

Beyond the 'Divided City': a manifesto for spatially-balanced, sprawl-free post-crisis metropolises

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Abstract. *Going beyond traditionalist discourses on economic backwardness, uneven demographic growth and cultural secularism, this article proposes an interpretation of Mediterranean urbanities based on place-specific settlement morphology and characteristic socioeconomic traits, including unregulated regional planning, poorly-participated local governance and typical socio-spatial structures. By questioning the (supposedly weak) strategies containing regional disparities and the failed opportunities to promote scenic landscapes and cultural heritage of peri-urban areas, a framework investigating long-term urban dynamics in the Mediterranean was illustrated here and can be generalized to other metropolitan regions with similar morphological and functional traits. The proposed framework is based on the analysis of ecologically-fragile and socially-unstable contexts in view of the persistence of a structural crisis affecting the economic base, the institutions and the governance system. In this line of thinking, we debate on the relationship between crisis conditions in both social and economic dimensions and unbalanced spatial configurations typically observed in southern European regions, and shaped by persistent economic polarizations in urban and rural areas. While reducing demographic and economic polarizations along urban gradients, dispersed expansion of cities further contributes to unbalanced metropolitan structures promoting local-scale spatial heterogeneity and further enhancing territorial disparities.*

Keywords: Urban planning, Informality, Sustainable development, Competitiveness, Mediterranean.

JEL Codes: C23, O50, Q56, R14, R19.

1. Introduction

Urban studies were and are still attracted by the inherent peculiarities of the Mediterranean cities [1-4]. For a long, metropolises such as Barcelona, Istanbul, Athens, Lisbon, Madrid, and - in part - Italian cities such as Rome and Naples, have been considered paradigmatic cases due to their morphological and functional uniqueness in the European panorama [5-10]. Empirical studies re-contextualized the different southern European urban paths in-between regional planning and settlement informality [11-13]. The partial failure of development policies towards modernization, competitiveness and the revitalization of Central Business Districts, played a key role in spontaneous processes of urban growth [14]. Mediterranean

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informality, in fact, expresses a duality based on the recognition of the role of market and capital and the refuse of the state control on such dynamics [15]. By this way, late industrialization highlights the absence of a 'bourgeois hegemony', evidencing in turn diversity and versatility typical of Mediterranean societies [16]. The basis of social control that allows such contamination is the supremacy of the family on the state, fronting the interest to the common good [9].

Rapid population growth was one of the most relevant characteristics of the post-war development of Mediterranean cities [17]. The determinants of urban growth observed at least until the 1990s include processes driven by rural transformations and powered by land development policies causing a disproportionate expansion of urban areas [18]. Population growth has placed the Mediterranean regions in front of new crucial issues, including the environmental implications of this massive rural exodus [19]. Peri-urban areas, coasts and uplands were the areas of the highest demographic expansion [20]. Combined with the demographic transition and the undeniable cultural change, the shift of production from industrial economy to the tertiary sector is another feature of Mediterranean urban evolution [21]. This transformation per se is not the dominant characteristic of the region [22]. However, the importance of the advanced tertiary sector - increasingly viewed as a proxy of local competitiveness - is a key question for southern European cities that can be better addressed using a comparative approach [23-25]. For example, the uneven centrality of the Mediterranean in the global tourism resists the onslaught of time, although concentration of the local infrastructure in few development nodes, the (low) quality of human capital employed and the lack of alternative and innovative tourism policies may reduce territorial competitiveness [26]. In this sense, the progressive decline of centrality observed for some Mediterranean cities in the last century is the result of a slow (but continuous) shifting of commercial, productive, social and cultural networks towards north America, northern Europe and the middle East [27].

Searching for unique taxonomies representing the Mediterranean cities as a homogeneous cluster has fascinated generations of scholars. In this line of thinking, the 'Mediterranean urban paradigm' developed in a variety of combinations of tradition and post-modernism distanced from a linear interpretation of the relationship between northern/western and southern urbanities [28]. A relatively more recent debate is grounded on the notion of 'post-modernity' expressed by the Mediterranean city [29], a condition that [15] interprets as a 'reaction to modernity'. This condition has led to a new modernity, interpreted as a cultural alternative to the traditional modernism [3], reflected in the criticism to the European centralism and the 'one-way' vision typical of the American world, possibly enhanced by the uneven impact of economic crisis [30].

While the 'Mediterranean city' notion cannot be intended as a formal paradigm interpreting complexity in contemporary cities of southern Europe [31], a necessary distinction point in the comparative analysis of different urban trajectories is particularly required in a context of regional heterogeneity and urban specificity [32]. To this end, the comparison between cities, regions, urban systems to identify archetypes of the 'Mediterranean' traits is functional to a more conscious identification of contemporary urbanization processes [33]. This clearly passes through a range of possible alternative trajectories, based on theoretical and empirical criteria grounded on both quantitative and qualitative assets [34]. Mediterranean cities still alive in the 'metropolis in continuous transition' described by [7]. After qualifying the pre-Olympics Athens sprawl as a category of spontaneity à la Gramsci, Leontidou grounded the sprawl dimension within a context of 'social tension' perhaps unique in Europe. A path that distinguishes, in her view, the Mediterranean city from the developed northern regions but also from agglomerations of the World South, still experiencing a lack of development that never seems to be filled [35].

