fabric is inextricably linked to a heightened state of urban vulnerability. However, the causal mechanism through which short-term rentals translate into increased insecurity remains a subject of intense academic debate (Lanfear and Kirk, 2024; Mixa, 2025). While this study, grounded in the Lefebvrian tradition (Lefebvre, 2015; Ploger and Lefebvre, 1995) and Jane Jacobs' (1961; 2020) urban sociology, emphasizes the social-control erosion pathway whereby the displacement of long-term residents (Cocola-Gant and Gago, 2019; Grisdale, 2019) dismantles the "eyes on the street" and the informal networks of collective efficacy (Wilson and Kelling, 1982; Taylor and Hale, 1986), recent empirical evidence introduces an alternative, yet complementary, perspective.

According to the latest quantitative research in European and North American contexts (Lanfear and Kirk, 2024), the rise in property-related crimes (burglary, theft) in high-STR density areas appears to follow an opportunity-driven pathway. This perspective posits that the proliferation of entire-home listings creates a "target-rich" environment of transient occupancy: vacant homes during off-peak

periods and a constant influx of unfamiliar visitors who lack territorial knowledge (Wrede, 2022; Hoffman and Heisler, 2020), thus increasing criminal opportunities regardless of the underlying social cohesion (Cohen and Felson, 1979). This contemporaneous effect suggests that STRs may alter the "opportunity structure" of a neighbourhood faster than they erode its long-term social fabric (Mixa, 2025; Guth et al., 2025).

In the specific case of Athens, however, these two mechanisms should not be viewed as mutually exclusive but as deeply intertwined vectors of vulnerability. Given the documented lack of neighbourhood-level longitudinal crime data for the Greek capital (Brownlow et al., 2026), this study contends that the "Right to the Safe City" is compromised through a synergistic process: directly, through the creation of temporary 'blind spots', defined here as spatial gaps in informal surveillance where the absence of 'capable guardians' increases criminal opportunity. These spots emerge in the urban fabric due to the transient nature of STR occupants (Lanfeer and Kirk, 2024; Cohen and Felson, 1979); and systemically, through the gradual displacement of the permanent residential "guardians" who provide the social infrastructure for informal surveillance (Cohen and Felson, 1979). According to Routine Activity Theory, the presence of 'capable guardians' is a primary deterrent to criminal opportunity; however, in neighbourhoods dominated by transient populations, this social infrastructure is severely eroded. The lack of stable residents means that the everyday routines which once facilitated natural surveillance are disrupted, effectively removing the 'guardians' who would otherwise monitor and protect the local urban space (Cohen and Felson, 1979; Jacobs, 1961).

Consequently, the Athenian experience suggests that the commodification of housing (Balampanidis et al., 2019; Gourzis and Alexandri, 2026) does not merely "attract" crime through opportunity; it actively "hollows out" the neighbourhood's capacity to resist it (Fenton, 2019). The intensification of civic resistance in neighbourhoods like Exarcheia and Koukaki (Layer 4) can thus be reinterpreted as a desperate attempt by the remaining social fabric to re-establish territorial control against both market-driven dispossession (Harvey, 2012; Morales-Pérez et al., 2020) and the resulting insecurity (Zarafonitou and Kontopoulou, 2020). By bridging these two criminological pathways (Lanfeer and Kirk, 2024; Wilson and Kelling, 1982), the proposed "Right to the Safe City" framework gains a more robust empirical footing. It recognises that urban safety is not just a byproduct of policing, but a fundamental spatial right (Lefebvre, 2015) that is eroded when the exchange value of an apartment overrides its use value as a component of a stable, self-regulating community (Jacobs, 1961; Hale, 1996).

5. Conclusions

This study set out to examine the relationship between urban commodification and spatial vulnerability through a combined theoretical and spatial analytical framework. By bringing critical urban theory (Lefebvre, 2015; Harvey, 2009) into dialogue with environmental criminology (Wilson and Kelling, 1982; Jacobs, 1961; Zarafonitou and Kontopoulou, 2020), it has argued that the transformation of urban space under conditions of tourism-led development (Balampanidis et al., 2019; Gourzis and Alexandri, 2026) produces not only spatial inequalities (Cristeche and Anguelovski, 2025; Morales-Pérez et al., 2020), but also structural conditions associated with diminished urban safety. The empirical analysis of Athens (Inside Airbnb, 2025; Hellenic Police, 2025) revealed a clear and consistent spatial pattern. Neighbourhoods characterised by high concentrations of short-term rental properties also exhibit elevated housing pressure (Ardura Urquiaga et al., 2020; Grisdale, 2019), limited access to green space, and intensified civic resistance (Musaraj, 2024). The spatial convergence of these factors (Piasek et al., 2022) suggests that urban vulnerability is not randomly distributed, but follows the geography of commodification itself (Fenton, 2019; Cocola-Gant and Gago, 2019).

