

PROCEEDINGS
of the
INTERNATIONAL CONFERENCE
on
CHANGING CITIES III
Spatial, Design, Landscape & Socio-economic Dimensions

Under the aegis of

The Department of Planning and Regional Development, University of Thessaly
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In collaboration with:

- **The Department of Product & System Design Engineering**, University of the Aegean, Syros Island, Greece;
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FORWARD

The 1st international conference on 'Changing Cities', which was hosted on Skiathos island, 18-22 June 2013, had started as an idea in 2012. The initial concept was to organise an academic event creative, inspiring, stimulating, and above all, international. There had been a belief that such an academic event may contribute in revitalizing academia and promoting tourism in Greece - hit by the economic crisis of public debt in the Eurozone. Given that during the last years, both societies and cities in Greece have been dramatically changing, shrinking in economic, spatial and demographic terms, we have chosen Changing Cities as the main theme of this series of conferences. Our aspiration had been to provide an international forum for transaction of ideas on cities and bring together architects, urban designers, landscape designers, urban planners, urban geographers, urban economists, urban sociologists and demographers, to investigate new challenges. This goal became a reality since the 1st Changing Cities conference gained strong interest of academics and researchers from many countries and regions around the world; Greece and the Balkans, south Europe and Mediterranean countries, northwest Europe, Middle East and Asia, Far East, North America, Latin America and Africa. A total of about 460 abstracts and 320 papers had been submitted in the conference – most of them, about 60% from abroad.

The 2nd Changing Cities conference, Porto Heli, Peloponnese, Greece, 22-26 June 2015, was also fruitful academically since it attracted the attention of scholars, not only from Greece, the Balkans and Europe, but also from far-away countries like USA and Canada, Brazil, Chile, Colombia in Latin America, and China, Japan and Australia in the far-east. We received about 500 abstracts and more than 350 papers. Among the scholars participating, there were about 185 Greek academics and researchers. This indicated that despite shortage of research funds, salary cuts, and broken morale, university teachers and researchers in Greek state universities were trying hard to keep a high-level academic status. Besides, the number of contributions by scholars from abroad (63%) emphatically pointed the international character of the conference.

The results of the 3rd Changing Cities conference, Syros Island, Greece, 26-30 June 2017, points that the series of conferences on Changing Cities is getting established in the international academia as a significant bi-annual international forum. We have received 485 abstracts and 200 papers from many countries around the globe – honouring our efforts as Organising Committee. The contribution by Greek researchers and scholars is 27.42% while that of foreign academics reaches 72.58%; this indicates the international character of the conference. Regarding foreign academics, many of them are from neighbouring countries such as Italy (69), Turkey (37), Cyprus (11), and

Serbia (6); but also many are from distant countries such as Brazil (27), USA (16), UK (16), Poland (11), and Netherlands (10).

The strong interest for this conference by academic communities allows us to have thoughts about organising the 4th Changing Cities conferences in two years' time, spatially hosted in a different Greek sea resort – probably Santorini Island, or Crete.

I would like first to thank the Organising Committee, the keynote speakers, and the members of the international scientific board who supported enthusiastically the academic organization of this conference. I would especially like to thank those colleagues of the Scientific Committee who have also pre-organized special sessions in this conference. I would like to thank all the academic, political and scientific organisations which supported this conference in many different ways: University of Thessaly; The Municipal Authority of Syros Island; the Greek Ministry of Tourism; The Greek National Tourism Organisation (GNTO); Finally, I would like to thank the shipping companies 'Blue Star Ferries' and 'SuperFast Ferries' which sponsored sea travel to and from Syros Island.

