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► **To cite this version:**

Thomas Maloutas, Hugo Botton. Trends of Social Polarisation and Segregation in Athens (1991–2011). *Social inclusion*, 2021, 9 (2), pp.117-128. 10.17645/si.v9i2.3849 . hal-04350025

HAL Id: hal-04350025

<https://hal.science/hal-04350025>

Submitted on 21 May 2024

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Article

Trends of Social Polarisation and Segregation in Athens (1991–2011)

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Submitted: 15 November 2020 | Accepted: 7 January 2021 | Published: 13 May 2021

Abstract

This article investigates social and spatial changes in the Athens metropolitan area between 1991 and 2011. The main question is whether social polarisation—and the contraction of intermediate occupational categories—unevenly developed across the city is related to the changing of segregation patterns during the examined period. We established that the working-class moved towards the middle and the middle-class moved towards the top, but the relative position of both parts did not change in the overall socio-spatial hierarchy. The broad types of socio-spatial change in Athens (driven by professionalisation, proletarianisation or polarisation) were eventually related to different spatial imprints in the city's social geography. Broad trends identified in other cities, like the centralisation of higher occupations and the peripheralisation of poverty, were not at all present here. In Athens, changes between 1991 and 2011 can be summarised by (1) the relative stability and upward social movement of the traditional working-class and their surrounding areas, accounting for almost half of the city, (2) the expansion of traditional bourgeois strongholds to neighbouring formerly socially mixed areas—25% of the city—and their conversion to more homogeneous middle-class neighbourhoods through professionalisation, (3) the proletarianisation of 10% of the city following a course of perpetual decline in parts of the central municipality and (4) the polarisation and increased social mix of the traditional bourgeois strongholds related to the considerable inflow of poor migrants working for upper-middle-class households.

Keywords

Athens; occupational structure; polarisation; professionalisation; proletarianisation; residential segregation; segregation patterns

Issue

This article is part of the issue “Vicious Circle of Segregation: Understanding the Connectedness of Spatial Inequality across Generations and Life Domains” edited by Tiit Tammaru (University of Tartu, Estonia), Siiri Silm (University of Tartu, Estonia), Frank Witlox (Ghent University, Belgium), Maarten van Ham (Delft University of Technology, The Netherlands) and Madli-Johanna Maidla (University of Tartu, Estonia).

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1. Introduction

Deindustrialisation and globalisation have produced changes in the social structure of large metropolitan areas in advanced capitalist societies. There were two opposite approaches in the early 1970s claiming, on the one hand, the growth of the upper pole of the social hierarchy—professionalisation (Bell, 1973)—and, on the other, the growth of the lower pole—proletarianisation (Braverman, 1974). In the 1980s and early 1990s, a third approach—polarisation—was developed by Friedmann

and Wolff (1982), Friedmann (1986) and Sassen (1991), defending that both poles of the social hierarchy were growing at the expense of intermediate positions. The ‘polarisation thesis’ focused on world or global cities, i.e., on the metropolitan areas that had substantially increased their role in the management of the globalising economy by providing a network of high-end producer services to transnational corporations.

Hamnett (2020) provides an overview of the discussions about these approaches with a focus on the polarisation thesis. He also provides empirical evidence

to support or disprove these three theses for several large cities across the world over the last 50 years. He concludes that in most cases there is professionalisation combined sometimes with polarisation, which, however, does not appear as an unavoidable universal effect of globalisation. Polarisation appears to be an outcome related to contextual factors like welfare regimes, varieties of capitalism, urbanisation paths, immigration flows and their regulatory policies. This conclusion matches his previous claims about the polarisation thesis (Hamnett, 1994, 1996).

Hamnett's discussion about social polarisation usually evaluates its validity in terms of changes in the occupational or broader social structure and deals much less with its spatial dimension (Buttler & Hamnett, 2012). Sassen (1991), however, claimed that social polarisation in global cities leads to more segregation due to the gentrification of centrally located working-class spaces by the incoming and growing corporate elite and the appropriation of prime spaces by corporate activities. The dividing spatial impact of globalisation on world cities has been discussed by several authors (e.g., Marcuse & van Kempen, 2000; Mollenkopf & Castells, 1992). Recently, van Ham, Uesugi, Tammaru, Manley, and Janssen (2020) have revisited the cities discussed by Sassen (New York, London and Tokyo) and, apart from eventually agreeing with Hamnett's claim about professionalisation, deal with the changing levels and patterns of segregation observed between 1980 and 2010. Their analysis shows that although the levels of segregation have not changed much over these 30 years, the social geography of these cities was considerably reshaped. In New York and London, the main trends were the growing concentration of higher-income occupations in central locations through gentrification and the peripheralisation of poverty. In Tokyo, changes were less manifest, involving mainly the intrusion of higher-income categories in some neighbourhoods of the disadvantaged eastern part of the city.

The main purpose of this article is to discuss the spatial imprint of social changes in Athens between 1991 and 2011, taking polarisation as the reference process. Our primary hypothesis is that residential areas where polar occupational categories increased their weight during these 20 years have moved towards the top or the bottom of the city's hierarchy of residential spaces, while those where intermediate categories increased moved towards the middle. This hypothesis is accompanied by the assumption that polarisation is a process strongly diversified in space, as exemplified by the comparative analysis of five East European capital cities where polarised areas were very unequally distributed both within and among cities (Marciniczak et al., 2015). The analysis of changes within different types of residential spaces in Athens is used to illustrate this diversity and to discuss the causality of observed changes related to parameters beyond those which induce social polarisation. Sorando (2021, in this issue) used a similar method-

ology to investigate the trajectories of different social spaces in Madrid in this issue.