Importantly, the findings support the interpretation of urban insecurity as a structurally produced condition rather than an isolated outcome of individual behaviour or policing deficits (Zarafonitou and Kontopoulou, 2020; Hale, 1996). While the literature consistently identifies inadequate policing and a lack of formal authority as primary drivers of elevated fear of crime and feelings of insecurity in the urban context (Zarafonitou, 2008), this study contends that these factors operate in tandem with structural transformations. Through the combined mechanisms of community displacement (Cocola-Gant and Gago, 2019; Park et al., 2023), erosion of informal social control (Wilson and Kelling, 1982; Jacobs, 1961), and the accumulation of physical and social incivilities (Taylor and Hale, 1986; Farrall et al., 2009), the commodification of residential space contributes to the gradual weakening of neighbourhood-level resilience. In this sense, the study advances a conceptual shift from viewing crime and insecurity as discrete phenomena to understanding them as embedded within broader processes of urban transformation (Lanfear and Kirk, 2024; Wrede, 2022).

At the same time, the analysis highlights the dual criminological pathways through which short-term rentals may influence urban vulnerability. On the one hand, the opportunity-based mechanism (Lanfear and Kirk, 2024; Cohen and Felson, 1979) emphasises the creation of transient and low-familiarity environments that may increase exposure to property crime. On the other, the social control mechanism (Wilson and Kelling, 1982; Jacobs, 1961; Zarafonitou and Kontopoulou, 2020) underscores the longer-term erosion of community cohesion and informal surveillance. In the context of Athens (Balampanidis

et al., 2019; Gourzis and Alexandri, 2026), these processes appear to operate in tandem, reinforcing one another within highly commodified neighbourhoods (Mixa, 2025).

The introduction of the "Right to the Safe City" constitutes the central theoretical contribution of this paper. Extending Lefebvre's (2015) original formulation (Ploger and Lefebvre, 1995; Gerhard, 2014), the study argues that the right to inhabit, use, and transform urban space must necessarily include the right to the social and environmental conditions that sustain safety (Jacobs, 1961; Zarafonitou and Kontopoulou, 2020). Urban safety, in this perspective, is not reducible to policing, but emerges from the presence of stable communities (Wilson and Kelling, 1982), accessible public space (Hewitt et al., 2025), and a collectively maintained urban environment (Mark et al., 2025).

From a policy perspective, the findings point to the need for a more integrated approach to urban governance. Regulating short-term rental markets (Guth et al., 2025; Cristeche and Anguelovski, 2025), protecting long-term housing availability (Hoffman and Heisler, 2020; Ardura Urquiaga et al., 2020), and investing in public and green infrastructure are not only issues of housing or environmental policy, but also of urban safety (Hewitt et al., 2025; Mark et al., 2025). The spatial concentration of vulnerability identified in this study (Piasek et al., 2022) suggests that targeted, place-based interventions are essential for mitigating the uneven impacts of commodification (Celata and Romano, 2020; Pinto et al., 2024).

Finally, the study is subject to important limitations, most notably the lack of neighbourhood-level crime data (Brownlow et al., 2026), which constrains the ability to empirically test direct correlations between short-term rental density and recorded crime. Future research should address this gap through the integration of longitudinal and fine-scale crime datasets (Lanfear and Kirk, 2024), as well as comparative analyses across cities experiencing similar forms of tourism-driven urban restructuring (Pinto et al., 2024; Musaraj, 2024; Celata and Romano, 2020). Building upon these limitations, a significant avenue for future research lies in the empirical validation of the proposed structural vulnerability index. Future studies should investigate how this spatial index correlates with empirical criminological indicators, such as localized victimisation surveys, geocoded police incident reports at the micro-neighbourhood scale, or localized metrics of fear of crime. Evaluating the statistical relationship between the mapped environmental vulnerabilities and actual crime data will further calibrate the proxy model, enhancing its predictive utility for targeted urban safety and spatial justice interventions.