Looking for specificities rather than common patterns, the choice of typical characters identifying place-specific urbanization patterns in the Mediterranean was therefore developed considering an in-depth analysis of settlements, focusing on city's shape, the relationship between compactness and density, urban growth dynamics over time and space, and functional aspects of a city, including the demographic characteristics of the resident population, employment profile and the characteristics of the local labor market, income, consumption patterns and social segregation [36]. Beyond traditionalist discourses on economic backwardness, uneven demographic growth and cultural secularism, interpretative frameworks for Mediterranean urbanities were often grounded on specific peculiarities of the region, including unregulated urban planning, poorly-participated local governance and characteristic socio-spatial structures [37]. By questioning the (supposedly weak) strategies containing regional disparities and the failed opportunities to promote urban competitiveness and social inclusion, the present study proposes a novel framework interpreting ecologically-fragile and socially-unstable contexts in view of the persistence of crisis conditions affecting the economic base, the institutions and the governance system in the Mediterranean region. Consequently, we debate on the link between structural socioeconomic crisis and unbalanced spatial configurations typically observed in southern European regions, being possibly exalted by persistent economic polarizations in urban and rural areas [38]. While reducing demographic and economic polarizations along urban gradients, we hypothesize that dispersed expansion of cities further contributes to unbalanced metropolitan structures promoting local-scale territorial heterogeneity adding to regional disparities. In this line of thinking, Athens (Greece) was considered a representative example of the Mediterranean 'crisis cities', reflecting consolidated territorial disparities and local heterogeneity fueled by urban sprawl [39-41]. By reading and interpreting long-term Athens' growth, this study stimulates a reflection on sustainable governance of post-crisis cities, providing empirical evidence that may support policies designing inclusive places, revisiting territorial disparities and re-orienting urban-rural divides into ecologically-friendly and socially-balanced metropolitan continuums.

2. Athens, an example of 'crisis city'

Athens (24°43' East and 37°58' North) is at the same time the capital of the Greek Republic and the head town of the administrative region of Attica, Nuts-2 level of the European Territorial Statistical nomenclature. Attica shows a rugged topography (Figure 1), with a relatively small extension of flat areas, with the largest being the 'Lekanopedio Attikis' (Attica's lowland), which host almost the whole urban area of Athens, and the plains of Thriasio and Messoghia, respectively west and east of the urban area. The Greek capital is bordered to the east by Mount Hymettus (1,027 m), northeast by Mount Pendeli (1,107 m), northwest by Mount Parnitha (1,413 m) and west by Mount Egaleo (467 m). Numerous hills characterize the urban area, creating a wavy cityscape that resembles the undulated landscape typical of other Mediterranean cities, *in primis* Barcelona. The compact city (hereafter, greater Athens) has developed into the center of the homonymous region in contact with both the sea and mountain ranges of high altitude (the top of Parnitha mount, in the northern quadrant of Attica, is 1,413 meters at sea level), extending along a large part of the coastline overlooking the Saronic Gulf. Its extension, totaling approximately 430 km², is about 30 km along the southwest/northeast axis and about 20 km along the northwest/southeast axis.

Total population of Greece was estimated to 11,260,402 in 2009. More than one third of all the country's inhabitants (4,088,447) concentrated in Attica, making it the most densely populated region of Greece. Athens is the economic and cultural center of Greece, hosting universities and museums, and displaying a prominent role in the eastern Mediterranean as a commercial and industrial market and an important crossroads of International air traffic and traditional exchange node, mainly through the port of Piraeus. More than 40% of the Greek Active Employment is concentrated in Attica, the highest percentage of

specialized workforce, more than 37% of gross domestic product, dominating almost all economic sectors. Per-head product is the highest in Greece with 109% of the national average. In Athens, more than 42% of national employment is in industry, 42% in the public administration and defense sectors, 48% in transport, logistics and telecommunications, 54% in banking and financial sectors, and 60% in real estate [35, 42-43].