2. Persistent Questions about Social Polarisation and Methodological Issues

Since the 1970s, empirical data have corroborated professionalisation much more than proletarianisation in the advanced capitalist world. Managers and professionals were expanding categories while the working class was shrinking. However, relying on the simple growth or decrease in these categories should not be enough. Braverman's (1974) position was not that the working class was growing *stricto sensu*, but that many other occupational categories—mainly in the services—were moving towards the occupational bottom through increased deskilling, precariousness and low wages. Today's proletarians are not the same as those of industrial societies. Many jobs at the lower end of services do not require skills, are poorly paid, provide minimal job security and those who perform these jobs are easily replaced. These jobs are regulated as labour contracts rather than service relationships which are reserved for those occupying secure positions in the labour market (Erikson & Goldthorpe, 1992). Women of working-class origin and immigrants are mainly providing the human capital to expand proletarian positions in today's occupational structures. Considering only the traditional working class to assess the lower part of the social hierarchy is, therefore, negating that positions in social hierarchies are relative and that the shrinking of the working class is mainly indicating that the changing economy introduces new, deletes old and alters the content and the placement order of all occupational positions.

Professionalisation is not unambiguous either. Managers and professionals may be expanding, but their relative social position is not the same as that of the 1970s. These occupations are now much less homogeneous. On the one hand, a substantial fragment—e.g., professors and researchers, professionals and managers in the public sector, self-employed professionals without employees—is no longer part of the higher occupational positions in terms of income or job security. The limits between higher and intermediate occupational positions are increasingly placed within rather than beyond managers and professionals. Moreover, a large part of the expanding categories of managers and professionals in advanced capitalist societies are the ones that have experienced the lowest income increase compared to other parts of the social hierarchy in recent decades—mainly the supermanagers characterised by higher earnings, particularly in the Anglo-Saxon context since the end of the 1980s (Piketty, 2013, pp. 500–505) and the 'enablers' who are very highly remunerated for facilitating the exclusive consumption needs of the super-rich in top-tier global cities (Atkinson, 2020)—as well as to the expanding and upwards moving middle-classes of China and India (Milanovic, 2016).

These reservations about rejecting proletarianisation and accepting professionalisation at face value also affect how polarisation should be investigated. The upper pole should not comprise all managers and professionals, but only those partaking in the corporate elite of the global economy and, secondly, the high-rank officers of the public administration and the local large employers. This limitation would be more compatible with the mechanism behind the growth of the upper pole proposed by Sassen (1991), leading to the attraction of a corporate elite operating the network of vital production services for transnational corporations in global cities. Likewise, the lower pole should comprise the workforce attracted by such cities to service personal needs and to perform the menial jobs within the workplaces of the corporate elite. Both poles should, therefore, comprise a large share of migrants, either as highly qualified professionals and managers attracted by competitive job offers or as poor migrants willing to perform routine jobs for low wages to escape from worse conditions in their places of origin. The combination with the loss of intermediate positions in the occupational hierarchy—due to the declining industry—depicts the hypothetical landscape of polarisation in global cities. Three questions arise:

The first is practical. The limits of the upper and lower poles of the occupational hierarchy according to the previous paragraph are very difficult to identify within occupational datasets originating from censuses or standard surveys. In very few cases, mainly in France, occupational data can allow more detailed investigations (e.g., Prêteceille, 2018). In most cases, however, analyses—including, e.g., Maloutas (2007)—are restricted by the available data sets and the upper (managers and professionals) and lower categories (working-class occupations) are used as broad proxies, often without acknowledging their limitations. Moreover, there is no clear distinction between segments of the occupational hierarchy that are affected by globalisation and those that are not. In most cases, occupational positions are neither completely affected nor completely unaffected by globalisation and, consequently, the limits of the poles that should be investigated become even more blurred. Several solutions can be considered, like the combination of occupational and income groups undertaken by van Ham et al. (2020), but precision remains a challenge, even more so when a comparison among different contexts is involved.

The second question is more fundamental. Should we limit our investigation to the part of the social structure mostly affected by globalisation or should we expand our focus? In cities at the top, like New York City, the two options may not be very different, but as we get closer to ‘ordinary’ cities (Robinson, 2006), the part not clearly affected by globalisation becomes more and more sizeable. Athens is ranked as a ‘beta’ global city for 2020 (GaWC, 2020), meaning that changes in its social and spatial structures should be expected to be

less affected by global forces than those in cities at the top of the list.

The third question is methodological. When we talk about professionalisation or polarisation, we assume that their limits are rather clear and that they are mutually exclusive. In reality, however, this may not be the case: 30% growth of the upper pole and a 5% decline of the lower one may be a clear case of professionalisation, and a 20% growth of both poles may be a clear case of polarisation. But a 30% growth of the upper pole and a 10% growth of the lower one is both professionalisation (dominant trend) and polarisation (both poles are growing). Moreover, professionalisation and proletarianisation can materialise within conditions of growing or shrinking intermediate social categories. We assume that a growing or shrinking social middle is also changing the content of professionalisation or proletarianisation. In this article, our attention is mainly turned to the parts of the city where intermediate categories are shrinking and where changes in polar categories—in principle more closely related to global forces—are more clearly reshaping the city’s social profile. This induced us to initially divide our terrain into areas with a growing or shrinking social middle and then to subdivide the latter according to the main trend of social change (e.g., professionalisation).

3. Social Polarisation in Athens?

Athens is a Mediterranean metropolis in the Southeast of Europe with comparatively reduced connections to regional and global economic networks. This is partly due to the difficult relations for over a century with Turkey, Greece’s major neighbour, and to the shutting of all the country’s other land borders from the Cold War to the 1990s. The expansive Greek corporate activities since the 1990s in banking and telecommunications with takeovers in neighbouring Balkan countries, in Turkey and Cyprus, was short-lived and literally disappeared in the early 2010s with the sovereign debt crisis. Moreover, the Greek economy never invested in highly innovative industrial activities or in high-end producer services that would be attractive for global markets. Greek exports comprised a large share of unprocessed agricultural products, while industry and services were mainly oriented to the national market. Tourism and merchant marine have been the most extroverted activities, but the management of the former could be located in tourist areas outside Athens and shipping companies have usually settled their headquarters outside Greece, usually in London.

As a result, the appeal of Athens for members of the corporate elite has been weak. However, the data on changes in broad occupational categories between 1991 and 2011 show an impressive increase in the percentage of higher occupational categories and a decrease of blue-collar workers. Table 1 shows that Athens experienced professionalisation, with the sum of the two polar occupational groups climbing from 55.1% to 65.4% between

Table 1. Share of managers and professionals and blue-collar workers in the active population and distribution by nationality group in the Athens metropolitan area (1991–2011).