Despite these limitations, the case of Athens demonstrates that the erosion of the Right to the City (Lefebvre, 2015; Harvey, 2009) and the production of urban vulnerability are deeply interconnected processes (Fenton, 2019). As such, understanding and addressing urban insecurity requires not only criminological insight (Wilson and Kelling, 1982; Hale, 1996; Jacobs, 1961), but a broader rethinking of the social and spatial foundations of contemporary urban life.

References

- Albuquerque, H., Quintela, J.A. and Marques, J. (2024). The Impact of Short-Term Rental Accommodation in Urban Tourism: A Comparative Analysis of Tourists' and Residents' Perspectives. *Urban Science*, [online] 8(3), p.83. doi:<https://doi.org/10.3390/urbansci8030083>.
- Ardura Urquiaga, A., Lorente-Riverola, I. and Ruiz Sanchez, J. (2020). Platform-mediated short-term rentals and gentrification in Madrid. *Urban Studies*, 57(15), p.004209802091815. doi:<https://doi.org/10.1177/0042098020918154>.
- Balampanidis, D., Maloutas, T., Papatzani, E. and Pettas, D. (2019). Informal Urban Regeneration as a Way out of the crisis? Airbnb in Athens and Its Effects on Space and Society. *Urban Research & Practice*, 14(3), pp.1–20. doi:<https://doi.org/10.1080/17535069.2019.1600009>.
- Bourgeois, P., Holmes, S.M., Sue, K. and Quesada, J. (2017). Structural Vulnerability: Operationalizing the Concept to Address Health Disparities in Clinical Care. *Academic Medicine*, 92(3), pp.299–307. doi:<https://doi.org/10.1097/acm.0000000000001294>.
- Brownlow, S., Gomes, J.A., Meghana Kalagana, Marosszeky, S., Drews, L.M. and Tapia, F. (2026). 'This City is Theirs': Lived Experiences of Short-Term Rentals (STRs) and Overtourism in European Cities. *LSE Laidlaw Scholars Journal*, [online] 2(1). Available at: <https://lslj.lse.ac.uk/articles/21> [Accessed 3 Apr. 2026].
- Celata, F. and Romano, A. (2020). Overtourism and online short-term rental platforms in Italian cities. *Journal of Sustainable Tourism*, 30(5), pp.1–20. doi:<https://doi.org/10.1080/09669582.2020.1788568>.
- Cocola-Gant, A. and Gago, A. (2019). Airbnb, buy-to-let investment and tourism-driven displacement: A case study in Lisbon. *Environment and Planning A: Economy and Space*, 53(7), pp.1671–1688. doi:<https://doi.org/10.1177/0308518x19869012>.

Cohen, L. and Felson, M. (1979). Social change and crime rate trends: a routine activity approach . *American Sociological Review*, [online] 44(4), pp.588–608. Available at: <https://faculty.washington.edu/matsueda/courses/587/readings/Cohen%20and%20Felson%201979%20Routine%20Activities.pdf>.

Cristeche, M., Anguelovski, I., Cristeche, M. and Anguelovski, I. (2025). Gentrification, short-term rentals, and housing rights: Legal intricacies and policy limitations in Buenos Aires and Barcelona. *Journal of Urban Affairs*, pp.1–20. doi:<https://doi.org/10.1080/07352166.2025.2580310>.

Farrall, S.D., Jackson, J. and Gray, E. (2009). *Social order and the fear of crime in contemporary times*. Oxford ; New York: Oxford University Press.

Fenton, R.P. (2019). Accumulation by Dispossession. *The Wiley Blackwell Encyclopedia of Urban and Regional Studies*, pp.1–4. doi:<https://doi.org/10.1002/9781118568446.eurs0001>.

Gerhard, U. (2014). Henri Lefebvre on space. Architecture, urban research, and the production of theory, by Lukasz Stanek. *Urban Geography*, 35(6), pp.938–940. doi:<https://doi.org/10.1080/02723638.2014.933002>.

Gourzis, K. and Alexandri, G. (2026). The evolving modalities of gentrification in Athens vis-à-vis Greece's shifting growth models: Insight from a novel multi-scalar approach. *European Urban and Regional Studies*. doi:<https://doi.org/10.1177/09697764251407087>.

Gridale, S. (2019). Displacement by disruption: short-term rentals and the political economy of 'belonging anywhere' in Toronto. *Urban Geography*, 42(5), pp.1–27. doi:<https://doi.org/10.1080/02723638.2019.1642714>.