Aspa Gospodini, PhD

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SPECIAL SESSIONS**



Public Space & Sustainable Regeneration



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Issues on urban design of public space: social and spatial identifications in the case of 4 central squares in Athens

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Abstract

Being part of a wider research project, which was conducted by the National Centre for Social Research (EKKE), regarding the social impact of urban design on the sustainable development of cities and especially the city of Athens, this paper focuses on the study of four central squares (Omonoia, Kotzia, Varvakeios and Monastiraki). The four squares have been redesigned in the period 1990s-2000s, interrelating different design and implementation procedures. These redevelopment projects have reflected diverse views for the urban renewal of each square and its surrounding area taking into account specific spatial and social re-considerations. The paper aims to present, evaluate and discuss the social and spatial impact of these projects on urban sustainability. The research methodology was based on the identification of the socio-demographic profile of the surrounding area for the assessment of the integration of urban design interventions in the local social tissue, the analysis of land use changes and economic activities adaptation before and after the urban interventions, some empirical findings related partly to specific issues of the quantitative survey based on a questionnaire addressed to professionals established in the four squares areas, as well as the analysis of the political and scientific discourse with regard to the redevelopment projects. The paper concludes pointing out some important factors that prevented the regeneration of the wider area and undermined the goals and expected outcomes of the urban design projects and, in general, the urban sustainability of the area.

Keywords: public space; social identifications; land use changes; political and scientific discourse; central Athens

1. INTRODUCTION

Rather an ambiguous and overused term [1, 2], with a wide range of meanings as well as development trends in different European countries, urban design constitutes a specific planning approach and intervention process on urban space, or as Bernad Huet [3] stated a privileged means to perceive reality before being a tool for transforming urban space. In fact, the concept of urban design has been widely discussed in academic and professional milieu: its definition and nature, its issues and challenges, as well as the process or the methods, the procedures and the operational tools adopted, or the role of the involved stakeholders [4, 5, 6, 7, 8, 9, 10]. The term originated as a tendency to renew the concepts and tools used in the analysis and making of urban space and it gradually seems to refer mostly to the ways that urban design interventions are conceived along with their characteristics and objectives, regardless of their scale. It is interested both in the programmatic level and the form and structure of the produced urban space, expressing in several cases integrated urban strategies [11].

Urban design has become primarily concerned with the quality of the public realm – both physical and sociocultural – and the making of places for people to enjoy and use [10]. Indeed, over the past three decades, there has been a vast, diversified and multidisciplinary literature on the morphological and social issues related to the production and management of public space as well as its use, observation and perception, which grew somewhat in parallel with the one on urban design [12, 13, 14,15]. At the same time, a significant number of projects enhanced public spaces in many European cities, a tendency which was intensified by the mid-1990s under the influence of sustainable urban policies focusing both on the regaining of public space and the promotion of soft urban mobility modes. Moreover, in the context of intense urban competition, several city marketing and regeneration strategies focused on the design of high quality public spaces since these are considered to contribute to the formulation of positive urban images and attractiveness of private investors. Thus, in the context of the growing discussion since the late 1950s on the formative elements of urban space, public space making and use became gradually the key issue for almost every small, medium or large scale urban design intervention [16].

Yet, public space remains, as Devillers stated [4], a kind of ideal and it is always threatened by two forms of segregation: social exclusion that produces ghettos and deals unequally with public spaces in line with the neighbourhood status and the functional or technical exclusion as more and more public spaces are divided and specialised. Hence, there has been a rich literature about the privatisation policies and exclusion strategies transforming public spaces [17, 18, 19, 20]. Arguing on this matter, Carmona et al. [10, p. 129] conclude that “While arguably the aim should be the provision of an accessible, safe and secure, equitable public realm for all, economic and social trends in many parts of the world are making this increasable difficult to deliver”.

One of the most important problems in Greek cities is the lack of public spaces and their aesthetic poverty. As a matter of fact, inherent and historically rooted weaknesses and shortcomings, such as land system, non-regulated extensions of the cities, economic hardship of the public bodies in charge, lack of implementation tools and management mechanisms, distortion and deficiency of implementation and land acquisition tools in practice, overlapping responsibilities of public agents, etc. prevented the development and implementation of a coherent policy regarding public space production and management throughout the 20th century. Following to a certain degree the evolutions in Europe – at least concerning urban design approaches and institutional framework – the policies adopted from the 1980s have clearly led to the improvement in the design and production of public spaces. This became possible by enhancing the land acquisition tools for ensuring public spaces mostly in urban expansion areas – nevertheless with questionable quality of the end-product –, the proliferation of architectural competitions on public spaces redevelopment, as well as the implementation of mostly *ad hoc* and fragmented projects for enhancing existing public spaces (pedestrian streets in central commercial zones, redevelopment of squares etc.). The latter had a complementary role along special events (Cultural Capital of Europe, Olympic Games of 2004), in the framework of which a restricted number of such projects were integrated in wider urban strategies (Archaeological Walkings in Thessaloniki, Unification of the Archaeological Sites of Athens). Although the number of public spaces redevelopment projects has been growing, especially from the mid-1990s, they have been commented as actually unable to induce a general improvement in the quantity and quality of public spaces in Greek cities [21].