	Managers & professionals		Blue-collar workers	
	1991	2011	1991	2011
% in active population	23.7	37.7	31.4	27.7
% by nationality group				
Greeks	97.2	96.6	97.4	69.2
Developed economy countries	2.1	1.3	0.7	1.3
Developing countries	0.7	2.1	1.9	29.4
Total	100	100	100	100
% within nationality groups				
Greeks	23.6	41.8	31.1	22.1
Developed economy countries	43.4	43.1	19.8	30.8
Developing countries	12.9	6.5	44.3	68.7

Note: This table and all subsequent calculations refer to the 25–54 age group of the economically active population living in the Athens metropolitan area. The exclusion of older age groups is induced by our focus on the economically active and on those who are more residentially mobile and, therefore, more partaking in the reshaping of segregation patterns. In 1991, 97.2% of the managers and professionals were Greek and 23.6% of the Greeks were managers or professionals at that period. Table 1 overestimates managers and professionals since technicians and professionals' assistants are also included because they could not be separated from professionals in 1991. Without technicians and professionals' assistants, the percentage of managers and professionals in 2011 would be 26%. Source: EKKE-ELSTAT (2015).

1991 and 2011, mainly due to the increase in managers and professionals.

The sharp increase of managers and professionals between 1991 and 2011 mainly comprises professionals rather than managers (242,000 new professionals' positions against 48,000 for managers). Moreover, 50.4% of managers and 23.1% of professionals were self-employed in 2011 (EKKE-ELSTAT, 2015)—therefore not part of the salaried corporate elite—while a large part of salaried professionals was employed in the public sector. Also, the attraction of a foreign highly qualified workforce has been very small: 2,000 new positions for nationals from developed economy countries and 9,000 from developing ones between 1991 and 2011 (EKKE-ELSTAT, 2015), while Greek nationals continued to represent about 97% of this higher occupational category (Table 1). The occupational structure of Athens is therefore professionalised, but not like in global cities at the top of the list. Only the native Greek component in the labour market was professionalised, and the positions filled usually did not belong to the corporate elite.

On the other hand, the composition of the lower pole of blue-collar workers changed significantly despite their aggregate share in the active population remaining quite stable relative to the dramatic increase in the share of the upper pole between 1991 and 2011. Migrants from developing countries formed about 30% of this category in 2011, rising from a mere 2% in 1991. Only 22% of Greeks were blue-collar workers in 2011, compared to 69% of migrants from developing countries (Table 1). In this case, globalisation has affected the occupational structure of Athens through the collapse of socialist regimes in the Balkans, and mainly in Albania, which provided more than 50% of immigrants in Greece in the

1990s and the 2000s. Once again, it was not the function of Athens as a nexus or as a hub that attracted new migrants but push factors in their places of origin with accompanying effects at the receiving end. It is also the case with the recent migrant crisis in 2015, though at a smaller scale.

These changes in the occupational structure are not contradicted by the rather stable level of income inequalities in Greece, and presumably in Athens. The s80/s20 index (i.e., the ratio of the upper to the lower quintile of the income distribution) has oscillated around 6 between 1995 and 2011—6.1 in 1995 and 6.4 in 2011—according to Katsikas, Karakitsios, Filinis, and Petralias (2015), based on microdata of the Hellenic Statistical Authority (ELSTAT) on poverty.

Another important change between 1991 and 2011 is the gender ratio in different occupations. The participation of women in the labour market has constantly increased, but not in the same way for different occupational categories. The share of women increased in the upper pole (from 41.7% in 1991 to 51% in 2011) mainly among professionals, but much less in the higher managing positions. It also increased among blue-collar workers (from 15.3% in 1991 to 26.1% in 2011), especially at the lower end of unskilled positions (EKKE-ELSTAT, 2015). In both categories, the participation of women increased mainly at the bottom. At the top, it is mainly young, socially mobile native Greek women from intermediate social categories whose trajectories are often curtailed by glass ceilings. At the bottom, even younger women, mostly migrants from developing countries, have been relegated to routine jobs despite frequently possessing much higher qualifications which are not acknowledged by the city's labour market. Migrant women accounted

for 1.2% of professionals and 0.3% of blue-collar workers in 1991. These percentages changed to 1.5% and 28.9% respectively in 2011 (EKKE-ELSTAT, 2015). Feminisation has, therefore, mitigated professionalisation in the sense that the latter has not been developed on the model of growth of the corporate elite; the feminisation of the lower pole, on the other hand, is closer to the global city model as it mostly refers to the growing share of the female migrant workforce employed in personal services for upper-middle-class households.

4. The spatial Patterns of Changes in the Occupational Structure

4.1. Data and Method

All data used in the subsequent analysis are part of the micro datasets of the 1991 and 2011 censuses concerning the metropolitan area of Athens. They have been accessed through the “Panorama of Greeks Census data 1991–2011” application (EKKE-ELSTAT, 2015). Our analysis uses polarisation as a starting point in the broad sense of initially dividing the city’s residential areas into polarised and depolarised areas (i.e., where the social middle is shrinking or growing respectively). Then, we focus mainly on the part of the city where intermediate categories are shrinking and explore the different types of trends, i.e., professionalisation, proletarianisation or polarisation. The measures we used to distinguish the different types of spaces are simple. They are based on the average percentage change of occupational categories in the metropolitan area, and the difference—in terms of standard deviation from average—of this percentage change in the small neighbourhoods of the city (ad hoc aggregates of ELSTAT’s 3,000 URANUs [Urban Analysis Units] that provided 455 units with an average population between 3,000 and 4,000 inhabitants).

4.2. Results and Discussion

We have examined the changes of the spatial imprint of the three broad occupational categories (managers and professionals; intermediate occupations; blue-collar workers) during the 1991–2011 period, linking them with the social profile of residential areas. In fact, we have divided the city’s residential space in accordance with the changes in the mix of the three broad occupational categories and explored thereafter whether the change observed is related to the social composition and the location of the areas it corresponded to. We start by distinguishing between residential areas where the sum of the two occupational poles increased or decreased regardless of their positive or negative contribution. This option allows distinguishing spaces that are moving towards the social middle from spaces that move towards the edges (Figure 1).

