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Exploring Spatial Proximity and Social Exclusion through Two Case Studies of Roma Settlements in Greece

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Abstract: Roma groups in Greece are a long-standing socially deprived population that faces extreme social exclusion and segregation. Their marginalization includes limited access to education, employment, and housing. This paper explores their spatial position and social exclusion, comparing the social profile and life conditions in two case studies of Roma settlements with those of the municipal and regional units to which they belong. Methodologically, we analyze quantitative data from the 2011 Population Census to measure life conditions at three levels (settlement, municipal unit, regional unit), and we also use qualitative data from interviews with representatives of local agencies and residents of the two settlements to document our hypotheses on the causal relations between the spatial position and the social exclusion of Roma groups. The comparison shows that the two Roma settlements are clearly different from their entourage, assembling the lowest positions in the labor market, the weakest performances in education, the largest households, and the worst housing conditions. This case of extreme social exclusion in ghettoized spatial proximity raises the question about the significance of micro-segregation and the way it works in different contexts, as well as the need for further research for a more comprehensive understanding of the relation between social inequality and spatial distance.

Keywords: Greece; Roma; exclusion; deprivation; segregation; micro-segregation



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1. Introduction

Three young Roma, between 16 and 18 years old, were shot dead by police officers during the last two years in Greece. The Roma protests that followed confirmed the issues of stigmatization, social exclusion, and institutional exclusion that affect Roma ethno-cultural groups in Greece [1] and in other European countries [2]. In recent years, EU organizations have provided an increasing amount of information about the poor conditions of life and the violation of the fundamental rights of a substantial part of the Roma population [3]. Different forms of anti-Roma prejudice engrained on “institutional racism” obstruct the capacity of Roma communities in Greece to claim and exercise their rights [4]. Moreover, the stigmatization and marginalization of Roma groups is a persistent feature of Greek society.

Roma are the largest ethnic minority group in the EU. Out of an estimated total of 10–12 million in Europe, about six million live in the EU, and most of them are citizens of an EU country. The estimated population share of the Roma in 2012 ranges from 10.3% in Bulgaria, 9.1% in Slovakia, 8.3% in Romania, 7% in Hungary, 2.5% in Greece, 2% in Czechia, and 1.6% in Spain, to less than 1% in most of the other EU countries [5].

Excessive force, police brutality, and misconduct against Romani people continue to be reported across the EU, in line with the 2020 findings of the European Union Agency for

Fundamental Rights [3]. The FRA report also revealed that Romani people are subject to widespread poverty, inadequate living conditions, poor health, exclusion from the labor market, and harassment [2].

The aim of this paper is to explore the spatial proximity and social exclusion of Romani people in Greece, using the detailed data on two settlements (*Dendropotamos* and *Kritiri*). These two settlements have different characteristics. The former is at the periphery of the metropolitan area of Thessaloniki, and the latter is at the outskirts of a small town (Tyrnavos) within a rural area in the region of Thessaly in central Greece. The two settlements are investigated in terms of social profile and spatial exclusion, providing evidence on the intensity and form of the segregation and social exclusion of Romani people in Greece. This exploratory investigation uses a mix of quantitative and qualitative methods in a complementary way.

On a broader level, this paper raises the issue of simultaneous social mix and exclusion in space. Usually, social mix is understood as the opposite of exclusion, referring to neighborhoods where social mix entails the cohabitation of diverse groups in its space. Roma settlements illustrate a different situation: administratively, such settlements are often part of a neighborhood with a socially mixed population but, at the same time, are extremely excluded within it. In fact, they are ghettos populated exclusively by Roma groups. Roma settlements provide further evidence that spatial proximity does not necessarily entail social proximity [6], and that the question of micro-segregation [7] is multidimensional in terms of form as well as in terms of its impact on social reproduction.

2. The Social and Spatial Isolation of Roma Communities

Starting from the Chicago school, spatial segregation corresponds to social distance [8] in the form of a horizontal separation between neighborhoods, bearing distinct social, racial, and ethnic characteristics. The question was socio-spatial isolation, and assimilation processes were considered the main route of integration in the American reality. Today, these approaches seem interpretatively simplistic. Concepts such as the global and dual city involve processes of globalization, economic restructuring in a neoliberal context, and highlight intense polarization in the city as a form of segregation arising from new economic processes, leading to deepening inequalities and exclusions of social, ethnic, and racial groups [9–11]. In the European city, the particularities of the historical and social context contributed to a less intense and more complex form of segregation [12]. On the contrary, the spatial isolation of Roma groups in Europe looks much less connected to intricate economic processes and much more to offensive discrimination and intense segregation.

The question of Roma segregation and exclusion is far beyond the debates on segregation forms in Western cities and the impact of globalization and neoliberalism on urban diversity and inequality. The territorial confinement and social exclusion of Romani people is related to archetypical, yet still persistent, forms of extreme out casting throughout urban history [13,14], which even the inclusive policies of the welfare state failed to eradicate [15].

Most Roma settlements in the EU are located on the outskirts of cities or villages, separated from the ‘mainstream’ population by artificial obstacles (e.g., walls, roads, railways) or natural barriers (e.g., rivers, forests). Many of these settlements are not connected to water pipelines or sewage treatment and are close to landfills and to areas that are regularly flooded. The location of these settlements confirms evidence that access to social services and natural resources, as well as exposure to environmental risks are not equally distributed. The class and/or ethnic profiles of neighborhoods play an important role. In other words, the risks and distributions of adverse effects have a tendency to be imposed more on those who do not possess sufficient resources for their own protection and/or are disempowered, socially marginalized, and discriminated against [16,17]. Roma settlements provide extreme evidence of the unequal spatial distribution of advantage and disadvantage.

Attempts to build walls and segregate Roma settlements because of their different ethnic origin, class, or culture developed in central and eastern Europe (mainly in the Czech Republic, Slovakia, and Romania) in the post-socialist period and the rapid transition to the capitalistic economy. These attempts provide vivid illustrations of the perception of decision makers (and often of the majority) that isolation using cement and bricks may solve social and economic problems. The Roma ethnic minority should stay behind the wall [17]. The social and economic conditions for Roma groups, always worse in comparison to the non-Roma population, deteriorated rapidly during the transition period.

In southeastern Europe, and especially in Serbia, the spatial segregation of Roma settlements within cities is shaped by the long-standing ethnic distance and social exclusion. The broader context from the pre-socialist period historically formatted the background in which Roma settlements emerged in Serbia, as well as their current demographic, legislative, and urban degradation. Several forms of the segregation of Roma settlements include segregation as a consequence of racist hostility, institutional discrimination by city administration, and development-based conflicts. Examples of setting up a wall enclosing a Roma settlement in Kruševac, racist pressures that prevent the construction of housing for Roma in Belgrade, and the reluctance to improve and legalize Roma settlements in Novi Sad illustrate the various manifestations of segregation and division of urban space in Serbia [18].

The social exclusion of Roma in Europe as ‘a phenomenon of exclusion from participation in social life, either due to a lack of basic skills and lifelong learning opportunities or as a result of discrimination’ [19] is at the core of the EU approach to tackling this phenomenon through a range of institutional provisions, funding, and policies. However, the issue of social segregation, race discrimination, stigmatization, and spatial marginalization against social groups continues to be a further challenge for the debate that historically started from the human ecology approach of the Chicago school and the Jewish Ghetto [20]. This has been further discussed regarding the development of the Black ghetto [21] and its comparison with other forms of spatial marginalization [22].

A parallel debate appears in EU studies on the social exclusion of Roma communities under the lens of race and postcolonial approaches [23,24]. Moreover, studies regarding the social exclusion of Roma communities in Europe were developed especially after the enlargement of the EU and the admission of the former eastern socialist bloc countries [24–26]. Here, the discussion is enriched combining the class position with the spatial management of Roma groups in ghettos (using walls or other physical barriers) [27]. This spatial management is a governance device operated by the dominant social groups, mainly by avoiding the symbolic ‘contamination’ of mainstream society through the spatial isolation of the undesirable motifs of delinquency and danger associated with Roma settlements in collective representations.