Being part of the wider research project *Social impact of urban design for the sustainable development of cities* conducted by the National Centre for Social Research (EKKE) [22], this paper focuses on the study of four central squares in the city of Athens, that is Omonoia, Kotzia, Varvakeios and Monastiraki squares, aiming to present, assess and discuss the social and spatial effects of their redevelopment projects. The four squares constitute one case study among the five ones examined within the research project.

2. BASIC FEATURES OF THE PUBLIC SPACE URBAN DESIGN PROJECTS UNDER STUDY AND METHODOLOGICAL APPROACH

The four squares under study form an important physical and functional complex of lively public spaces with a dominant commercial character located in the heart of Athens. They are within a diversified urban environment characterised by strong bonds with the old town, the 19th century city and the urban fabric of the 1960s. This area faces great environmental and social challenges that have been strengthened after the burst of the economic crisis in 2008. The squares have been redesigned in the period 1990s-2000s, interrelating different design and implementation procedures (Table 1), and reflecting diverse views for the urban renewal of each square and its surrounding area in reference to particular spatial and social re-considerations. In fact, these redevelopment projects are indicative examples of the two characteristic aspects of the urban projects in Greece (see also [23]): (a) small scale interventions with the application of both formal/institutionalised and informal/non institutionalised procedures, and (b) large scale interventions, either being flagship projects or connected to a broader urban strategy.

The redevelopment projects of the squares Varvakeios and Kotzia constitute revealing examples of the fragmentary public space renewal projects of the 1980s, directly related to the intention of the municipality to solve the parking problem in the city centre by creating a number of parking garages under unbuilt lots and squares. Varvakeios Square, opposite to Athens Municipal Market, was constructed at the end of the 1980s, in the form of a multi-level public space, which contains an underground parking, ground-floor shops (vegetable market) and an elevated square-park on the roof. Before the Olympic Games, the open spaces were redesigned, mainly introducing new green spaces as well as recreational and cultural uses. However, the redevelopment of the square was soon proved to be problematic and a new upgrading project has been recently launched focusing on the overall regeneration of the Municipal Market area. The present form of Kotzia Square is the result of two independent urban projects: the construction of the underground parking (1994-96) and the redevelopment of the square (1998-2000), the implementation of which was eventually included in the wider regeneration program of the historical centre of Athens. The integration of the archaeological findings in the northeast corner of the square that came to light between 1985-88, the treatment of the square as a whole entity and its simple layout in terms of urban equipment, gave the square the characteristics of a space of passage, movement and sitting of the passers-by, enabling it at the same time to be used for social, commercial, political and other events [24, 25].