We initially ordered neighbourhoods of the Athens metropolitan area in three categories according to their share of blue-collar workers: (1) the workers’ areas, which correspond to 30% of inhabitants living in neighbourhoods with the highest share of blue-collar workers, (2) the higher occupation areas, which also comprise 30% of individuals living in the neighbourhoods with the smallest share of blue-collar workers and (3) the intermediate areas that correspond to the remaining 40% of the population. Table 2 shows that changes in the occupational composition of residential areas are related to their social profile. In fact, in the residential spaces where the share of workers is the lowest (deciles 1, 2 and 3) the sum of the two poles increased by 17.6pp, while the increase was very small (1.8pp) in the three deciles with the highest share of workers. Moreover, polarisation stricto sensu—i.e., when the shares of both poles increase—is observed only in the first three deciles. In the other two groups of deciles, there is an important

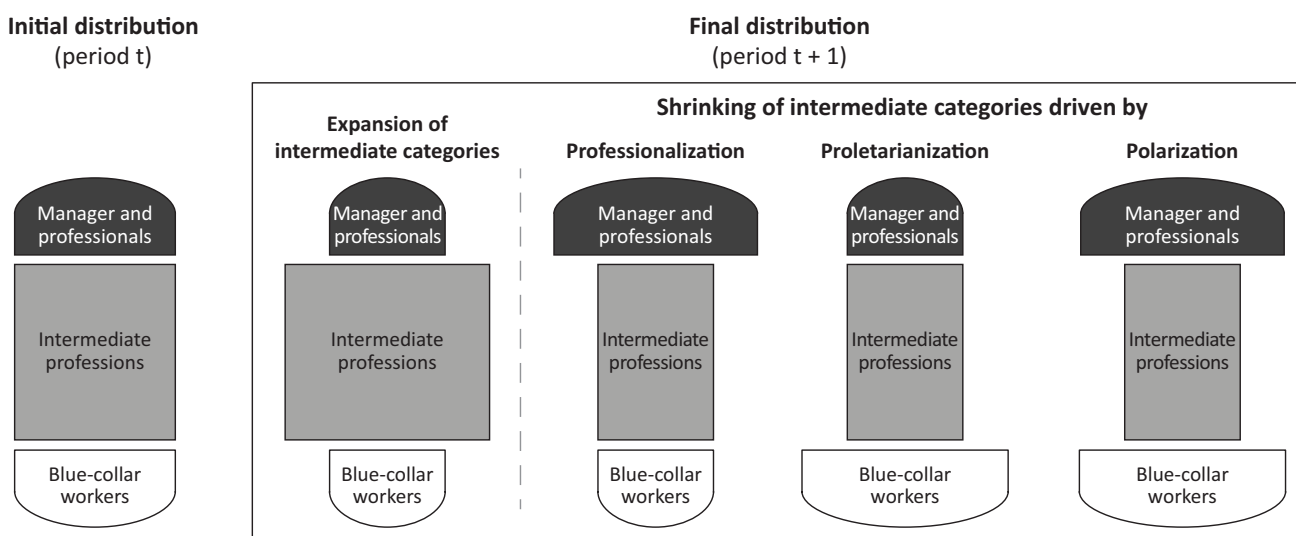


Figure 1. Major types of social change in terms of polarisation/depolarisation.

Table 2. Percentage of managers and professions (M&P) and blue-collar workers (BCW) in the active population aged 25–54 in the Athens metropolitan area, according to the percentage of blue-collar workers at the URANU level.

Area/Decile	1991			2011		
	% M&P	% BCW	Sum	% M&P	% BCW	Sum
Higher occupations areas/Deciles 1–3	36.4	16.2	52.6	50.7	19.5	70.2
Intermediates areas/Deciles 4–7	21.1	32.0	53.1	36.7	27.4	64.1
Workers areas/Deciles 8–10	12.3	48.9	61.2	27.7	35.3	63.0
All areas	23.7	31.4	54.8	37.7	27.7	65.3

Source: EKKE-ELSTAT (2015).

growth of the share of managers and professionals and a sharp decrease in the proportion of workers, especially in the deciles where workers had the highest shares. It looks, therefore, as if there is professionalisation all over the city—even if the distribution of this category remains very unequally distributed among deciles—and polarisation only in the most bourgeois neighbourhoods of the city.

Table 2 shows that polarisation is observed at the higher socio-spatial pole, where a big increase in higher categories is combined with a slight increase in the lower categories. In the other two groups of areas, there is a trend towards more social mix, not due to the growth of intermediate categories, but to the equilibration of the two poles. These patterns may not make much sense at this very broad level of analysis, but they invite the exploration of causal mechanisms in more spatial detail where these mechanisms operate.

As noticed in previous work on segregation in Athens (Maloutas, 2007; Maloutas, Arapoglou, Kandyliis, & Sayas, 2012; Maloutas & Spyrellis, 2019), segregation levels did not increase during the examined period. The index of dissimilarity (ID) has decreased between 1991 and 2011, from 24.1% to 21.5% for managers and professionals and from 26.7% to 20.2% for blue-collar workers. It would be expected for managers and professionals who increased in numbers and expanded in areas where their share was small. It was less expected for blue-collar workers because shrinking categories are usually also confined in space.

The declining levels of segregation are not necessarily related to reduced changes in the city's social geography. Van Ham et al. (2020) show that stable or decreasing IDs for London and New York for the period 1980–2010 developed in parallel with the concentration of higher occupational groups in central areas and with the peripheralisation of poverty. The social geography of Athens has also changed substantially but has not followed a similar path.

For a detailed examination of changes in the city's social geography, we initially distinguished between spaces of growth or shrinkage of the social middle. Figure 2 distinguishes spaces where the share of intermediate occupational categories has increased and those where their share has decreased more than 1 standard

deviation below their average decrease between 1991 and 2011. Spaces with a lower decrease of intermediate occupations are not marked with a symbol on this map.