3. Roma Groups in Greece

3.1. *Life Conditions, Roma Identity, and Ghettoization*

The Roma population in Greece, a mosaic of diverse—and sometimes conflictual—communities with unequal degrees of societal integration, is a de facto minority group. No accurate demographic information is available on the number of Roma living in the country. International organizations’ reports provide varying estimates—ranging from 100,000 to 350,000 people, out of a total of approximately 11 million population in Greece [28]. Most Roma communities in Greece have a centuries-long presence in the area, preceding the establishment of the modern Greek state (1830). According to the estimation of the General Secretariat for Social Solidarity and the Fight Against Poverty [29], the number of Roma in Greece was approximately 117,500 or 1.13 percent of the country’s population in 2021. This estimation is based on a survey of the country’s 332 local authorities. In detail, 145 participated in the mapping, 122 responded that there was no Roma population in their territory, and 65 did not respond. The Roma population is probably greater than this estimation since several local authorities did not respond, and the mapping by those

who responded may not have been exhaustive. Other estimations raise the number of Roma in Greece between 160,000 and 220,000 [30] or more.

Greek Roma are composed by two distinct groups. The first is a relatively small group of approximately 20,000 Muslim Roma in the country's northeastern region of Thrace [31]. They are part of the broader Muslim minority recognized as such by the Treaty of Lausanne (1923), which allowed the stay of Muslims in the region of Thrace, despite the complete ethnic cleansing between Greece and Turkey in the early 1920s. The second and larger group of Roma were labelled "aliens of Gypsy descent" by the Greek authorities and remained effectively without nationality until the early 1950s. Naturalization processes started in 1955, when the country's Citizenship Code was amended. However, most Roma were granted citizenship after the fall of the military dictatorship (1974) [4,32].

The Roma population is spatially concentrated: 60 percent live in 20 municipalities (out of 332 municipalities in Greece) with at least 2000 members [29] (p. 34). A very large part of this group lives in totally segregated settlements, i.e., in settlements with exclusively Roma population and in peripheral degraded areas of Greek cities. This enhances school segregation (see also [3] (p. 40) by forming school units comprising only, or with a large percentage, of Roma children, which usually drives the non-Roma parents to develop strategies to avoid these schools.

A recent survey registered the harsh living standards and the limited mobility prospects faced by the Roma communities [33]. Importantly, 25.6 percent of the 125,000 Greek Roma identified in this survey live in substandard housing, and a further 22 percent squat illegally in settlements described as "shanty towns". According to a more recent report by the General Secretariat of Social Solidarity and Fight Against Poverty [29], 80 percent of the Roma population was living in ghettoized settlements in 2021 with very low housing conditions and very poor accessibility to basic amenities. These settlements are divided into three categories (labelled I, II, and III) in terms of housing quality and location. Type I comprises areas of extreme degradation (slums) where living conditions are not acceptable, with barracks, other precarious constructions, and a complete lack of fundamental infrastructure. Type II are settlements, usually at the outskirts of small or medium size agglomerations, with a mix of precarious housing forms (barracks, tents, mobile homes, containers, etc.) used as permanent residences, and with some elements of infrastructure (streets, water, and electricity supply). Type III are labelled 'neighborhoods' made of regular housing units (independent or apartments) mixed with mobile homes and containers, usually located at the degraded part of urban areas [29]. Type I hosted about 10 percent of the Roma population, and type II and III hosted 40 and 30 percent, respectively, while the rest (20 percent) lived more dispersedly within or outside urban tissues [29]. Those living more dispersedly usually have regular housing units (74 percent) and much better housing conditions than those living in settlements [29]. Type I settlements are usually outside the official city plan; type II are equally divided between locations within and outside city plans; and type III are usually within. Those living more dispersedly are almost always located in areas within city plans [29].

The evidence on the poverty and exclusion of Roma groups in Greece is presented in this paper, with a focus on the profile of two important Roma settlements in central and northern Greece (Figure 1).

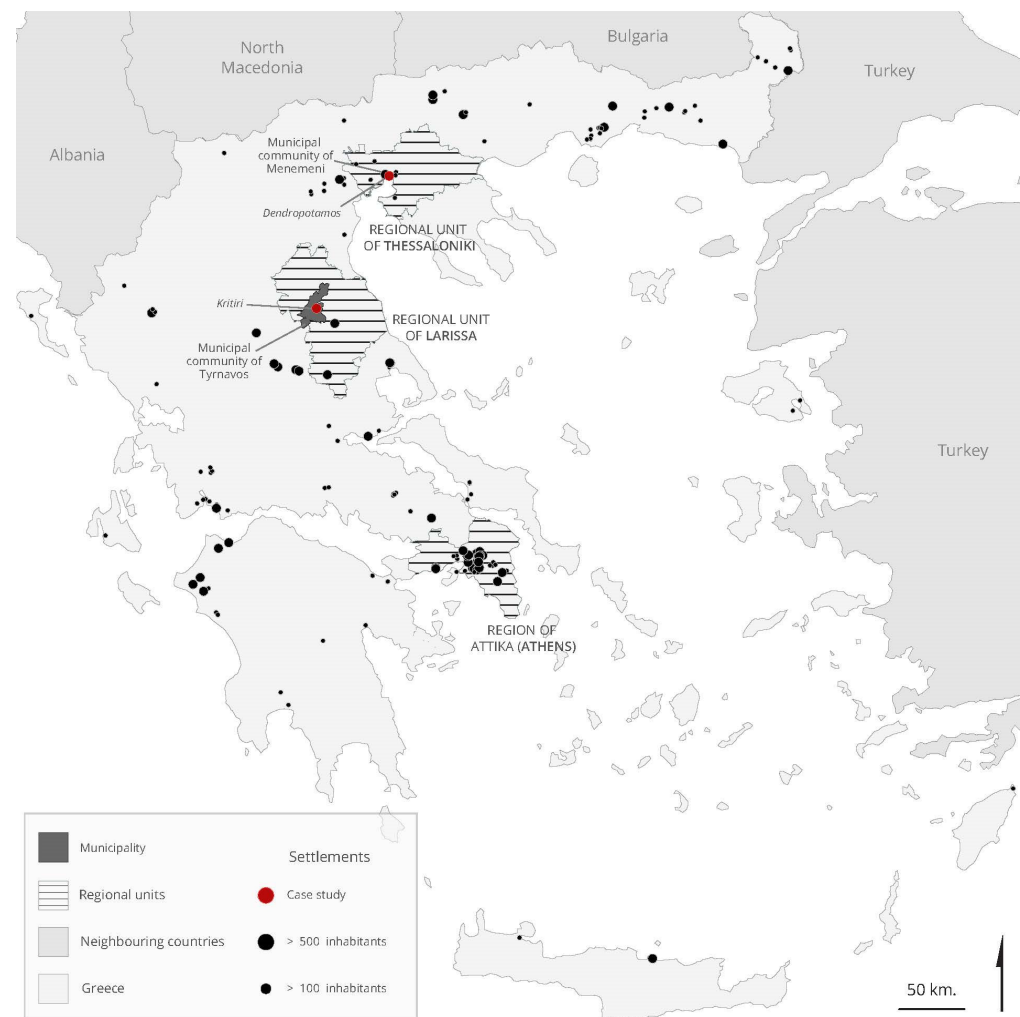


Figure 1. The two case study Roma settlements (*Dendropotamos* and *Kritiri*) and the distribution of Roma settlements (>200 inhabitants) across Greece. Mapping SN Spyrellis, data source [34].

Unemployment within the Roma population stands at 61.7 percent (compared to 8.3 percent for the general population, aged 15–64), with Roma women appearing to be completely absent from formal paid employment. With regard to education, almost half (41.2 percent) of Greek Roma are illiterate (compared to 1.2 percent for the general population, aged 15–64), and only 17 percent of minors of compulsory schooling age are enrolled in schools, compared to 97.5 percent of the general population [33,35].