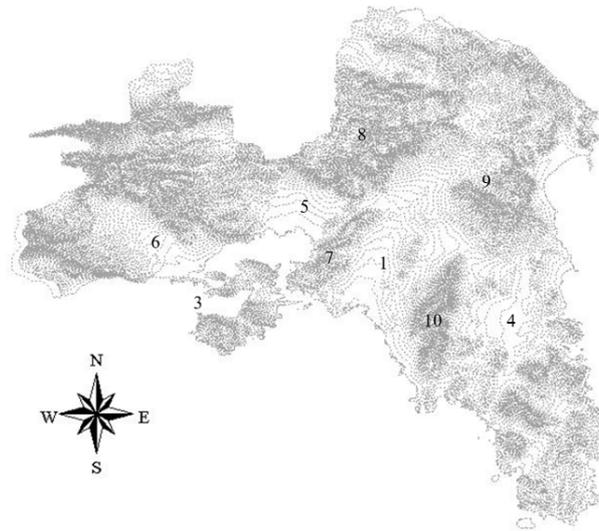


Figure 1: Elevation map of Attica (1: Athens; 2: Piraeus; 3: Salamina island; 4: International Airport; 5: Thriasio; 6: Megara; 7: mount Egaleo; 8: mount Parnitha; 9: mount Penteli; 10: mount Hymettus).

Based on a brief profile of European cities provided by the statistics of the Urban Audit project elaborated by Eurostat, Athens is at the top of the ranking for demographic size, growth rate and average family size, positioning at the lower part of the European ranking for the presence of single-parent families and single households (Table 1).

Table 1: Athens' city profile according to Eurostat Urban Audit dataset.

Indicator	Inner city		Urban Audit cities' ranking					Large Urban Area (LUZ)			
	Year	Value	Low V	Quintiles			High I	#	Year	Value	City-to- LUZ ratio
				IV	III	II					
Resident population	2004	796 442						342	2004	4 013 368	0.20
5-years population growth (%)	2001	0.1						218	2001	13.0	0.01
One-component families (%)	2004	32						152	2004	23	1.39
One-parent families (%)	2004	2	+					118	2004	3	0.67
Average household size	2004	2.35						173	2004	2.64	0.89
Property households (%)	2004	52		+				63	2004	63	0.83
Dwelling size (m ² per inhabitant)	2004	32						81	2004	33	0.97
0-4 children in pupil school (‰)	2004	130						142	2004	128	1.02
Unemployment rate (%)	2004	9		+				159	2004	9	1.00
Female unemployment rate (%)	2004	11			+			147	2004	13	0.85
Participation rate (%)	2004	69						182	2004	62	1,11

Relevant differences were observed for many variables comparing urban and rural areas. The proportion of households living in property houses was relatively low in greater Athens (52%), increasing sharply in rural districts (63%). Average house size places Athens at the top of the European hierarchy, with 32 and 33 m² per inhabitant respectively for urban and rural areas. Finally, the participation of 0-4-year-old in the infancy school is one of the lowest in Europe, reflecting the limited family policies developed by the Greek

government, a relatively comparable situation throughout southern Europe. Labor market variables also place Athens in the mid-low range of European cities. Unemployment rates (total and referring to the female component) were relatively high in the urban area and increase considering the entire metropolitan area. Employment and activity rates also indicate a relatively small share of the labor market (with marked gender segregation), with further disparities between urban and rural areas [44].

3. Identifying drivers of change in long-term urbanization processes in Athens

Characteristics of Athens' development differentiate it from the traditional North American and North European one. Through a detailed analysis on the distribution of population density classes over the region since the early 1950s, a clear picture of the phenomenon has been reached [35]. Urban growth and sprawl in Attica - due to several reasons that will be later explained - have been considered relatively subtle phenomena. This explains why even if since the early 1980s sprawl has been proceeding, the net effect still indicates relatively compact growth and containment as the overall dominant trend [45]. For this reason, the model of development of Attica today consists in an intermediate form of sprawl, characterized by a structure which can be placed in between compact settlements and diffused urban assets [46].

The main characteristics of the recent urban growth in Athens are essentially three: (i) the increase of intermediate and the decrease of very-low residential density areas in municipalities of the periphery and outside greater Athens and Piraeus, (ii) the growth in population of high density and intermediate areas, (iii) the demographic decrease of very-low and very-high density areas [47]. The fact that intermediate residential areas are growing more than all the others indicates a phenomenon of discontinuous urbanization [48]. But the process presents itself in Attica with the peculiarity that very-low and low-density areas (having residential values typical of North American suburbs) are decreasing. In other words, the sprawl process in Attica is still at its early stages [49]. This model of sprawl derives from various causes and consequences that have been resumed here below.

3.1. Land availability

Land scarcity in the Mediterranean strongly influences the expansion of cities [12]. In Athens, even if land values are much cheaper in areas outside the central city, its availability remains limited [11]. Consequently, areas that are experiencing a sprawl process in Attica later undergo a successive phase of concentration and self-containment (Figure 2) that tends to “fill the gaps” in between isolated built-up areas [50]. However, the result of this expansion and successive compaction remains intermediate density sprawl, for the typology of building constructions in expanding peripheral areas is typical of medium density settlements [42].