Figure 2 shows that there is a clear dichotomy between the eastern and the western part of Athens according to changes in the share of intermediate categories. This dichotomy coincides with the broad partition of the city into working-class (West) and middle-class areas (East). Figure 3 shows the forms of the different types of the city's residential space in terms of dominant trends. In the West, intermediate categories increased their share in most spaces, remained stable or mildly decreased between 1991 and 2011, while in the East their share decreased noticeably.

The growth or stability of intermediate categories in the West is due to the shrinking of the working-class and the spatial entrapment of the endogenous social mobility in the traditional working-class strongholds of Athens (Maloutas, 2004). The latter entails that the socially mobile new generation of working-class children usually does not abandon their parental neighbourhoods due to the importance of family self-help networks in a context of reduced availability of social services, a phenomenon observed in other metropolises of Southern Europe as well (Leal, 2004).

The areas with the highest growth of intermediate categories are clearly situated in the western working-class suburbs (Figure 3, type 1.a). These are the lowest-rise areas—55% live in apartment blocks compared to the average of 70% for the whole city—where the housing stock is relatively recent (EKKE-ELSTAT, 2015). They are surrounded by a broader group of lower-middle-class and working-class neighbourhoods (Figure 3, type 1.b), which also comprise pockets in the eastern part of the city and the outer periphery, where the trend in 1991–2011 was stability or mild decrease of intermediate categories. The upward social mobility trend in these areas involves mainly native Greeks with a working-class background who have accessed intermediate occupational positions. An important part of this mobility is female (Arapoglou & Sayas, 2009), related to the much more important progress of women in education and especially of young women of working-class origin. These women have been massively partaking to the active population—compared to their mothers and

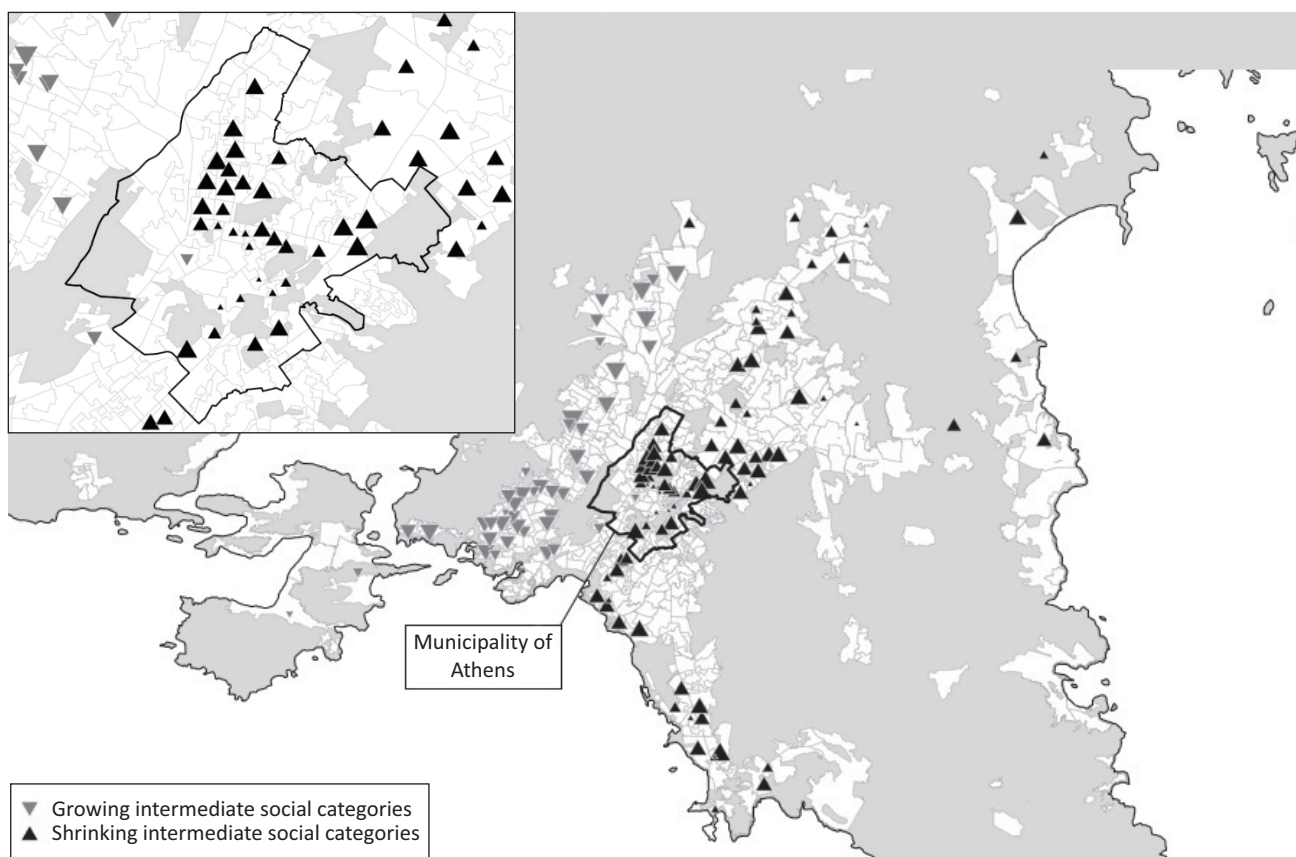


Figure 2. Residential spaces in Athens metropolitan area with a growing or shrinking share of intermediate social categories between 1991 and 2011. Notes: Black triangles depict areas where the share of intermediate occupations decreased at least by -17.5pp , i.e., 1 standard deviation (-7.8pp) more than their average decrease in 1991–2011 (-9.7pp); grey triangles represent areas where the share of intermediate occupations increased; areas without symbols correspond to areas with a mild decrease of intermediate occupations (up to -17.5pp). The size of the symbols is proportional to the resident population aged 25–54.

grandmothers—and mainly accessed lower positions in services since working-class jobs are still dominated by males. However, this process of moving towards the social middle is not to be taken at face value since the relative position of these residential spaces and of the occupational categories that populate them remain at the bottom of the city’s socio-spatial hierarchies. The type 1 of residential space hosts a very large part of the city’s active population aged 25–54, 44% in 1991 and 48% in 2011. It had the highest share of working-class occupations in 1991 (Table 3) and lost a substantial part of it in the next 20 years, while it gained important numbers of managers and professionals—in fact, their shares doubled—becoming socially much more mixed. Type 1 has been less accessed than average by immigrants, but it continues to lag in terms of housing surface per capita and of the education level of its population (Table 3).