The socio-discursive construction of Roma “otherness” has been based on stereotypes that devalue the nomadic or sedentary culture of their communities. Moreover, it has been developed within a national context, where rejection has been the usual way to deal with “otherness” [36]. The Greek state does not consider the Roma population as a minority group, but rather as a vulnerable social group which nevertheless does not belong to the Greek ethnicity, according to dominant perceptions. This official position does not derive from concerns about potential claims by Roma as a minority group. It is rather an indirect consequence of the official concern to recognize any minority ethnic group in Greece—mainly Muslims in Thrace or Albanian origin groups—which could potentially facilitate claims of national territory by neighboring countries. At the same time, this official viewpoint is shared by Roma groups and associations who consider themselves an integral part of Greek society. In this line, rough conditions and integration difficulties are attributed to cultural differences and preferences. Government officials express the widely held belief that Roma are responsible for many of the problems they face. “The Greek State would like to fully integrate Roma, but they do not like that a different style

of life is imposed on them” [28]. Therefore, the state half-heartedly applies policies to integrate and overcome the exclusion of Roma despite not expecting significant results, while the dominant perception and claim of the group itself can be summarized to “we are no different from you. . .” (DEN.INT.02).

Although Roma people protested throughout Greece as a separate group against police violence and the death of a seventeen-year-old Roma boy, at the same time, they are opposed to be recognized as an ethnic minority and are suspicious of any institutional measure for positive discrimination in their favor. Living in a nation-state dominated by solid nationalism with entrenched hegemonic ethnic categories that are historically embedded in the structures of the new State, the Roma are perhaps the lowest (ethnic) category in the pyramid of power relations [37]. They tend to have a very low index of social mobility, even when compared to the new poor immigrant groups who massively arrived in Greece from the early 1990s to the late 2000s (i.e., Albanians, Pakistanis, Georgians, Bulgarians, etc.). The latter may be lagging behind ‘mainstream’ Greek society, but they have improved their situation since their arrival to Greece, while Roma groups remain in a condition of perpetual stagnation. Interestingly, there is a comparable situation between the stagnating conditions for the Afro-American minority and the social mobility of immigrants from different parts of the world in the US.

The issue of the social exclusion and segregation of the Roma is closely linked to the social construction of their otherness, the reproduction of stigmatization, and perhaps the failure of inclusive policies in Greece. At the same time, the extreme ghettoization of Roma seems invisible due to the social construction of their otherness, which ‘justifies’ their spatial togetherness with their social exclusion. In this sense, it is paradoxical that in the public debate the areas of concentration of immigrants at the center of Athens are often labelled as ghettos—even though native Greeks remain the main ethnic group [38]—while settlements exclusively inhabited by Roma are rarely labelled as ghettos.

3.2. Roma Communities and Multiple Deprivation in the Two Major Greek Cities

In this part, we explore the spatial correlation between deprivation and Roma communities in Athens and Thessaloniki. This analysis depicts the relation between the social context of urban residential areas and the areas on which the Roma communities are established. The social profile of residential areas is depicted using the General Deprivation Index (GDI). The example of the two principal metropolitan areas in Greece, Athens and Thessaloniki, in which more than 44% of the country’s population in 2011 were concentrated, is considered indicative. For the mapping of Roma settlements in 2016, presented by Linos et al. [34], we used a population threshold of 500 in order to provide a clearer pattern of the major settlements of this group, and also to protect the anonymity of smaller, lesser known Roma communities. The GDI analysis is made on the spatial level of URANUS [35], an aggregated version of 2011 census tracts, which divides Athens to 2999 and Thessaloniki to 884 spatial units with an average of 1200 residents. We used the data of the 2011 national Census since the 2021 census detailed data are not yet available.

The mapping of deprivation in Figure 2 is based on the methodology published in Karadimitriou et al. [39], analyzing the evolution of deprivation in Athens since the 1990s and in Karadimitirou and Spyrellis [40], comparing deprivation in the six largest Greek cities. The computation of the GDI, for the needs of this paper, takes into account three general domains (employment, education, and housing). We organized a detailed dataset which included 3883 URANUS of Athens and Thessaloniki and 20 variables organized into 10 groups, therefore providing a multidimensional estimation of multiple deprivation. The three domains are given equal importance in the calculation of the GDI (Table 1).

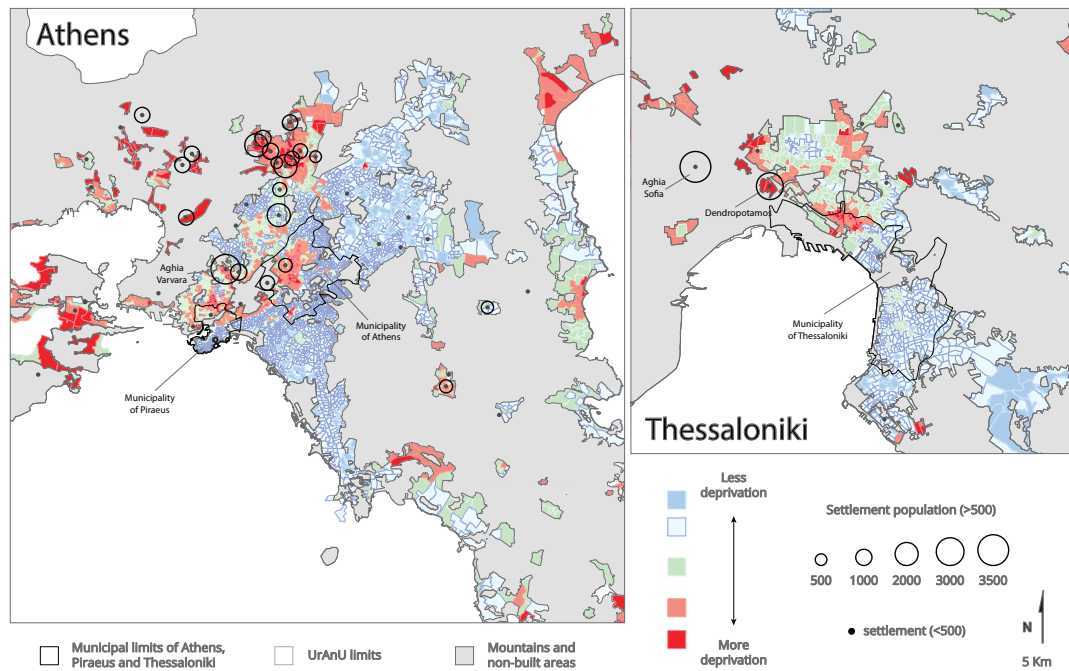


Figure 2. The spatial distribution of deprivation (GDI) in 2011 and the location of Roma settlements in 2016 in Athens and Thessaloniki. Source: Karadimitriou and Spyrellis [40], Linos et al. [34], adjusted by S.N. Spyrellis.

Table 1. Variables taken into account to calculate the General Deprivation Index per city, URANUS level 2011. Source: Karadimitriou and Spyrellis [40].

Domain	Group	Variables (%)
Employment	Structural inactivity	Economically inactive Women homeworkers (20–54 year old)
	Chances of access to employment	Unemployed Young unemployed (15–34 year old)) Mature unemployed (50–64 year old))
	Lack of role models	Managers and professionals (30–64 year old)
	Quality of employment	Routine occupations
Education	Lack of high Education level	Higher education (20–64 year old)
	Low Education level	Up to 9 years of education (20–64 year old)
	Education dynamic	Not in education (15–18 year old) Not in education (19–27 year old)
Housing	Extremely negative housing conditions	Population in irregular dwellings Population in dwellings without heating
	Lack of housing space and vulnerability	Population in dwellings with <20 sq m/cap. Tenants in <20 sq m/cap. Routine occupations living in <20 sq m/cap. Unemployed in <20 sq m/ca.
	Tenure and vulnerability	Population in rented dwellings Routine occupations among tenants Unemployed among tenants

This method was chosen to pinpoint the extreme scores, singling out the areas where values indicating higher deprivation are maximized. Subsequently, a step-by-step identification procedure for the most deprived areas was carried out. The variables were

standardized, according to the distance from the mean, in standard deviation multiples, singling out the areas where values indicating higher deprivation are maximized. Eventually, a deprivation index was calculated for each domain, and finally, a General Deprivation Index (GDI). This procedure was followed for each city separately, using as measurement a scale specific to each city, the local standard deviation, and the local mean.