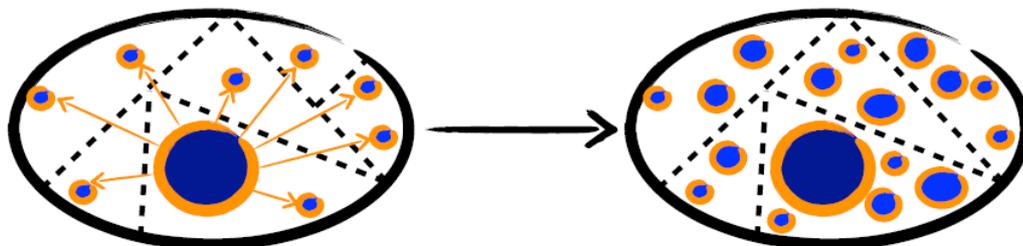


Figure 2: A graphical representation of the expansion and successive self-containment process of Attica's municipalities. On the left, detached settlements from the central nuclei appear in newly established blocks. On the right, the following process of urban saturation of partly developed fringe land, possibly exalting population and socioeconomic divides among neighboring territories.

3.2. Pro-urban ideology

Besides land scarcity, the pro-urban ideology and preference for the city center typical of Mediterranean populations is one of the reasons that sprawl in Attica has not reached the intensities of North American regions [7]. The demographic decrease observed in very low and low residential areas demonstrates how isolated and dispersed neighborhoods still do not represent the desired location by most of the Greeks [15]. However, the urban chaos and degradation of the very high-density areas of the hyper-compact city, together with high real estate prices and rent values of some areas in central Athens, is making intermediate density areas of the periphery and suburbs more attractive [51].

3.3. Infrastructure-driven development

In the process of growing desirability for medium residential density areas, infrastructure development has and is playing a crucial role [52-54]. Now that municipalities outside of greater Athens relate to the city center (which still today is the core of the economic activities of the country) through transport infrastructure, urbanization in those areas has become convenient [55]. Particularly, an intense urbanization process has been noticed in all those municipalities favored by the construction of new metro lines and the Attiki Odos (the new highway of Attica). Furthermore, in the light of infrastructure-driven sprawl, the Mega-Event of the 2004 Olympic Games and the intent of Athens for emerging as a new, competitive city-region are strongly influencing land-use dynamics [56]. Image enhancement strategies together with Infrastructure development in occasion of the Games have created new spatial links between peripheral and central municipalities of the region and changes in real estate market values [14]. Consequently, urbanization in peripheral areas has been made more convenient and attractive [57]. The contribution to the sprawl process is thus inevitable [58]. The most evident case of infrastructure-driven sprawl has been observed in the Messoghia plain [18]. Due to morphological and geographical reasons, real estate values and the development of major infrastructure, urbanization in the Messoghia has been very intense since the end of the 1980s [18]. The area has become one of the preferred locations for the sprawl process, and much of its agricultural and forested land is being converted to urbanized areas with buildings presenting a relatively high degree of "isolation", low vertical profile and intermediate density levels [59]. Other signs of infrastructure-driven sprawl have been recently observed in the Thriasio, Oropos and Marathon plains. Even if still far from the levels of diffused urbanization present in the Messoghia, there are valid reasons that bring to the belief that these areas will represent new hot-spots for sprawl soon, further exalting socioeconomic disparities among neighboring territories [60].

4. The consolidation of structural divides in the metropolitan structure

An overview of long-term urban dynamics was inferred from a comprehensive spatial analysis of population growth [46]. The observed processes are mainly related to the transition from a settlement model polarized in urban and rural areas (672 inhabitants per km² in the municipality of Athens in 1848 compared to an average of 20 inhabitants per km² in other areas of Attica) observed up to the beginning of the twentieth century, to a locally-polarized metropolitan region partitioning Attica into homogeneous (but spatially uncoordinated) areas with high population density ranging between 1,000 and 20,000 inhabitants per km², intermediate density (between 200 and 1,000 inhabitants per km²) and, finally, low density with less than 200 inhabitants per km². A review of factors underlying long-term urban growth in Attica was proposed in Figure 3.

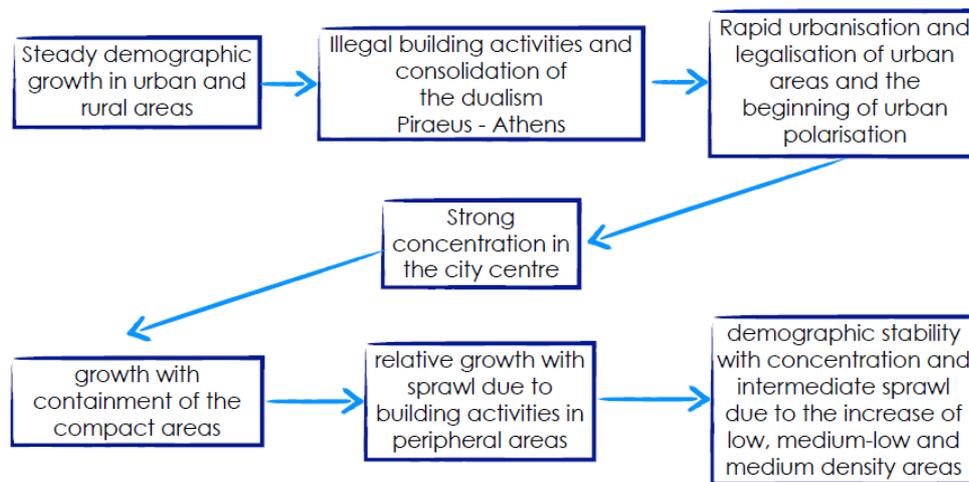


Figure 3: Main phases of Athens' growth during the last century, reflecting the consolidation of regional disparities along the urban gradient.