The maps in Figure 3 should be further described and explained as follows:

- **Type 1:** Areas of growth or stability of intermediate categories (12.1%):

- **Type 1.a:** The share of Intermediate occupations increased ($> 0\text{pp}$)
- **Type 1.b:** Areas of stability or mild decrease of intermediate categories (36%): The share of intermediate occupations decreased slightly [$-10\text{pp}; 0\text{pp}$]
- **Type 2:** Areas of professionalisation (25.6%):
 - The share of intermediate occupations decreased dramatically ($< -10\text{pp}$)
 - The share of blue collar-workers decreased ($< 0\text{pp}$)
 - The share of managers and professionals increased more than the average ($> +15\text{pp}$)
- **Type 3:** Areas of proletarianisation (9.3%):
 - The share of intermediate occupations decreased dramatically ($< -10\text{pp}$)
 - Blue-collar workers compensate at least half of the drop in the share of intermediate professions in each neighbourhood

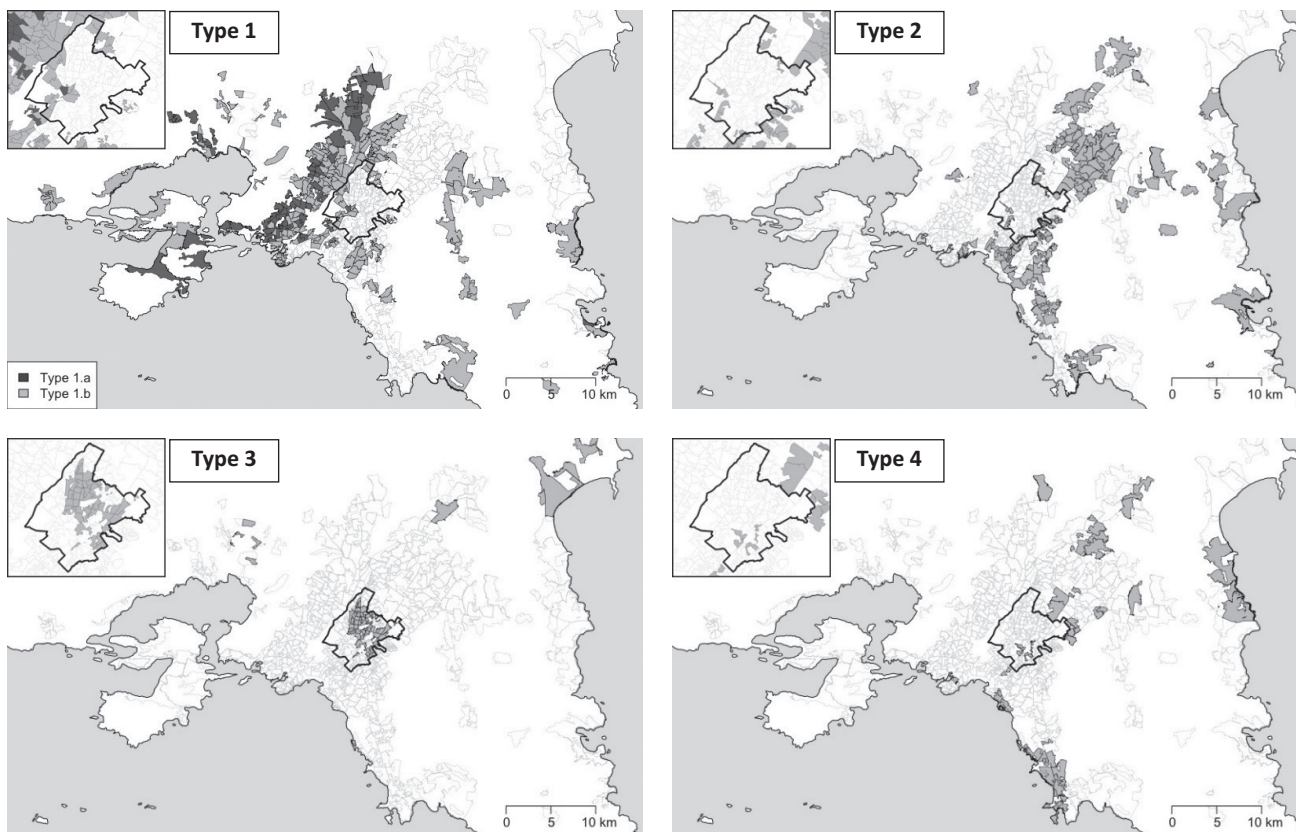


Figure 3. Location patterns of residential areas according to changing social profile trends in Athens metropolitan area (1991–2011). Notes: Spatial units represented on these maps correspond to aggregates of URANUs of the metropolitan area of Athens. Percentages in brackets represent the share of individuals aged 25–54 living in this type of area in 2011.

- **Type 4:** Areas of polarisation (5.9%):
 - The share of intermediate occupations decreased dramatically (< -10pp)
 - Either the share of managers and professionals increased more than the average (> +15pp) and the share of blue-collar workers increased less than the average (< -6pp)
 - Or the share of blue-collar workers increased more than the average (> +6pp) and the share of managers and professionals increased less than the average (< +15pp)

Type 2 neighbourhoods contain residential spaces, where the increase in managers and professionals was the driving force of change and the share of blue-collar workers remained stable or decreased moderately (Figure 3, Table 3). This type of spaces covers most of the middle-class neighbourhoods of the city and about 25% of the active population aged 25–54. They have an average share of residents in apartment blocks and their housing stock is more recent than in all other types—60% of housing built after 1980 compared to the average of 50% for the whole city (EKKE-ELSTAT, 2015). They are not the traditional bourgeois strongholds, but close to them and along the main communication axes that link them to the city centre. These spaces, rapidly appropri-

ated by higher occupational groups, are not at all located in the city centre, contrary to the outcome of gentrification processes observed in other cities, especially in the Anglophone world. They complement the settlement pattern of the middle-classes in the north-eastern suburbs, the south—where they filled spaces along the axes leading from the centre to the coastal communities—as well as isolated spaces within the western—working-class—part of the city and in the distant periphery. A small part of these areas is located at the periphery of the central municipality, without any particular link with gentrification processes. The dominant change pattern for type 2 spaces is the *embourgeoisement* of the surrounding areas of upper-middle-class strongholds. They are spaces of expansion for middle-class categories, where the shares of managers and professionals (slightly less than 30%) and blue-collar workers (around 25%) were quite close in 1991. The distance between these shares increased significantly by 2011 (around 50% of managers and professionals and less than 20% of blue-collar workers). The percentage of immigrants remained below the average at the level of the metropolitan area, while housing conditions and the education level of the active population remained above the city’s average (Table 3).