In more detail, for an initial value of χ ,

- a value of 1 was assigned for $\chi < \text{mean}$,
- a value of 2 was assigned for $\text{mean} < \chi < \text{mean} + 0.5\text{stdev}$,
- a value of 3 was assigned for $\text{mean} + 0.5 < \chi < \text{mean} + 1\text{stdev}$,
- a value of 5 was assigned for $\text{mean} + 1\text{stdev} < \chi < \text{mean} + 2\text{stdev}$, and
- a value of 7 was assigned for $\text{mean} + 2\text{stdev} < \chi$.

A deprivation index was calculated for each domain (e.g., Deprivation Employment Index = (Group1 + Group2 + Group3 + Group4)/4), and finally, a General Deprivation Index (GDI) = Deprivation Employment Index + Deprivation Education Index + Deprivation Housing Index with a minimum value of three and a maximum of twenty-one.

The calculation of the lack of housing space and vulnerability variables is linked to a '20 m² per capita' threshold. We define the 'population living under housing poverty' as the portion of the population whose per capita living space is less than 60% of the median per capita living space for the total population in each city.

The nuances of red indicate the more deprived areas, while those of blue are the less deprived. Green areas are close to the average. The black dots indicate the location of Roma settlements, while the size of the circles is proportional to their population. The capital's metropolitan area has a cluster of highly deprived areas in the city center and along the old industrial zone, as well as several deprived areas in the outer peri urban zone of the city, especially on its western parts. Deprivation in Athens does not seem to follow the traditional dichotomy [41] between western-working class and eastern-bourgeois areas. On the other hand, we observe a strong association between the location of Roma settlements and the level of deprivation. The central municipalities of Athens and Piraeus do not host Roma settlements, with the sole exception being those found in the ex-industrial extremely deprived zone of Eleonas in western Athens. The municipality of Agia Varvara, on the west of the city, is the "capital" of the Roma community, with 15 percent of the population of Roma ancestry. This municipality has the highest levels of Roma integration in Greece, Ref. [34] possibly related to the large number of members of the Roma groups living outside ghettoized settlements. Finally, the most important concentration, in the form of a complex of settlements on the western and north-western fringe of the city (municipalities of Acharnes, Zefiri, Fyli, and Aspropyrgos), is cut off from the rest of the city, "squeezed" between the southern slope of mount Parntiha and circumscribed by different highways and railroads. Figure 2 illustrates how Roma settlements, with limited exceptions are located in the most deprived areas of the city.

A similar situation is observed in Thessaloniki. The deprived areas are around the western part of the city, close to the port, the train station, and the industrial zone, while smaller clusters are to be found on the outer periphery of the metropolitan area [42]. Like in Athens, deprivation does not closely follow socioeconomic segregation patterns, since an important part of the working-class neighborhoods are mapped as areas of average deprivation. Furthermore, the central municipality does not host Roma settlements. In Thessaloniki, we identify two major communities, located on the western part of the city close one to the other: *Dendropotamos* with a population of 2700 people, which will be presented further down as a case study, and *Aghia Sofia*. According to Figure 2, the *Aghia Sofia* settlement is located at an "unbuilt" area, despite it having a population of 3500 people. In fact, there is no census tract attributed in this area, therefore this settlement, surrounded by industrial installations and cut out by the highway, was not properly registered by the census, consequently concealing the area's deprivation level. This case reveals that Roma settlements can be excluded from the rest of the urban agglomeration and become invisible in different ways.

4. Methodology

4.1. The Investigation Methods

Methodologically, in this paper, we use mixed research methods combining quantitative and qualitative data. We analyze quantitative data from the 2011 Population Census, but we also use qualitative data from interviews with representatives of local agencies and residents of the two case study areas of *Dendropotamos* and *Kritiri* (Appendix A).

Regarding the analysis of quantitative data, we used variables related to the level of education, the occupational position, the household structure, the main sources of income, and housing conditions from the 2011 Population Census that could exemplify the important differences in the social profiles of Roma settlements and their surrounding areas. The data for each case study area are presented at three levels: (1) the settlement (*Dendropotamos* and *Kritiri*), (2) municipal community (*Menemeni* and *Tyrnavos*), and (3) the broad administrative unit (Regional Units of Thessaloniki and Larissa). By analyzing the data at these three levels, we provide a clear image of the inclusion/exclusion of the two settlements in their immediate surroundings, but also in the broader region in which they are part of. The use of these quantitative data provides a mapping of the different social profiles and segregations of the Romani people in the two settlements.

Semi-structured in-depth interviews were conducted with representatives of local agencies and residents of the two case study areas. These interviews followed an interview guide with 10 questions, referring to the relationship and the opinion of the interviewee about the settlement; to the question and the intensity of social exclusion; and to the ways to proceed for improving the integration and the living conditions of the Romani people in the settlements. All the ethical principles were followed during the interviews, with all the interviewees agreeing to take part voluntarily after being informed about the procedure and the purposes of the research project.

The interviews were carried out in two phases: in November 2020 in the settlement of *Dendropotamos*, and in June and July 2021 in the settlement of *Kritiri*. Five interviews were conducted in each settlement. All the interviews were conducted in person and at the location of the two settlements. Their duration ranged from 14' to 65'. The qualitative part of this investigation added the experiential perception of stakeholders and residents of the two settlements about the social and spatial exclusion of Roma groups. The relatively small number of interviews prevented from exploring the potential impact of their personal features (e.g., gender, age, member or not of the Roma community) but complemented and corroborated the findings of the quantitative analysis.

This investigation of the social and spatial segregation of Roma groups is focused on two areas of Greece with different territorial characteristics (urban and rural¹). The investigation is carried out, firstly, at the level of each of the two settlements (*Dendropotamos* and *Kritiri*), and then in comparison with the external environment, i.e., the municipal communities and the regional units they belong to.

4.2. The Territory and Its Features

The two investigated settlements (*Dendropotamos* and *Kritiri*), whose main features are briefly presented in Table 2, are inhabited exclusively by Romani populations and show several similarities in terms of their structure, but also some differences related to their immediate and broader administrative surroundings.

In particular, the settlement of *Dendropotamos* (officially *Agios Nektarios*) is located southwest of Thessaloniki and administratively belongs to the municipality of Ampelokipi-Menemeni. The settlement is below sea level and is protected from flooding due to the neighboring settlement of Kalochori, which acts as a dike. *Dendropotamos* is clearly separated from the rest of the urban tissue by natural and artificial barriers (Figures 3 and 4). This separation reinforces the introversion of the settlement and impedes the attempts to integrate the Romani population, while delinquency and unemployment are clearly “localized” within the settlement. The exclusion and separation of *Dendropotamos* from the rest of Thessaloniki is not only witnessed by the natural and artificial barriers, but also

perceived through the clear differentiation in the morphology of the buildings and the differences in the daily life rhythms and the dressing and posture of the residents.

Table 2. The main features of the two case study areas. Source: EKKE [35], data processed by the authors.

	<i>Dendropotamos</i>	<i>Kritiri</i>
Municipal community	Menemeni	Tyrnavos
Regional unit	Thessaloniki	Larissa
Population	3227 (2011)	1415 (2011)
Active population	952 (2011)	305 (2011)
Area	0.41 km ²	0.68 km ²
Type of area	Urban area within the official plan	Rurban area outside the official plan
Type of settlement ¹	III	II

¹ II: mix of precarious housing forms; III: regular housing units mixed with precarious housing forms (see Section 3.1).

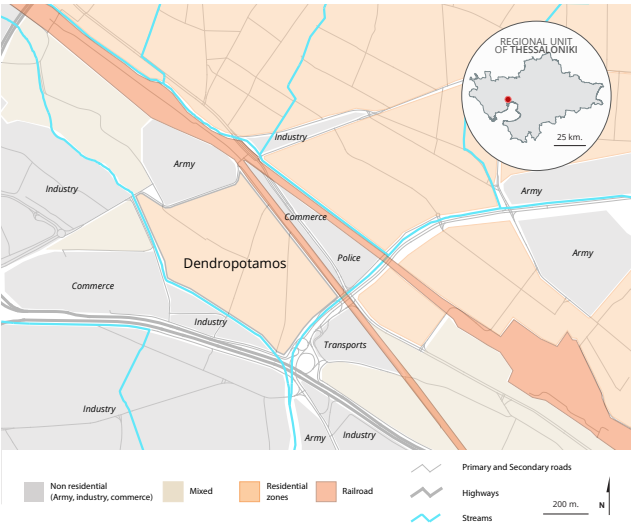


Figure 3. The settlement of *Dendropotamos*. Mapping by S.N. Spyrellis.