In the 1950s, alongside the slow decline of industrial areas (Piraeus held 20% and 12% of Attica's population respectively in 1961 and 2001), a moderate consolidation of peripheral areas took place especially along northern and eastern directions of growth [7]. In 1971, if 10% of the Greek population is concentrated in the municipality of Athens, another 20% live in the rest of greater Athens. Greater Athens reaches the maximum share in total Attica's population (92%) in 1961, falling to 85% in 2001. The early-1970s have thus marked the city's supremacy on the surrounding territory based on the maximum urban polarization. Having reached such a high density in the central neighborhoods (around 20,000 inhabitants per km²), the need for a complete reorganization of the metropolitan city has arisen, driven by the growing demand for new commercial, residential, recreational and industrial building spaces [61]. As a matter of fact, during this period, the debate on the enlargement of the metropolitan area throughout the region has consolidated [17]. A new spatial organization emerged in the 1980s because of the abandonment of the traditional compact model, evolving toward a discontinuous city model [9]. Areas ready to accommodate the 'new city' were those showing the greatest accessibility, especially in traditionally-settled rural areas [11]. The 'new city' outside greater Athens grew rapidly concentrating 6% of Attica's population for 30 years, from 6.7% in 1971 to 13% of 2001, as documented extensively by [35].

To confirm the evolutionary dynamics highlighted earlier, population density shows a heterogeneous distribution over space in Attica. The articulation of the most densely populated areas (> 5,000 residents per km²) shows, over the time period between 1951 and 2001, a two-axes spatial evolution: the first, north-south oriented, shows the compact expansion towards the northern Athens' suburbs, the main headquarters of the Olympic infrastructures; the second, east-west oriented, reflects a medium-density spillover outside the urban area, which mainly invested the plains of Thriasio (Western side of Attica) and Messoghia (Eastern side of Attica). In the rural area north of greater Athens, human settlements still maintain a density not exceeding 250 inhabitants per km².

During the 1990s the population growth of the rest of Attica (28.0%) has been significantly higher than the one of the central urban area (5.2%), the entire region (8.3%) and country (7.4%). In the following decade, growth rates have decreased on all the investigated territorial levels (Table 2). Nevertheless, the rest of Attica remains as the area with higher growing rates of the entire country. Birth rates by permanent residence of mother indicate that Attica's population is growing faster than the rest of Greece, but with

heterogeneous spatial patterns. The growth of the rest of Attica is proceeding at higher speeds than the one of greater Athens (Figure 4).

Table 2: Annual population growth rate (%) in Attica by homogeneous district.

Zone	1951-1961	1961-1971	1971-1981	1981-1991	1991-2001
Inner city	0.18	0.19	0.05	-0.07	-0.01
Consolidated urban districts (north)	0.44	0.27	0.25	0.05	-0.01
Consolidated urban districts (east)	0.24	0.21	0.10	-0.06	-0.02
Consolidated urban districts (south)	0.63	0.44	0.33	0.10	0.06
Suburbs (south-west)	0.38	0.21	0.10	-0.03	0.03
Suburbs (north-west)	0.65	0.45	0.22	0.07	0.08
Suburbs (north-east)	0.41	0.43	0.42	0.16	0.03
Coastal area	0.34	0.35	0.4	0.29	0.26
Attica road district	0.41	0.36	0.34	0.31	0.23
<i>Greater Athens (total)</i>	<i>0.41</i>	<i>0.32</i>	<i>0.25</i>	<i>0.11</i>	<i>0.09</i>
Seconda periferia nord	0.29	0.30	0.41	0.50	0.29
Northern Attica	0.00	0.05	0.31	0.25	0.20
Messoghia	0.17	0.17	0.4	0.32	0.28
Thrasio-Megara-Salamina	0.05	0.12	0.15	0.23	0.15
<i>Rest of Attica</i>	<i>0.13</i>	<i>0.16</i>	<i>0.33</i>	<i>0.33</i>	<i>0.24</i>
Athens' metropolitan area	0.27	0.24	0.29	0.21	0.16