Guth, K., Aišmannová, T., Benešová, I. and Pártlová, P. (2025). Regulatory Approaches to Short-Term Rental Accommodation: A Systematic Literature Review for Urban Policy. *Urban Affairs Review*. doi:<https://doi.org/10.1177/10780874251369729>.

Hale, C. (1996). Fear of Crime: A Review of the Literature. *International Review of Victimology*, 4(2), pp.79–150. doi:<https://doi.org/10.1177/026975809600400201>.

Harvey, D. (2009). *Social Justice and the City*. doi:<https://doi.org/10.1353/book13205>.

Harvey, D. and Paik, N. (2017). How capital operates and where the world and China are going: a conversation between David Harvey and Paik Nak-chung. *Inter-Asia Cultural Studies*, 18(2), pp.251–268. doi:<https://doi.org/10.1080/14649373.2017.1309501>.

Hellenic Police (2025). *Statistical Yearbook of the Hellenic Police 2025*. Athens: Ministry of Citizen Protection (in Greek).

Henri Lefebvre (2015). *Le droit à la ville*. Paris: Ed. Economica.

Hewitt, C.M., Do, A., Elayan, S., Feick, R., Gruebner, O., Rank, E., Shaughnessy, K., Sheppard, H., Solter, M., Sykora, M. and Shankardass, K. (2025). Smart Citizens Enabling Resilient Neighbourhoods (SCERN): Participatory mapping platform for resilience planning at a neighbourhood scale. *Cities*, [online] 165, p.106101. doi:<https://doi.org/10.1016/j.cities.2025.106101>.

Hoffman, L.M. and Heisler, B.S. (2020). *Airbnb, Short-Term Rentals and the Future of Housing*. Routledge. doi:<https://doi.org/10.4324/9780429279768>.

Inside Airbnb (2024). *Get the Data*. [online] insideairbnb.com. Available at: <https://insideairbnb.com/get-the-data/>.

Jacobs, J. (1961). The Death and Life of Great American Cities. *The Yale Law Journal*, 71(8), p.1597. doi:<https://doi.org/10.2307/794509>.

Jacobs, J. (2020). ‘The Uses of Sidewalks: Safety’. *The City Reader*, pp.189–194. doi:<https://doi.org/10.4324/9780429261732-25>.

Katsinas, P. (2021). Professionalisation of short-term rentals and emergent tourism gentrification in post-crisis Thessaloniki. *Environment and Planning A: Economy and Space*, 53(7), p.0308518X2198894. doi:<https://doi.org/10.1177/0308518x21988940>.

Lanfear, C.C. and Kirk, D.S. (2024). The promise and perils of the sharing economy: The impact of Airbnb lettings on crime. *Criminology*. doi:<https://doi.org/10.1111/1745-9125.12383>.

Lefebvre, H. (1981). *La production de l'espace*. Éditions Anthropos.

Mark, L., Holec, K. and Escher, T. (2025). Socio-spatial justice through public participation? A mixed-methods analysis of distributive justice in a consultative transport planning process in Germany. *Case Studies on Transport Policy*, pp.101467–101467. doi:<https://doi.org/10.1016/j.cstp.2025.101467>.

Mixa, M.W. (2025). Housing under platform capitalism: the contentious regulation of short-term rentals in European cities. *Housing Studies*, pp.1–3. doi:<https://doi.org/10.1080/02673037.2025.2576737>.

Morales-Pérez, S., Garay, L. and Wilson, J. (2020). Airbnb's contribution to socio-spatial inequalities and geographies of resistance in Barcelona. *Tourism Geographies*, pp.1–24. doi:<https://doi.org/10.1080/14616688.2020.1795712>.

Musaraj, S. (2024). Reclaiming the Mediterranean City: Contesting the Legitimacy of Urban Renewal Projects and the Airbnb Economy in Marseille. *Palgrave Studies in Urban Anthropology*, pp.77–95. doi:https://doi.org/10.1007/978-3-031-78694-5_5.

Ollenburger, J.C. (1981). Criminal Victimization and Fear of Crime. *Research on Aging*, 3(1), pp.101–118. doi:<https://doi.org/10.1177/016402758131004>.

Ortigueira-Sánchez, L.C. (2016). Influencing factors on citizen safety perception: systems and broken windows theories. *International Review on Public and Nonprofit Marketing*, 14(1), pp.95–111. doi:<https://doi.org/10.1007/s12208-016-0163-x>.