Figure 4. Views of the *Dendropotamos* settlement. Photos by D. Kourkouridis.

The settlement was first inhabited after World War II by Romani people who bought and built self-promoted houses on the cheap land plots of an area abandoned or neglected by its original owners due to poor conditions. *Dendropotamos* was the first Romani settlement in Thessaloniki. Here, 128 permanently settled families were registered in 1979 as part of the regularization of Romani citizenship, and another 200 families were registered in 1986. Today, the population of *Dendropotamos* officially amounts to 3227 people. However, according to unofficial data, the population is estimated at 5000, comprising the many individuals not registered in *Dendropotamos* or elsewhere.

The population of *Kritiri*, according to the 2011 census, amounts to 1415 inhabitants. This number is considered quite small. The population of the settlement, according to estimates by the municipality, is approximately 2500 inhabitants, even sometimes reaching 3000 inhabitants, following the constant movement of Romani people for seasonal jobs.

The settlement of *Kritiri* is located on the north-eastern outskirts of the small city of Tyrnavos (11,000 inhabitants), one kilometer from its center. Administratively, it belongs to the municipality of Tyrnavos and to the regional unit of Larissa. The location of the settlement is compatible with the nomadic life of the Romani people. However, this compatibility does not seem to be the main cause of the settlement's location. The latter may facilitate the mobility of its inhabitants, but, at the same time, *Kritiri* is a strictly demarcated settlement, separated from the continuous urban fabric of the city of Tyrnavos by natural and human-made barriers (roads, agricultural land, business building stock, etc.) (Figures 5 and 6).

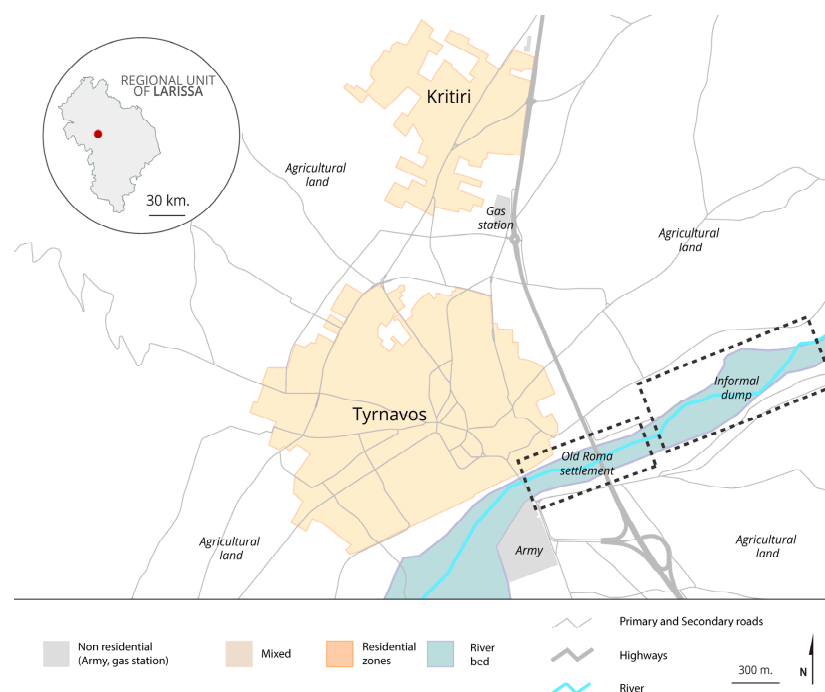


Figure 5. The settlement of *Kritiri*. Mapping by S.N. Spyrellis.

Historically, Romani people first appeared in the city of Tyrnavos about 150 years ago by a small number of Romani stagehands. Initially, the Roma settled at the south-eastern entrance of the city in an area next to the river Titarisios, which caused flooding problems and led to an informal dump very close to the settlement. The lack of basic infrastructure and the minimal provision of health and other services made it imperative to seek a better area with more decent living conditions. This led to the relocation of the Roma community to the new location of *Kritiri*. From 1988 onwards, the first land plots were bought in *Kritiri*, at the crossroads in the north exit of the city.



Figure 6. Views of the *Kritiri* settlement. Photos by D. Kourkouridis.

5. Results: The Socio-Spatial Profile of *Dendropotamos* and *Kritiri* Settlements and Their Surrounding Areas

The investigation in the two case study areas focused on a few indicators of the quality of life that we assumed appropriate to illustrate the extreme deprivation in Roma settlements, and, at the same time, the very significant difference of the level of quality of life between the settlements and their immediately neighboring areas. These indicators refer to education (e.g., the education level of the adult population); employment (e.g., the percentage of the lowest occupational categories in the area); and housing (e.g., the overcrowding in housing space). Moreover, demographic indicators in Roma settlements reveal that structural parameters related to age and household forms restrain mobility opportunities (e.g., imposed marriages at an early age, followed by childbirth in adolescence) and housing conditions (large households in small and precarious houses). Eventually, the extreme deprivation in settlements creates vicious circles, hindering the potential of young Roma for social mobility: illiterate parents or parents with elementary education lack the means to monitor and encourage their children's education trajectory; children's duty to help parents in their family survival strategies diminishes their own mobility prospects; the range of potential jobs in Roma settlements limited to menial, unskilled, and dead-end jobs also curtails any mobility prospects through employment.

5.1. Education

The percentage of the cohort of 4–15 years olds registered in compulsory education among the Roma population was estimated at 51.8 in 2021, using a sample of 54,735 individuals in the Roma population [29], against 85.1 in 2011 for the same cohort in the general population [35]. In pre-school education (0–3 years old), 8.6 percent of Roma were attending in 2021 [29], versus 30.4 percent in the general population [43]. Moreover, the percentage of those who completed the upper secondary education among 20–24-year-olds was estimated at 16 percent for the Roma population [29] against 95 percent for the general population [3]. Furthermore, the percentage of young Roma, aged between 16 and 24, whose current main activity was neither in employment nor in education or training (NEET), was 58 percent in 2021, having increased from 48 percent in 2016, against 13 percent in the general population [3] (p. 45).

The huge gap in education trajectories and attainment between Roma and the general population in Greece is further specified by data on the two investigated settlements. The lowest education level (not completed primary school) scores very high in *Dendropotamos* (37.1 percent). This percentage is in stark contrast to both the surrounding municipal community of Menemeni, and the Regional Unit of Thessaloniki Table 3). The drop-out rate for 12–15-year-olds is also very high (28 percent), especially since this age cohort corresponds to lower secondary school, which is part of compulsory education. Moreover, the percentage of NEETs is more than half among the 15–22-year-olds, and both drop-out and NEET rates are incomparably higher than in the adjacent community and the regional unit (Table 3). A local children’s caretaker and teacher explains the high percentage of Romani people who have not finished primary school in *Dendropotamos*: “the fact that their language is unwritten, that they have been illiterate for centuries, that parents take their children to work as peddlers or marry them very young” (DEN.INT.01) deprives them of the opportunity to go to school. Family monitoring and family conditions play a significant role in educational attainment. Apart from the impossibility of illiterate parents to supervise the course of their children in school, family conditions also play an important role in the increased illiteracy rates. According to a resident, born and raised in *Dendropotamos*, and a member of the center for the protection of Roma children, “many Roma children whose parents were in prison do not get up in the morning to go to school” (DEN.INT.03).

Table 3. Educational attainment and exclusion in the Roma settlements of *Dendropotamos* and *Kritiri* and their surrounding areas (2011). Source: EKKE [35], data processed by the authors.