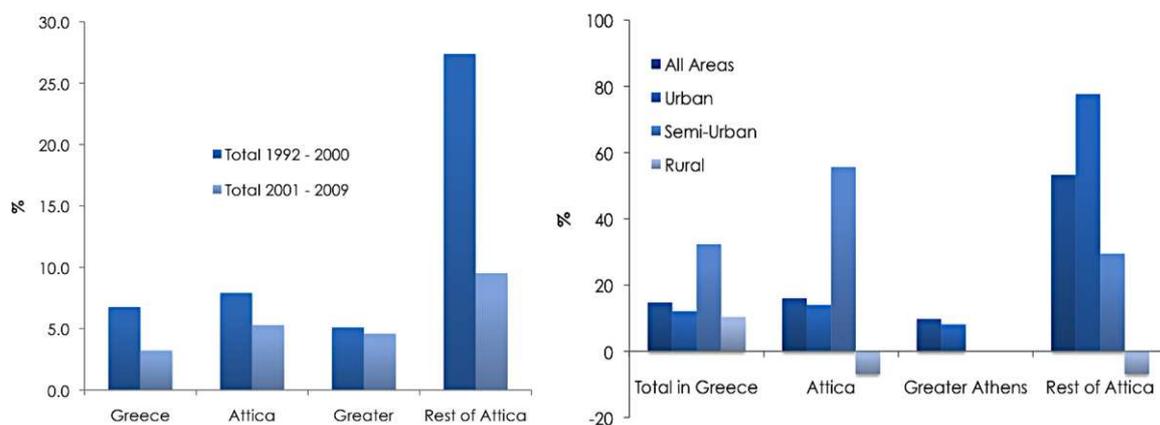


Figure 4: Selected demographic traits in Greek regions; (left) annual population growth rates (%) in different periods and regions of Greece; (right) birth rates (2000-2008) by permanent residence of mother.

5. Discontinuous urban expansion and spatially-heterogeneous social patterns

Urban sprawl is amongst the most debated and argued topics in the fields of urbanism, environmental sciences, economics, geography and sociology [52]. As urban sprawl involves different subjects of study, the phenomenon is fascinating on the one side, but difficult to analyze on the other side [62]. The emergence of externalities regarding infrastructures, human and financial capital and investments has led to major territorial disparities and a generalized loss of competitiveness [63]. The marked imbalance in spatial planning between northern and southern European regions continues to exert its influence on peripheral areas [49]. The socioeconomic fragility of these areas was initially addressed through approaches based on weak technical actions and poor participatory processes [44].

Heterogeneous spatial patterns characterized the most recent Athens' development, differentiating districts growth with high residential densities and those expanding at intermediate-low values of urban concentration [8, 39, 43, 61]. Eastern and Western Attica were mainly developing through the construction of industrial compounds and factories and, at the same time, small dwelling units typical of sprawling areas [17]. Besides the spatial distribution of buildings according to their surface or volume, vertical profile of built-up areas is worth investigating for the assessment of sprawl. Decomposing the total number of buildings constructed in relation to the numbers of floors gives useful information on the evolution of built-up areas. Most of the buildings constructed between 1991 and 1995 in Eastern and Western Attica pertained to the lowest categories of vertical profile [47]. This means that in these two prefectures there is a stronger increase of small dwelling units (1 floor), factories and industrial compounds (only ground level). By contrast, in the same period buildings of 2, 3 and 4 floors concentrated in the prefectures of Athens and Piraeus. In the following investigated time interval (1996-2000), a period of economic expansion preceding 2004 Olympics, an impressive number of ground floor constructions have been realized in Western Attica (77%), while in the prefecture of Eastern Attica construction activities concentrated on small dwelling units of 1 floor. Again, most of the buildings of high vertical profile were being realized in the prefecture of Athens and Piraeus. The same trend seems to persist even in the subsequent decade, even if the realization of ground level buildings in Western Attica has markedly decreased [42].

Reflecting consolidated processes of urbanization and a more recent wave of dispersed urban growth in Athens, a major concentration of young people was observed in the North-West and North-East districts of greater Athens, along the western sea coast and in the Messoghia plain. A similar spatial trend was observed for the age profile 18-44 years, indicating a spatially-heterogeneous population structure [18]. The age class 45-64 years, representing a large part of the older active population, concentrated in the North-eastern district of greater Athens, including Messoghia plain, and the Eastern sea coast of Attica. Finally, the oldest class (age profile > 64 years) representing retired people was basically located in central areas of greater Athens and along the eastern sea coast of Attica [20].

The distribution of population by country of origin indicate significant patterns noticed from the distribution of native Greeks, Albanians and EE15 immigrants over the region. Native Greeks concentrated mostly in the center and North-East of greater Athens, in the Messoghia plain and on the two opposite coasts of the region. Non-Greek, native European (EE15) people residing in Attica seem to follow a similar trend as the previous one. Finally, Albanian immigrants, widely diffused over the entire region, seem to concentrate in the North-West zones of greater Athens, in the Messoghia plain and along the western coast of Attica [31].