The character of the Kotzia and Varvakeios squares gained in significance with the decision to redevelop the Omonoia and Monastiraki squares as well as Athina Street, the vertical historical axis connecting the four squares, in the framework of the Unification of the Archaeological Sites of Athens program. This program was an innovative urban project with a general reach and extensive impact on the urban tissue, as it involved a much larger number of urban interventions than the ones actually implemented [24]. Omonoia Square was redeveloped within the collaboration framework of several public agents (ex-Ministry of Environment, Planning and Public Works, ATTIKO METRO SA, Unification of the Archaeological Sites of Athens SA (EAHA S.A.), ex-General Secretariat for Public Works and Athens Urban Transport Organisation) to upgrade the historic centre of the city. The present form of the square resulted from the implementation of the first prize in the architectural competition proclaimed by EAHA SA in 1998, in view of the Olympic Games, as well as from the subsequent *ad hoc* additions and alterations realised by some of the involved public agents during 2004 - 2012. The redesign of the traffic flows around the square, proposed by ATTIKO METRO SA, resulted in the provision of more space to the pedestrians, transforming the square from a primarily node of convergence of road axes into a square of mainly passage, but also short-time sitting of the passers-by. Fragmentary and *ad hoc* subsequent additions have altered not only the intentions of the designers and the character of the square, but also the aesthetics of this lively, crowded public space [24, 25]. The redevelopment of Monastiraki Square is also the result of a coordinated effort between different public agents, as it was initiated by the Ministry of Culture and the ex-Ministry of Environment, Planning and Public Works and completed by EAHA SA). The square was delivered to the public in 2008 and its form resulted from the realisation of the first prize in the architectural competition proclaimed by EAHA SA in 1998, after significant modifications provoked by the metro works. The key redevelopment elements of this vital and busy public space-passage and meeting point, which encourage spontaneous performances and events are: the lowering of the square level in relation to the commercial busy axis of Ermou Street; the creation of a single, flat, multi-coloured mosaic surface that symbolises the continuous flow of pedestrians; the integration and enhancement of the historical monuments and archaeological findings that came to light during the construction of the metro; and the lack of excessive urban equipment. Thus, a multifunctional and flexible public space was created according to the intention of the designers [24, 25].

Concerning the four central squares redevelopment projects, the investigation focused on: (a) the socio-demographic identification of the surrounding areas, (b) the land use changes before and after their implementation, (c) the commerciality of the redesigned public spaces through the business adaptation, (d) the necessity, objectives and social acceptance of the projects through the analysis of the political and scientific discourse. Thereafter, the main findings derived from the above-mentioned methodological tools are briefly developed.

Table 1. Basic features of the four squares redesign projects, adapted from [24, 25]

SQUARE	PROJECT	CONCEPTION AND IMPLEMENTATION
	Main components Reach of the project	Procedures Period Contracting authority/ies
Varvakeios	Construction of underground parking Redevelopment of the square in two levels (ground floor shops + square-park on the roof) 2nd redevelopment of the square/introduction of cultural and recreational activities (before the Olympic Games)	Architectural competition (not concluded) Assignment of the project to external consultants Contracting the realisation to a construction company Assignment of the 2 nd redevelopment project to external consultants Implementation of the refurbishing project by MA (technical service)
	Supralocal / metropolitan	1981-2002 MA**
Kotzia	Construction of underground parking Redevelopment of the square Pedestrianisation of the streets in the north and south of the square and the ones ending up in the middle of its north and south side (Kratinou, Efpolidos, Apellou, Streit) Integration of the archaeological findings and the entrances-exits in the parking garage	Parking construction (not concluded because of the archaeological findings) Contracting the realisation of the parking to a construction company+ architectural competition for the square redevelopment (not concluded) Assignment of the redevelopment project to external consultants Contracting the realisation of the square redevelopment to a construction company
	Supralocal / metropolitan	1984-2000 YPEHODE** MA
Omonoia	Redevelopment of the square Upgrading of the surrounding building facades Integration of the metro airways	Traffic study (ATTIKO METRO SA) Architectural competition for the square redevelopment Implementation of the 1 st prize with major modifications Fragmentary <i>ad hoc</i> additions decided by YPEHODE, MA and EAHA SA
	Supralocal / metropolitan	1998-2004 EAHA SA**
Monastiraki	Redevelopment of the square Upgrading of the surrounding building facades Integration of the archaeological findings and the metro airways	Architectural competition for the square redevelopment Implementation of the 1 st prize with significant modifications
	Supralocal / metropolitan	1998-2008 EAHA SA

3. MAIN FINDINGS AND DISCUSSION

3.1 Socio-demographic identification of the four squares surrounding areas [26]

Critical factors for the integration of a renewed urban space in the surrounding area, alongside its general functional and symbolic entity within the city, are the identity of the spatial unity to which the renewed space belongs as well as the identity of its social, urban and natural environment. These identities attribute the importance of the renewed space within the urban fabric as a significant place in the city [27, p.43].