	No Primary Education (Over 18)	12–15-Year-Old Not in Education	NEET ¹ (15–22)
<i>Dendropotamos</i>	37.5	28.0	56.4
MC ² of Menemeni	11.5	8.7	27.2
RU ³ of Thessaloniki	5.3	1.6	13.8
<i>Kritiri</i>	93.3	91.3	81.1
MC of Tyrnavos	17.9	27.4	33.9
RU of Larissa	11.3	3.7	16.8

¹ NEET: Not in education, employment or training; ² MC: Municipal community; ³ RU: Regional Unit.

In *Kritiri*, the percentage of those who have not completed primary school (93.3 percent) is more than double that in the *Dendropotamos*, five times higher than in the surrounding municipality, and eight times higher than in the regional unit. The same applies to school dropouts and NEETs, both being the norm in this settlement. The difference must be related to the type of settlement, with *Kritiri* being more precarious (type II versus type III for *Dendropotamos*), lacking all basic amenities, including schools. This means that children from *Kritiri* must attend distant schools in other neighborhoods of the municipal community of Tyrnavos. The local authorities have distributed Roma children among the school units of the area, “which is good for addressing the discrimination they experience” (KRI.INT.02), but their drop-out rate remains very high. The distribution of Roma children in different school units of the area increases the distance between home and school and, therefore, the difficulty to regularly attend school for children of a group with a very high drop-out rate. The increased drop-out rate eventually becomes a norm. A social worker in the community center of Tyrnavos stated that “school dropout is a multifactorial phenomenon and the nomadic way of life of the Romani people and the fact that they marry at an early age are important factors that withdraw Roma children from school” (KRI.INT.04). This widespread perception incriminates the culture and the way of life of the disadvantaged group as the cause of the outcome and, eventually, blames the victim.

Overall, the massive abandonment of education by young Roma at a very early stage makes it more difficult to get integrated to the labor market at a comparable rate with the rest of the population and, eventually, promote their social inclusion.

5.2. Employment

The Roma active population have very precarious jobs. Unemployment is extremely high (64 percent) [29], while the main occupational activities of the members of this group are part of routine occupations and often part of the informal labor market (54 percent) [29], corroborated by the fact that only 33 percent of respondents in a 2021 survey qualified their main activity as ‘paid work’ [3]. Routine jobs usually performed by Roma are the collection and resale of recyclable items, door-to-door sales, sales in open markets, and seasonal work in agriculture. These four routine jobs amount to about 82 percent of the Roma jobs in 2021 [29] (pp. 67–68). The situation is much worse for Roma women, since there is a huge gender gap in accessing employment [3].

Roma groups occupy a very disadvantaged position in the labor market, their members usually being close to the bottom of the occupational ladder. We measured the categories in which Roma have the higher percentages. In the large general occupational category (1-digit) of ‘unskilled workers’, Roma settlements have a comparable percentage with their surrounding areas (Table 4). On the contrary, they stand out in the small and undesirable three-digit categories of ‘garbage collectors’, ‘street vendors’, and ‘vendors in flea markets’ (Table 4). These categories also embody the occupational specialization and confinement of Roma groups at the national level. According to a non-Roma employee and experienced observer in *Dendropotamos*, “The Romani people belong to the most subordinate occupational categories, such as street sellers or garbage collectors, a fact also linked to their low level of education” (DEN.INT.05). A business owner in *Kritiri* also mentioned that “Romani people tend to be street sellers as this activity can be combined with their nomadic way of life” (KRI.INT.05), once more reproducing the belief that the fate of this group is, to some extent, a matter of choice.

Table 4. Occupational categories in the settlements of *Dendropotamos* and *Kritiri* and their surrounding areas (2011). Source: EKKE [35], data processed by the authors.

	Unskilled Workers	Garbage Collectors	Street Vendors	Sales Assistants
<i>Dendropotamos</i>	14.7	2.8	13.0	20.4
MC ¹ of Menemeni	14.6	0.9	2.7	10.4
RU ² of Thessaloniki	8.5	0.5	0.7	7.7
<i>Kritiri</i>	15.4	14.1	49.8	3.3
MC of Tyrnavos	14.4	1.3	3.6	5.3
RU of Larissa	8.6	0.5	0.7	5.7

¹ MC: Municipal community; ² RU: Regional Unit.

Unemployment would be expected to be higher than the score registered in the census (Table 5). In Roma settlements, unemployment is usually persistent, long-term, and most likely less easy to detect through the census. According to a teacher in *Dendropotamos*, the reduced unemployment rates are related to the fact that “Roma occupational activities are usually informal and not officially recorded” (DEN.INT.01). The former President of the municipal council of Tyrnavos also stated that “many Romani people work informally, without a work permit” (KRI.INT.01). Unemployment in Roma increases when those looking for a job for the first time (i.e., those who never worked officially before) are also considered. The occupational activity of women is very low, compared to the regional level, especially in the rural area of *Kritiri*. Among other things, this indicates the solid patriarchal hierarchy within Roma groups, the traditional and subordinate roles allocated to women, and the gender profile of the group’s occupational activity.

Table 5. Unemployment and women’s participation in the labor market in the Roma settlements of *Dendropotamos* and *Kritiri* and their surrounding areas (2011). Source: EKKE (2015) [35], data processed by the authors.

	Unemployed	Looking for a Job for the First Time	Economically Active Women
<i>Dendropotamos</i>	21.6	19.0	14.3
MC ¹ of Menemeni	23.2	9.0	29.6
RU ² of Thessaloniki	16.6	5.8	35.3
<i>Kritiri</i>	15.1	9.8	0.9
MC of Tyrnavos	9.0	8.0	25.5
RU of Larissa	11.1	6.5	30.3

¹ MC: Municipal community; ² RU: Regional Unit.

5.3. Main Sources of Income

A large percentage of the economically inactive population, including the large number of children, significantly reduce the percentage of those having employment as their main source of income. Public allowances are much more important in Roma settlements compared to the population in the surrounding areas, due to the much higher percentage of poverty and the allowances for families with three children or more. According to a local employee in *Dendropotamos*, the fact that Roma groups depend on allowances more than others “makes it often difficult for them to join the labor market” (DEN.INT.05). A local teacher adds that this may be the unintended result of “paternalistic policies for the social integration of Roma, which ultimately failed, and led to the opposite effect, i.e., isolating the Romani people even more” (DEN.INT.01). And a social worker in the community center of Tyrnavos stated that “even though allowances financially help Romani people they cannot be the exclusive instrument for their social integration” (KRI.INT.04). Moreover, large families and large numbers of children also increase the number of individuals whose income depends on others, parents, or other family members (Table 6).

Table 6. Main income sources in the settlements of *Dendropotamos* and *Kritiri* and their surrounding areas (2011). Source: EKKE [35], data processed by the authors.

	Employment	Allowances	Depending on Others
<i>Dendropotamos</i>	16.7	12.1	56.1
MC ¹ of Menemeni	26.6	5.7	48.1
RU ² of Thessaloniki	32.4	2.9	42.2
<i>Kritiri</i>	16.2	9.4	70.2
MC of Tyrnavos	31.8	2.1	43.7
RU of Larissa	31.9	1.8	40.0

¹ MC: Municipal community; ² RU: Regional Unit

5.4. Age and Size of Households and Families

The population of the two Roma settlements contains a much larger percentage of children and a much smaller percentage of elderly people than the general population (Table 7). This is confirmed by the more recent data on the total population of Roma people in Greece and the general population data from the census of 2021. According to the 2022 report of the General Secretariat of Social Solidarity and Fight Against Poverty [29] (p. 57–59), the Roma population comprises 34.3 percent of children (0–15) and 7.9 percent of elderly people (65+). The provisional data from the 2021 census show that the percentage of children and adolescents (0–19) in the general population is 18.6 percent and that of elderly people (70+) is 16.8 percent [44].

Table 7. Fertility and household size in the settlements of *Dendropotamos* and *Kritiri* and their surrounding areas (2011). Source: EKKE [35], data processed by the authors.