The following types of neighbourhoods (type 3) comprise fewer people—about 10% of the active population

Table 3. Selected characteristics of types 1–4 of residential areas in Athens metropolitan area in 1991 and 2011 (%).

Types	Relative size		Occupation				Nationality		Housing		Education	
	% Active population		% M&P		% BCW		% Immigrants		% 50sm, pp or more		% Higher education	
	1991	2011	1991	2011	1991	2011	1991	2011	1991	2011	1991	2011
1	43.8	48.1	15.3	30.3	43.8	32.4	0.8	10.6	3.3	10.8	7.8	16.5
1a	10.7	12.1	12	25.2	51.4	36.7	0.8	9.2	2.8	9.4	4.9	11.5
1b	33.1	36	16.3	32	41.4	30.9	0.8	11.1	3.5	11.3	8.8	18.2
2	24.5	25.6	28.6	48.5	24	18.8	0.9	7.3	6.6	19.5	19.9	34.8
3	11.5	9.3	31.6	31.9	19.5	37.6	3.7	37.5	10.8	18.1	22.5	25.6
4	6.4	5.9	40.4	58.7	11.8	14.8	2.4	8.7	17.1	35.6	32.4	47.8
All			23.7	37.7	31.4	27.7	1.3	12.8	6.4	15.8	15.5	25.1

Source: EKKE-ELSTAT (2015).

of the Athens metropolitan area aged 25–54—but is significant for the changes in the city’s social geography since social change has been driven mainly by the increase of blue-collar workers. Type 3 neighbourhoods (Figure 3, Table 3) experienced an increase of blue-collar workers +18pp whereas the aggregate share of blue collars decreased by –4pp in the entire metropolitan area. At the same time, managers and professionals was stable whereas their aggregate share increased by +14pp. Most type 3 neighbourhoods are located within the central municipality and occupy spaces extending around the bourgeois strongholds of the city centre and cover a large part of the densely built neighbourhoods that experienced extensive filtering down since the 1980s. They are the areas with the highest share of apartment blocks among the high-rise areas—89% of residents live in apartment blocks compared to the average of 70% for the whole city—and most of the housing stock (80%) was built before 1981 against an average of 50% for the whole city (EKKE-ELSTAT, 2015). These are the areas of the centre that were increasingly abandoned by the middle-class since the late 1970s due to the declining living conditions brought up by very dense building and increased air pollution. Former inhabitants were partly replaced by immigrants who found affordable housing in the less attractive housing stock of small apartments of lower floors in the apartment blocks of the centre, and particularly in the areas where abandonment increased the housing supply. Migrant presence increased spectacularly (+34pp) and the education level declined in relative terms, from +7pp above the average of the metropolitan area in 1991 to +0.5pp in 2011. Housing conditions remained above the average, reflecting the housing stock that corresponded to more affluent residents in previous times (Table 3). Type 3 areas are socially contested spaces, where the lower part of the occupational hierarchy has increased its presence much more than the upper part between 1991 and 2011. Similar social changes are observed in Madrid with the formation of ethnic enclaves (Sorando, Uceda, & Domínguez, 2021).

Finally, type 4 comprises the city’s polarised neighbourhoods where both the shares of managers and professionals and blue-collar workers increased between 1991 and 2011. These neighbourhoods are close to the average both in terms of low/high rise and age of the building stock. They comprise most of the bourgeois traditional strongholds in the northern suburbs, along the coast and the city centre, with by far the highest percentage of managers and professionals in 1991 (40%). This percentage increased by 2011 (59%), but by then other areas had notably converged (the share of managers and professionals in type 2 areas increased from 28.6% in 1991 to 48.5% in 2011; see Table 3). The share of blue-collar workers also increased (+3pp) during the same period, remaining however the lowest among the types of neighbourhoods presented in Table 3. Type 4 preserved the highest indices for housing conditions and the education level for its active population. The important change between 1991 and 2011 was the increase of the share of blue-collar workers—unlike all other types where it decreased—as well as the substantial increase of immigrants (Table 3) who are almost exclusively female and from countries with a reputation of providing the highest quality of domestic workers (e.g., the Philippines). Type 4 areas continued to be at the top of the city’s socio-spatial hierarchy. The change is related to the large number of immigrant workers who were employed as domestic live-in personnel in a period when the abundant supply for this type of work made it much easier for middle-class households to massively employ immigrants for domestic work and caretaking, with the more affluent being able to employ live-in personnel.