Park, S., Mullenbach, L.E. and Kim, J. (2023). Short-term rentals, resilience, and gentrification. *Annals of Tourism Research*, 101, pp.103610–103610. doi:<https://doi.org/10.1016/j.annals.2023.103610>.

Piasek, G., Fernández Aragón, I., Shershneva, J. and Garcia-Almirall, P. (2022). Assessment of Urban Neighbourhoods' Vulnerability through an Integrated Vulnerability Index (IVI): Evidence from Barcelona, Spain. *Social Sciences*, 11(10), p.476. doi:<https://doi.org/10.3390/socsci11100476>.

Pinto, H., Marzano, M., Cruz, A.R. and Elston, J.N. (2024). Overtourism and Short-Term Rental Effects in Florence and Lisbon. *Advances in hospitality, tourism and the services industry (AHTSI) book series*, pp.201–236. doi:<https://doi.org/10.4018/979-8-3693-6050-7.ch007>.

Ploger, J. and Lefebvre, H. (1995). Critique of Everyday Life. *Geografiska Annaler. Series B, Human Geography*, 77(1), p.65. doi:<https://doi.org/10.2307/490375>.

Psycharis, Y. (2012). "Spatial dimensions of the economic crisis - the 'geographic footprint' of the economic crisis in Greece." *Region & Periphery*, 1, pp.117-130. <https://doi.org/10.12681/rp.18531> (in Greek)

Robertson, D., Oliver, C. and Nost, E. (2020). Short-term rentals as digitally-mediated tourism gentrification: impacts on housing in New Orleans. *Tourism Geographies*, 24(6-7), pp.1–24. doi:<https://doi.org/10.1080/14616688.2020.1765011>.

Sampson, R.J. and Raudenbush, S.W. (1999). Systematic Social Observation of Public Spaces: A New Look at Disorder in Urban Neighborhoods. *American Journal of Sociology*, 105(3), pp.603–651. doi:<https://doi.org/10.1086/210356>.

Sanfelici, D.D.M. (2013). HARVEY, David. Rebel cities. New York: Verso books, 2012. *GEOgraphia*, 15(29), p.138. doi:<https://doi.org/10.22409/geographia2013.v15i29.a13658>.

Soja, E.W. (2010a). Seeking Spatial Justice. U of Minnesota Press.

Taylor, R.B. (1988). Human Territorial Functioning. *Cambridge University Press*. [online] doi:<https://doi.org/10.1017/cbo9780511571237>.

Taylor, R.B. and Hale, M. (1986). Testing Alternative Models of Fear of Crime. *The Journal of Criminal Law and Criminology (1973-)*, 77(1), p.151. doi:<https://doi.org/10.2307/1143593>.

Tonetta, M. (2021). Hoffman, L.M. & Schmitter Heisler, B., Short-term rentals and the future of housing, London, New York: Routledge, 2021, 158 pp., ISBN 9780367234188. *Journal of Housing and the Built Environment*, 36(4), pp.1835–1837. doi:<https://doi.org/10.1007/s10901-021-09902-4>.

Wilson, J. and Kelling, G. (1982). *The police and neighborhood safety*. [online] Available at: [https://faculty.washington.edu/matsueda/courses/587/readings/Wilson%20and%20Kelling%20\(1982\).pdf](https://faculty.washington.edu/matsueda/courses/587/readings/Wilson%20and%20Kelling%20(1982).pdf).

Wrede, M. (2022). How Short-Term Rentals are Changing the Neighborhood. *International Regional Science Review*, p.016001762110599. doi:<https://doi.org/10.1177/01600176211059981>.

Zarafonitou, C. (2008). Fear of Crime and Victimization: The Greek Experience. In H. Kury (Ed.), *Fear of Crime – Punitivity. New Developments in Theory and Research (Vol. 3, pp. 159-172)*. Bochum: Universitätsverlag Brockmeyer. Retrieved from <https://criminology.panteion.gr/el/demosieuseis/arthra/219-fear-of-crime-and-victimisation-the-greek-experience>

Zarafonitou, C. and Kontopoulou, E. (2020). Environmental degradation and fear of crime The research evidence in the center of Athens. *Urban Crime. An international Journal*, [online] 1(1), pp.3–33. doi:<https://doi.org/10.26250/heal.panteion.uc.v1i1.204>.