	Age 0–14	Age 65+	More Than 3 Children Per Mother ³	Household with More Than 5 Members	Average Household Size
<i>Dendropotamos</i>	21.8	13.0	13.5	13.1	3.5
MC ¹ of Menemeni	16.0	14.2	6.6	4.0	2.8
RU ² of Thessaloniki	15.2	17.2	3.1	1.9	2.6
<i>Kritiri</i>	48.6	1.1	42.8	49.6	5.5
MC of Tyrnavos	19.9	17.9	7.7	8.0	3.2
RU of Larissa	15.7	20.1	4.6	4.1	2.8

¹ MC: Municipal community; ² RU: Regional Unit; ³ women > 15 year old.

Table 7 also reveals two other issues related to the demographic structure: The first is that fertility is much higher in the Roma settlements compared to the surrounding regional units (four times higher in *Dendropotamos* and 10 times higher in *Kritiri*). The second is that these demographic features are also different between the two settlements. The urban *Kritiri* is scoring significantly higher in children per mother and in household size. Furthermore, households in *Kritiri* are much larger (5.5) compared to *Dendropotamos* (3.5), while the average household size of Roma households in Greece is 4.2 [29], against 2.4 in the general population [35]. The large households in Roma settlements are related to gender inequality, which they reproduce. A member of the women’s association in *Dendropotamos* affirmed the well-known fact that “it is quite a common phenomenon that most Roma women get married at a very young age” (DEN.INT.02). A member of the Centre for the Protection of Minors added that “this fact often leads Roma women to have many children at a young age and thus to reduce their possibilities and opportunities for further studies, education, employment, etc. compared to men” (DEN.INT.03). Moreover, a teacher in Tyrnavos mentioned that “only Roma boys come to school to acquire necessary knowledge that will help them later with their jobs; girls are restricted to the home, focusing on the care of the family” (KRI.INT.02).

The high percentage of children in the Roma population is linked to the higher fertility rate and early marriages that are ‘very present’ (88%) or ‘moderately present’ (9%) in Roma settlements [29] (p. 64). Interestingly, the percentage of marriages before 20 years old is only 0.3 percent in the general population [35]. On the other hand, the comparatively small share of the elderly should be related to the harsh living conditions that reduce life expectancy since Roma groups are not a recent addition to the Greek population. The life expectancy for the Roma population is almost 10 years shorter for both men and women (74 for Roma women against 83.7 in the general population, and 69.8 against 78.6, respectively, for men).

5.5. House Overcrowding and Amenities

Housing conditions are extremely poor for Roma groups, compared to the general population. Overcrowding ² was an issue in 2021 for 94 percent of Roma households, while it affects a much smaller share (29 percent) of households in the total population of Greece [45] (p. 54). Moreover, Roma groups persistently experience conditions of housing deprivation (accommodation that is too dark and humid; no shower/bathroom or no toilet inside the dwelling) at a very high percentage (68 percent) when compared to the general population (15 percent) [3].

Housing conditions are very different in the investigated Roma settlements and in their surrounding areas (Table 8). To elaborate, 20 m² per capita is the poverty line of housing surface in Greece (i.e., 60 percent of the median of the national surface per capita). Therefore, 10 m² per capita correspond to extreme conditions of overcrowding. One in five residents in *Dendropotamos* and two in three residents in *Kritiri* live in such conditions of overcrowding. Moreover, housing conditions are not the same within each settlement.

Some parts of the settlements are worse than others. A non-Roma businessman in the municipal community of Ampelokipi (near Dendropotamos) said “the majority of the Romani people in Dendropotamos, and particularly those who live close to the stream at the southern part of the settlement, reside in shacks and in very bad conditions” (DEN.INT.04). This is true for most residents of Kritiri, according to the former President of the municipal council: “most of Romani people in Kritiri live in shacks that can barely accommodate their families” (KRI.INT.01).

Table 8. Overcrowding and housing amenities in the settlements of Dendropotamos and Kritiri and their surrounding areas (2011). Source: EKKE [35], data processed by the authors.

	Up to 10 m ² Per Person	No Kitchen	No Plumbing	No Central Heating or No Heating
<i>Dendropotamos</i>	18.9	0.1	1.9	50.9
MC ¹ of Menemeni	5.5	0.0	0.4	26.2
RU ² of Thessaloniki	1.5	0.1	0.1	18.8
<i>Kritiri</i>	68.9	10.2	15.8	95.6
MC of Tyrnavos	9.8	1.2	2.3	30.1
RU of Larissa	2.6	0.3	0.6	17.7

¹ MC: Municipal community; ² RU: Regional Unit.

Heating issues are important for a significant part of the total Greek population, but they are much more significant for residents in Roma settlements (Table 8). More than half of the residents in Dendropotamos have insufficient heating (such as wood-burning stoves, braziers, etc.) or no heating at all, and the same applies to almost all the population of Kritiri. “There have been many attempts by the Mayor to improve the quality of life of Romani people, especially regarding those who live in tents, the most degraded and excluded area of the Roma settlement, on the south side of Dendropotamos next to the stream, to relocate them to normal housing” (DEN.INT.04). However, the stagnating outcome shows that although “such efforts could improve the situation in the Roma settlement of Dendropotamos, they also need to be carried out with the help of the state in order to overcome this long-term socio-spatial exclusion of Romani people”, stated the non-Roma man who works at the center for the protection of young Roma” (DEN.INT.03). These extreme conditions of housing deprivation—especially in Kritiri, where a considerable number of residents have no kitchen or running water—are persistent. These conditions are also a perpetual danger in their everyday life. A Roma resident in Kritiri said “it’s true that most of the Roma families use rough heating systems because they can’t afford anything else” (KRI.INT.03); and a non-Roma social worker in the community center of Tyrnavos mentioned that “immediate action must be taken to protect the Romani people from burning hazardous materials” (KRI.INT.04).

6. Discussion and Conclusions

The evidence we provided on the extreme social exclusion and ghettoization of Roma groups in two settlements in Greece raises four broader issues for further discussion. The first is that the position of these groups at the very bottom of the social hierarchy, hardened by discrimination, stigmatization, and exclusion, is leading to a vicious circle that is constantly reproducing their subordinate social position and their spatial exclusion.

Previous research work on the social condition of Roma groups, as well as our own investigation of the two Roma settlements in northern and central Greece confirm the extreme conditions of social exclusion and the absolute segregation (ghettoization) experienced by these groups. Roma children are distanced from education much more than children in the general population. Employment opportunities for Roma are limited to the less desirable positions of manual work with no mobility prospects. Housing conditions in Roma settlements are far worse than for the general population, sometimes involving the lack of basic amenities (like running water), which accessible to almost all the other residents in Greece. Moreover, being obliged to live in a Roma ghetto, within a country

where social and ethnic segregation is rather limited, increases the effect of social and spatial exclusion. The spatial separation of deprived groups is certainly enabling their social 'othering' as inferior and stigmatized. These extreme conditions of social exclusion and segregation significantly reduce the mobility opportunities for young Roma and even considerably affect their life expectancy [3] (p. 48).

Moreover, the state does not seem concerned enough to apply the law for this group in the same way it does for the general population, particularly when imposed patriarchal rules and traditional parental guidance (e.g., marriages in early adolescence) are overlooked as tolerated cultural difference. For example, the absence of parental caution to ensure that children attend compulsory school is tolerated, or at least not penalized, in the same way as for the general population; the same applies to the transformation of pickup vans into two-story makeshift vehicles, putting family members accommodated on the second level, mainly women and children, in danger. State indifference is usually justified by cultural difference and by the choice to not enforce solutions that would be incompatible with the Roma ways of life, leading to blaming the victim and reinforce the ostracizing of the group. On the other hand, state indifference towards Roma practices are limited to activities having a negative impact on members of the Roma group. If there are consequences outside the group, tolerance and explanations involving cultural differences disappear.

The second issue that comes from the investigation of the social exclusion and segregation of Roma groups in Greece is related to their contradictory segregation pattern. At the broad neighborhood/local community level, Roma settlements become part of social/ethnic mix, while at a lower level, at the level of city blocks (micro-segregation), Roma settlements embody a case of complete segregation. How can we grasp this contradictory aspect of segregation?