The object of this specific work is the exploration on basis of census data (panorama.statistics.gr) and the elaboration of a methodology based on an algorithmic application and descriptive statistics, in order to find and analyse the socio-demographic characteristics of the surrounding areas, *as a whole*, of a set of public open spaces in the wider area of Athens selected as the five case studies of the project [23]. Basing on this methodology, the surrounding areas of all case studies have been structured into a partition of spatial units with similar internal socio-demographic characteristics, and dissimilar characteristics to each other. These spatial units are considered of second-order as they group the first-order spatial units (shown by the letters A and B on the map of the Figure 1) and have arisen from the clustering by the K-means algorithm. So, the surrounding area of the four squares presented here, structured within the second-order spatial units, or groups, 1, 5, 8, and 9 represented in the figure 1, 2 (while the whole of the surrounding areas of all case studies of the project is structured within ten groups in total) have specific socio-demographic characteristics as it follows.

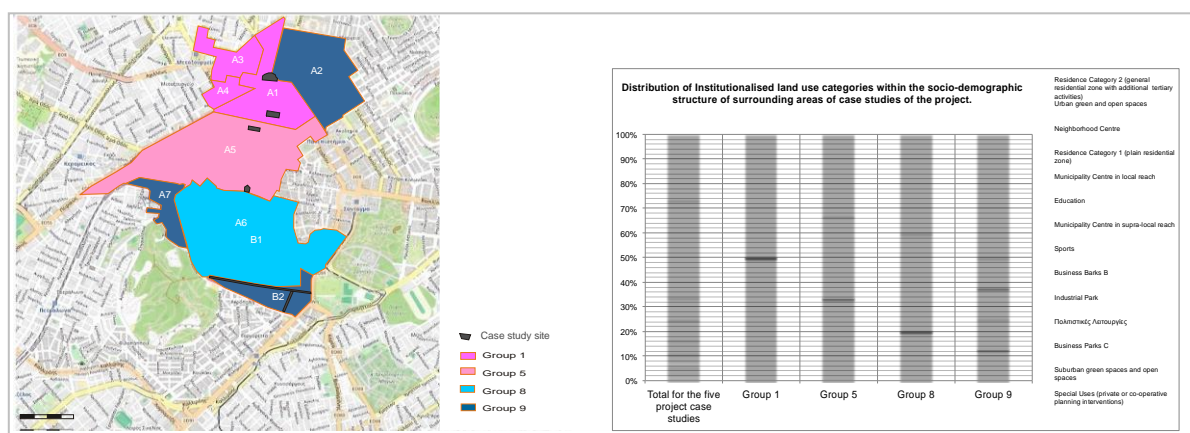


Figure 1, 2. Map of the surrounding area of the case study A (comprising the four open spaces Omonoia-Kotzia-Varvakeios-Monastiraki, and labelled with A) (left) and distribution of main institutionalised land use categories within socio-demographic structuring of this surrounding area compared to the whole of surrounding areas of all case studies of the project (right) [26]

Group 1 (A1, A3, A4), which includes two of the four squares (Omonoia and Kotzia), manifesting a predominant supra-local city centre land uses as it is situated in the heart of the city, presents a profile of very strong and clear characteristics. In particular, it has a gendered (male) and globalised synthesis, with people of the lowest level of education within all case studies of the project, unmarried, with blue collar professions, which are however economically active, reside in apartment blocks built during the period 1961-1980 and belong to households with numerous members. Group 5 (A5), which includes the other two squares (Varvakeios and Monastiraki), presents, like the first group but to a lesser extent, a gendered (male) synthesis. Its composition is also mixed in terms of educational level, with a strong presence of both educated and non-educated individuals, while it includes, again as the first group, a high percentage of unmarried, economically active, non-Greek citizens of low professional skills. This group has high rates of adults aged between 25 and 54, with the highest percentage among the 35-44 age group. Like the first group, residences are in majority apartment buildings of the 1961-1980 period. Like the first group, the spatial unit of this group is located in the heart of the historical city centre and includes the edges of the