Concerning working status, a further division of greater Athens based on a West-East axis was observed: un-employment was mostly concentrated in the North-West of greater Athens and in Piraeus' urban center. By contrast, the distribution of university students shows a clear concentration of this working status class in the North-East and South-East areas of greater Athens and in the Messoghia. Finally, housewives were more frequent in the North-West side of greater Athens, along the eastern coast and towards the western part of Attica. These three observed patterns highlight important characteristics of Attica from a social point of view. The "traditional" population, represented with some approximation from housewives, was clearly dominant in West and North-West of greater Athens. These zones also coincide with the ones characterized by the highest densities of un-employed individuals. Another population segment, symbolized by university students, was preferentially located on the East of greater Athens and in the Messoghia plain [10].

The social patterns of Attica are finally discussed while analyzing the distribution of population by working status [39]. The wealthy and high-status characteristics of areas located in the North-East part of greater Athens became even more clear in recent decades, possibly outlining a latent spatial divide within the

urban area [51]. High bourgeoisie groups have progressively spread from North-East peripheral areas towards the historical urban center and the Messoghia plain. Middle income individuals were homogeneously dispersed over greater Athens, even if a slight inclination towards the North West of the urban center and the Eastern coast of Attica was recorded [35].

6. Urban gradients as drivers of territorial disparities in an era of 'metropolitan continuums'

The 'compact city' notion was defined extensively and its benefits evidenced within the recent literature from the land-use perspective [19]. The compact model is typically recognized as land-saving [45]. Although it may produce negative externalities on the landscape especially within the boundary of the urban area (e.g. pollution, congestion, scarcity of green spaces), it remains the model for city growth with the relatively lowest impact on land-use consumption [12]. In the compact model, the relationship observed between urban areas and the neighboring region are regulated by the explicit geographical hierarchy of high-density urban centers, low-density peripheral villages, and few isolated settlements [64]. The structure of urban-rural gradients is reflected in a clear land-use segregation and by distinct economic roles for urban and rural areas [65]. The former areas are places of consumption and secondary/tertiary production of goods. The latter is the place for agricultural production and conservation (or reproduction) of natural amenities [17].

The dispersed city results in a mixed urban landscape that invades the rural countryside through a disorganized and heterogeneous spillover of built-up settlements, without a clear zoning among residential, commercial and industrial uses [21]. The transition from compact to dispersed cities is testified by the increasing mix of land-uses along the urban gradient and the mitigation of the density gradient [47]. Depolarization of the city center and sprawl in the peripheral districts tend to re-organize the rural territory within an undefined landscape where one possible dimension to interpret its (human-derived) complexity is land fragmentation, which determines an uneven disorder in land-use structure [19]. The agricultural traits of the landscape were progressively lost [59]. The environmental externality of the dispersed model is the amplification of ecological problems typical of urban areas merged with the ecological problems typical of rural areas, determining a downward spiral that is likely difficult to mitigate [35].

The changing role of the rural areas from 'actor' (i.e. sink) of production (agriculture, livestock, forestry, natural amenities) to 'object' at the service of the city (e.g. source of land suitable to edification) is evident in many metropolitan regions [50]. Are the rural areas becoming inexorably a sort of garbage can of the metropolis? Industrial and commercial areas are expelled from the city center and the first peripheral ring and located within the rural space, residential districts reproduced themselves in the same peri-urban space by standard settlement forms, miming urban compactness [13]; sprawled low-density villages grew everywhere without a clear spatial planning and lacking an urban 'vision': they are all elements of a picture shot on the modern peri-urban landscape [39]. Road infrastructures (and at a less pace, railways) grew anywhere to connect the several elements that were originally conceived as functionally distinct and spatially separated [56].

The loss of the original functions of the rural area is accelerated by globalization at all the production and spatial scales [66]. 'Global' citizens in the diffused city do not feel the preservation of the agricultural base close to the city as a crucial planning issue, since primary goods are imported from very far cropland, better equipped for large-scale production. The same 'global' citizens could even evaluate as superfluous to protect the remaining rural territory which produces natural amenities and tourism leisure, since an increasing human mobility stimulates tourism fluxes concentrating well outside the boundary of the urban region and big pipelines bring to the city the (supposedly unlimited) quantity of water produced far from its surroundings. Examples from Attica evidenced the peripheral distribution of agricultural enterprises -

progressively expelled from fringe rural land around the central city - and tourism businesses, with a spatial distribution typically associated to natural amenities concentrated at distant places from Athens (Figure 5).