The ghettoization of Roma groups in Greece does not completely follow the dominant pattern of the segregation of ethnic groups' in southern Europe. Arbaci (2019) [46] discusses the situation of recent ethnic migrants in southern European cities, a combination of a high level of deprivation with a relatively low level of spatial separation. Their deprivation does not lead to their segregation at the neighborhood level. However, their underprivileged social positions are usually combined with disadvantaged positions at the micro-space level (e.g., their concentration in the disadvantaged dwellings of apartment blocks or in small slums scattered in the urban tissue). Therefore, the presence of recent ethnic migrants in southern European cities gives the impression of reduced segregation at the neighborhood level due to the invisibility of micro-segregation.

The segregation pattern of Roma groups in major Greek cities is somehow different, representing an extreme form of Arbaci's pattern. The invisibility of Roma at the micro-scale is due to their small number and the out-of-the-way positions they are allocated in urban space. This invisibility at the micro-scale is contradicted by the striking visibility of their ghettoization when their settlements falls under the radar. The Roma condition can be summarized as social exclusion in spatial proximity: a mix with the non-Roma population at the neighborhood level and complete segregation at the micro-scale, supported by barriers that annihilate any potential beneficial impact of proximity. Considering the rationale of micro-segregation [7], Roma settlements are, at the same time, a formal type of social mix at the neighborhood level, as well as a form of extreme segregation at the level of the city block.

The ghettoization of Roma groups in small units in Greece is very different from the spatial form and the perception of the Black ghetto. The invisibility of Roma in Greece is related to the reduced share of the Roma population (about 2 percent), compared to the respective subaltern groups with much larger shares, of outcasts in India or the African Americans in the US, for example, where they form one of the poles of the racially hyper segregated city [27,47]. Roma groups in Greece are invisible because they are scattered and confined in localities at the margins. Their ghettos are a constellation of small and unconnected dots (Figure 1) within, or close to, the most deprived and out-of-the-way parts of urban areas (Figure 2).

Further research is needed on how this segregation form is working for social reproduction, using comparisons with processes and outcomes in contexts hosting similar forms of spatial arrangements, like urban areas in India with cast-set micro-communities [48], spatially proximate but socially very unequal residential areas in Brazilian cities [49], areas of Naples where working-class enclaves operate within the wealthiest neighborhoods of the city [50], and micro-segregated spaces of racial mixes in metropolises of the US East-Coast at the end of the 19th century [51,52].

The third issue is related to how the severe problems of social and spatial exclusion of Roma groups can be related to the debates about policies of social mixing, and also whether such policies could replace ghettos via a less discriminating spatial arrangement for the Roma population.

Policies to increase social mixing are usually implemented today by redistributing poverty in urban spaces and/or by attracting middle-class groups into areas of poverty in order to combat the assumed negative effects of spatially concentrated deprivation. The policies to increase social mixing are in the spirit of social engineering and usually:

- destroy the self-help social networks supporting the survival of marginalized groups; moving the households belonging to these networks in distant places removes their spatial proximity necessary for their operation,
- focus on the assumed –and not the real– effects of the inflow of middle-class groups in poor areas, which do not necessarily improve the life conditions and chances of former poor residents (often the process of this inflow leads to gentrification, promoting their displacement or their alienation from a place becoming less affordable and accessible [53,54]).
- neglect the new hierarchies created at the micro-scale following the increase of social mixing (either through the redistribution of poverty or through the attraction of middle-class groups) which remain unregulated, although they may negatively affect social reproduction.

In the plans to deal with the condition of Roma groups in Greece, there are no policies to redistribute poverty, and there are no debates about their potential limitations and negative effects. The ghettoization of Roma is not (yet) a policy issue of this kind. Also, the attraction of middle-class households in Roma settlements (i.e., gentrification) is something completely out of the policy radar, since these settlements occupy the most undesirable places. The complete absence of efforts to combat the ghettoization of Roma, even by considering the problematic policies for social mixing used in other contexts, is another facet of the complete exclusion of Roma groups from the policy management of mainstream society in Greece. The problems they experience and the policies to confront them are considered separately from those of the rest.

Roma groups experience discrimination and inequality at the same time. Their discrimination is not official and is not part of the rule of Law. It is implemented through stigmatization, through the dominant perception of their ‘otherness’ and inferiority, through their exclusion in the real estate market, through policies that consider their conditions as a problem of their group, through the distanced approach of civil servants, and through police violence that create an informal but effective apartheid. Under these circumstances, discrimination issues come first. Becoming part of a system (a community) precedes the issue of the position within it.

The fourth issue is related to the causal link between the persistent deprivation in Roma settlements and the extreme segregation/ghettoization of their residents. Is their ghettoization responsible for their social exclusion? Would their lives and prospects improve if they lived dispersedly within their cities?

At first sight, conditions in Roma settlements seem to be responsible for the reproduction of the subaltern position of their group members. This causality issue is connected to the neighborhood effect. It has been effortless to convince politicians and decision makers that segregation—understood as concentrated poverty and social disadvantage—is responsible for the negative effects of social reproduction [55]. Such an understanding of segregation enabled the promotion of social mixing in a period of neoliberal policies and state withdrawal that boosted gentrification processes, rather than improved the condition of vulnerable groups [56,57]. Critical research on the neighborhood effect and on policies of social mixing [58,59] has stressed that individual and family characteristics (like social origin, ethnic identity, gender, etc.) are more important for social outcomes than spatial environment. The latter may not be insignificant for social reproduction but should be considered in combination with the main causes producing socially inequal outcomes.

In this paper, we provide evidence about the extreme conditions of life in Roma settlements in Greece, while other reports assert that the Roma living dispersedly in non-Roma communities enjoy much better conditions than those in settlements. The evidence we provide supports the argument that the concentration of poverty is negative for life conditions and mobility prospects, and that policies to increase social mixing would be noticeably positive.

The question is whether the improved life conditions of Roma living dispersedly are due to the type of their residence or to the other differences the Roma living dispersedly have with those living in settlements. Apart from the many differences among and within Roma groups, usually unknown and invisible to outsiders, this question is similar to the interrogation of whether shop sellers living dispersedly in high status neighborhoods enjoy better quality of life compared to shop sellers living next to others with similar occupational positions. A positive answer raises the question as to whether this difference in the quality of life they experience is due to the profile of their residential area, or to other differences that mainly provoke different life conditions. Further research is, therefore, needed on differences within the Roma community, on the mobility trajectories of members of the group, and on the relation of these trajectories when members of this groups relocate to within or outside Roma settlements.

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Appendix A

Table A1. List of interviewees.

Code ID	Gender	Occupation/Position	Roma Group Member	Interview Date	Duration
DEN.INT.01	Male	Teacher	No	02/11/2020	28'
DEN.INT.02	Female	Roma Women's Association of Dendropotamos	Yes	17/11/2020	35'
DEN.INT.03	Male	Center for the protection of minors Roma	No	23/11/2020	17'
DEN.INT.04	Male	Business owner in Ampelokipi	No	29/11/2020	14'
DEN.INT.05	Female	Employee in Dendropotamos	No	30/11/2020	27'
KRI.INT.01	Male	Former President of the Municipal Council	No	05/06/2021	64'
KRI.INT.02	Female	Teacher	No	02/07/2021	24'
KRI.INT.03	Male	Roma Resident of Kritiri	Yes	02/07/2021	51'
KRI.INT.04	Female	Social worker in the community center of Tyrnavos	No	05/07/2021	52'
KRI.INT.05	Male	Business owner in Kritiri	No	11/06/2023	16'

Notes

- ¹ The word rurban (rural+urban) is used to describe land in the countryside on the edge of a town or city, on which new housing, businesses, etc. are being built (<https://dictionary.cambridge.org/dictionary/english/rurban>, accessed on 1 February 2024).
- ² Overcrowding is understood according to Eurostat's definition of overcrowding: a person is considered to live in an overcrowded household if the household does not have at its disposal a minimum number of rooms equal to one room for the household, one room per couple, one room per single person aged 18 or more, one room per pair of single people of the same gender aged between 12 and 17, one room per single person aged between 12 and 17 not included in the previous category, and one room per pair of children aged under 12 [3] (p. 54). Overcrowding in the two settlements is measured in a different way. It refers to the percentage of residents with available housing space below the housing surface poverty line, calculated in the same way with the income poverty line (i.e., those with housing surface per capita below 60 percent of the national median).

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