commercial centre towards Piraeus, Psyrri and Kerameikos. Its main land uses are residence, urban green and open public spaces zone and supra-local/metropolitan centre. Group 9 (A2, A7, B2) is characterised by the presence of middle social strata and presents the older age composition among the groups, with the more than 75 years old having the highest rate, and, on the other hand, the lowest percentage of men. Households are largely incomplete and the educational level is high as high rates of people with graduate and postgraduate degrees are recorded. The ninth group's spatial unity includes three poles perpendicular to the area of the four central squares. The north-eastern pole, adjacent to Omonoia square, is part of the city's commercial centre and manifests the functions of a supra-local city centre. The western pole includes Thissio and the Observatory, with uses of general residence, urban green and open public spaces and local centre. The southern pole includes the pedestrian walkways of D. Areopagitou and Makrygianni streets leading to Philopappou, while its main uses are those of supra-local cultural functions and general residence with relevant uses among which educational activities.

3.2 Land use changes before and after the redevelopment projects [28]

The empirical investigation of land uses change is based on the comparison of land uses during the period 1995-2016. For 1995, that is the year before the implementation of the squares' redevelopment projects, the land use data are extracted from the on-site research made by ATTIKO METRO S.A. For 2016, that is the year after the implementation of the projects, data are derived from an on-field survey that focused on a thorough recording of land uses in two levels of the city's space: a) the ground floor of the buildings and b) the set of the other floors of buildings. Land uses are classified into specific categories according to Law 4269/2014 (Chapter B) and the prevailing land use for each building (corresponding to a plot) is presented in maps (Figures 3, 4). The specific categories are grouped into general categories so that they meet the grouping made by ATTIKO METRO S.A. Each category of land use is expressed as a percentage in the total of land uses and the findings are presented in Table 2. The recording of land uses focused on the surrounding areas of the squares under study as they are delimited in the following maps.

Concerning the Omonoia-Kotzia-Varvakeios squares area, a basic characteristic of its general land uses changes during the period 1995-2016 is the reduction of central (city-level) services (hyper-local level retail, public administration, offices, mixed uses) and the subsequent increase in special uses, in other words mainly abandoned (and very rarely under construction) buildings and no-use plots. Similar are the trends in Monastiraki square area. The spatial organisation of specific land uses is presented in Figures 3, 4. In the case of Omonoia-Kotzia-Varvakeios squares' surrounding area the de-investment trends are generic since there are scattered abandoned buildings. On the contrary, in the case of Monastiraki square the distribution of special land uses is unequal, since abandoned buildings are located in the north of the central commercial Ermou road and focal areas in the periphery of the study area (Table 2).

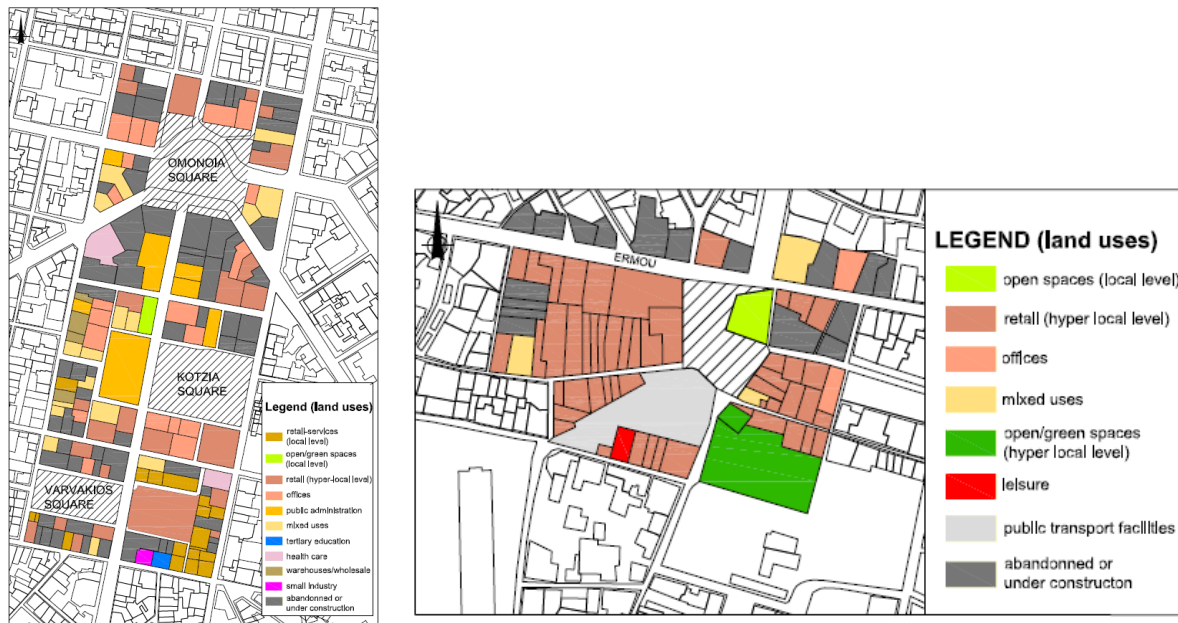
Table 2. General land uses (%) in the surrounding areas of Omonoia, Kotzia, Varvakeios, Monastiraki squares, 1995, 2016 [28]