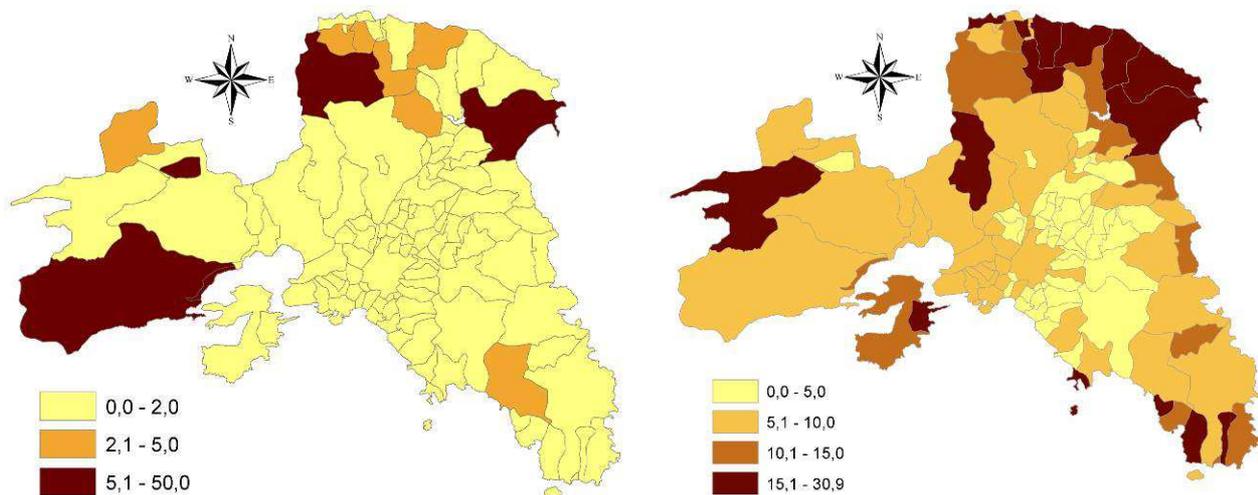


Figure 5: Spatial distribution of agricultural enterprises (left) and hotel/restaurant businesses (right) in Attica (percent share in total enterprises) based on statistics derived from national business register (2005); in both cases, businesses concentrate on peripheral, rural areas.

In this way, rural spaces in the Mediterranean city-region are becoming a mirror of the urban landscape, where not only rich people built-up their villas (in a typical 'lock living' framework: [67]) but also where bourgeois and even poor people escape the congestion of the city center and the compact periphery searching for 'de-concentration' amenities [7]: those second homes to live not only during summer holidays, but instead to be inhabited during the free time all over the year [35]. By escaping the urban congestion, however, suburbanites create another type of congestion, which is the loss of the (hierarchical) order of rural landscapes close to the traditional, Mediterranean compact city. The dispersed second-home settlements (with all ranges of construction possibilities, from poor 'villages' to rich villas) are visible marks of an incipient 'landscape congestion': they not only dominate coastal landscapes, but also invade the internal lowlands, originally occupied by wheat, fruit trees, and grapevines, and even the sloping uplands, the original kingdom of olives and old forests [19]. These processes anticipate the uneven environmental and socioeconomic problems derived from a weak management of the dispersed urban settlements [36], within a landscape that has lost its rural traits and necessitates of dedicated policy strategies beyond the standard urban planning tools [49].

7. Conclusions

The long-term development of Mediterranean cities was often considered as a powerful factor in the formation of regional imbalances. Empirical results highlight the need of adopting more specific, scale-dependent policies aimed at containing urban disparities. Economic polarization and the abnormal concentration of activities in urban areas combined with rapid population growth, have caused significant disparities with the inner regions that have partly adapted to these transitions. The emergence of externalities about infrastructures, human and financial capital and investments has led to major environmental imbalances, natural resource depletion, habitat fragmentation and a generalized loss of biodiversity. Moreover, the marked imbalance in spatial planning between western and southern Europe continues to exert

its influence on more peripheral areas. The socioeconomic fragility of these areas was initially addressed using interpretative approaches grounded on working hypotheses prefiguring weak governance at all spatial and administrative levels, poor participatory processes and ill-conditioned or biased technical actions.

On the other hand, the Mediterranean region has partially regained, in the last decade, the cultural role of cities as a bridge between Europe, Africa and the Middle East. The post-crisis economic scenarios and the global geo-political uncertainty may contribute to the redefinition of Mediterranean urban centrality. Some regions, especially those most open to trade, have strengthened the productive network and increase competitiveness in the international arena. During economic expansion, developmental policies have sometimes consolidated role and power of Mediterranean cities, governing social and cultural structures of the respective countries and leading innovation, competitiveness and regional processes of growth and change. In line with the opportunities opened by globalization, most of these cities is gearing up for a long time trying to consolidate (or improve) their position in the continental urban hierarchy. In a post-crisis scenario, Mediterranean cities are required to recreate landscape's charm and atmospheres that attract tourists from all over, looking for an image which is pleasant, alive, plenty of history and culture, socially cohesive and possibly efficient. The spread of co-operative approaches at all governance levels may stimulate an active involvement of stakeholders at different geographical scales, promoting networking, consolidation of best practices, institutional awareness and a diffused participation to strategies administering common spaces. Promoting policies designing inclusive places, revisiting territorial disparities and re-orienting urban-rural divides into ecologically-friendly and socially-balanced metropolitan continuums is a key issue in sustainable governance of post-crisis cities in the Mediterranean region and, possibly, elsewhere.

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