5. Conclusion

The research presented in this article showed that in an ‘ordinary’ metropolis like Athens, socio-spatial change over two recent decades (1991–2011) in terms of the trends of professionalisation, proletarianisation and polarisation can be summarised as follows:

- The increase, relative stability or mild decrease of intermediate social categories in most of the traditional working-class areas of the city (type 1) which moved towards the social middle by losing shares of blue-collar workers that were much higher than in all other social types of residential areas at the beginning of the 1990s and by gaining substantial shares of managers and professionals as well as of intermediate occupational positions. The professionalisation of these traditional working-class areas, however, should not be related to the corporate elite and/or to an invasion of gentrifiers, but mainly considered as the outcome of the spatial entrapment of endogenous social mobility in traditionally working-class neighbourhoods. These areas account for almost half of the city's active population aged 25–54 in 2011.
- The professionalisation of a slightly smaller part of the city (25%), where the share of managers and professionals was already above the average in 1991 and eventually approached that of neighbourhoods at the top of the occupational hierarchy by 2011 (type 2). Contrary to working-class neighbourhoods, these areas around the traditional bourgeois strongholds, especially outside the city centre, became less socially mixed through a process of *embourgeoisement*.
- The proletarianisation of a large part of the central municipality, comprising approximately 10% of the whole city's population (type 3). The change in the occupational composition is due to the long-lasting abandonment of these neighbourhoods by native Greek middle-class households following the deteriorating living conditions produced by dense building which put these areas in a course of perpetual decline. Poor migrants, usually employed as unskilled workers, partly replaced the exiting middle-class population.
- The polarisation which increased social mix in the traditional bourgeois strongholds following the increase of the shares of the two occupational poles. At a closer look, however, an increased mix is due, on the one hand, to the inflow of poor immigrants working for the personal service of upper-middle-class households and, on the other, to the significant increase of the share of managers and professionals (type 4).

In a nutshell, the working-class part of the city moved towards the middle, but this big move is changing the content of the social middle both in social and spatial terms and brings it closer to the bottom. Respectively, the middle-class part of the city moved towards the top, but the professionalisation process refers mainly to positions that are at the bottom of higher occupations or at the top of intermediate ones. As a result, this professionalisation process raises new questions about the limits between upper and intermediate occu-

pational categories as well as between upper and intermediate residential areas. Bourgeois strongholds remain at the top, but other spaces are converging in terms of social composition and also implicate these areas in the aforementioned question of limits. Moreover, their space is socially diversified by proletarian newcomers who, nevertheless, occupy specific positions at the service of the dominant group. Finally, the centre is reshuffled, but not gentrified. A process of proletarianisation through filtering-down is the main trend in many of the city centre neighbourhoods during the examined period (1991–2011).

The modest development of gentrification in Athens, at least until 2011, seems to be a paradox. Developments in other cities of the region, from Istanbul to Lisbon, point otherwise. Moreover, there were important factors favouring gentrification in Athens, like the huge investment in the city centre related to the 2004 Olympic games. The argument about modest gentrification is supported by the type of change in the social profile of neighbourhoods mostly affected and discussed in terms of this process. Evidence from census data does not corroborate the inflow of gentrifiers or the displacement of former residents. The main barrier to gentrification has been the typical Athenian apartment block which provided housing to a broad range of social strata. This diversity was not threatened by gentrification because no investment could make the most affordable parts of these blocks appealing to gentrifiers' tastes (Maloutas, 2018). Things have considerably changed since the mid-2010s due to the rapid development of tourism and of short-term rentals (STR) that made a large part of the 'ungentrifiable' stock appealing for the occasional tourist-gentrifier (Balampanidis, Maloutas, Papanzani, & Pettas, 2019). The impact of these changes, temporarily stopped by the pandemic, will be recorded in detail by the next census. For the time being, we hypothesise that gentrification has been developing more than in the past, as witnessed by the sharp rise of rents in the city centre between 2016 and 2018 and the proliferation of Airbnb and other similar platform listings in the low-status neighbourhoods of the centre. The outcome, however, is still uncertain since it depends on many different factors, like tourist development, policies to regulate STR, the participation of foreign investors, the resistance of actual tenants, etc.

The social polarisation debate helped us to synthetically formulate the investigation of trends for social change in terms of a broad social hierarchy that can be used across advanced capitalist societies. The advantage is that this framework can be used comparatively, although it is imperative to consider the changing content of the different concepts used across contexts.

Polarisation was ambiguously useful. If taken *stricto sensu*, only a rather small part of the city would be eligible where both poles increased (type 4). This would have limited our attention to around 6% of the metropolitan area, in terms of population share, without a valid

justification of such a focus. Moreover, polarisation in Athens is not similar to that of global cities at the top of the list since the rise of the upper pole, for example, is not driven by the corporate elite.

It was useful, on the contrary, to consider polarisation in the broad sense of spaces losing or gaining intermediate occupations. Eventually, we believe that polarisation-related research concerning social change in today's metropolitan areas are much more productive if polarisation, professionalisation and proletarianisation are not considered as mutually exclusive, but as potentially combining elements (e.g., professionalisation within a polarised context).

This particularised broad matrix of polarisation in Athens was eventually useful to depict the spatial imprint of different social/occupational change trends in the city's residential space. It could be insightful to apply the matrix we used to refine the analysis of the polarisation debate on other cities and distinguish processes driven by proletarianisation and professionalisation. Some broad trends identified in other cities, like the centralisation of higher occupations and the peripheralisation of poverty, were not at all present here. Gentrification, for example, was very weak, at least up to 2011. Identifying the main trends and processes of social change and locating differences among diverse types of residential areas facilitates to elaborate on the causal relations behind these trends and processes, enabling informed comparisons of processes of change in different cities and not simply of outcomes, making it possible to assess the significance of contextual diversity. Eventually, social change in the neighbourhoods of Athens displays differences not only in terms of patterns but also in terms of the content of categories (e.g., the characteristics of managers and professionals) and processes (e.g., professionalisation) used in the analysis. Our analysis raises questions concerning the differences observed. These differences may be partly attributed to disparities between top tier global cities and middle tier in terms of social structure, and in particular regarding the content of the upper social pole. On the other hand, differences and particularities of urban social changes are due to factors beyond our analysis. Global forces may be exercising pressure towards some outcomes, but eventual outcomes are always subject to a lot of other parameters, like welfare regimes, urban policies, urbanisation paths, form of and property rights in the housing stock, immigration trends and regimes, etc.

Acknowledgments

This article was partly inspired by and based on debates and research conducted in the COHSMO research project (2017–2021). This project has received funding from the European Union's Horizon 2020 Research and Innovation Program, under grant agreement no. 727058. It was also inspired by work performed in the project ISTOPOL (2020–2022) funded by the Hellenic Foundation for

Research & Innovation (HFRI), under grant agreement HFRI-FM17–1183 (26/03/2020).

Conflict of Interests

The authors declare no conflict of interests.

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