	OMONIOIA		KOTZIA		VARVAKIOS		MONASTIRAKI	
Land uses	1995	2016	1995	2016	1995*	2016	1995	2016
Residence	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%
Local level services	0.0%	0.0%	11.4%	2.2%	-	34.0%	1.3%	2.6%
Central (city-level) services	94.4%	50.0%	81.8%	56.5%	-	22.6%	94.7%	72.4%
Social Infrastructure / Institutions	1.9%	1.9%	0.0%	0.0%	-	3.8%	0.0%	0.0%
Culture	0.0%	0.0%	2.3%	0.0%	-	0.0%	0.0%	1.3%
Freight	0.0%	0.0%	2.3%	8.7%	-	0.0%	1.3%	0.0%
Small industry	0.0%	0.0%	0.0%	0.0%	-	1.9%	0.0%	0.0%
Transport	3.7%	0.0%	0.0%	0.0%	-	0.0%	1.3%	1.3%
Special uses	0.0%	48.1%	2.3%	32.6%	-	37.7%	1.3%	22.4%

* Attiko Metro S.A. did not provide appropriate data for this year

A more thorough analysis of the specific land uses in the two levels of the city provides interesting findings for the impact of urban renewal projects on the identity of the study areas. Concerning the Omonoia-Kotzia-Varvakeios squares' surrounding area, on the level of ground floor of the buildings, the dominant land uses are retail (58.72%), abandoned buildings (19.57%) and restoration (9.54%). In short, although the area is characterised by strong de-investment trends, it still maintains its strong commercial character. On the level of the set of the other floors of buildings, almost half of the buildings' surface (48.0%) is characterised abandoned, highlighting the social and economic degradation of this area. It is obvious that ground floor spaces are benefited by the central area's function as a passage place of a great number of different type of users (employees, consumers, tourists etc.), contrary to the spaces in the other floors that seem dissociated from the activities taking place in the city ground level. With regard to Monastiraki square's surrounding area, retail (69,3%) and restoration (15,3%) are the prevailing uses on the level of the ground floor of buildings, whereas underused spaces are significantly limited (8,7%) in relation to Omonoia-Kotzia-Varvakeios squares area. This could be explained by the more tourist identity and the greater attractiveness of the area as a result of its inherent features (cultural place of hyper-local reach, easy accessibility, being in-the-between district of Plaka and Commercial Triangle). In general, even though the abandoned spaces in the other floors of buildings have a high percentage (47,8%), the Monastiraki square area does not show the general degrading image that the other central squares present.

In short, taking into account the empirical investigation it can be deduced that there are two crucial factors that determine the impact of urban design project in land uses and consequently, the urban regeneration of an area. First, the existence of residence can multiply the benefits from urban regeneration and enhance urban sustainability in the direction of mixed land uses. On the other hand, the absence of housing (<1%) interacts with the existing urban crises (environmental, economic, social), intensifying the urban degradation tendencies of the area. Second, the existence of a clear vision to give a specific identity to the urban redevelopment area and not simply integrate this area into a wider strategy. A typical example is the design of Omonoia square. The lack of a clear strategy capable of mitigating chronic stresses only temporarily contributed to the 'revival' of the area.

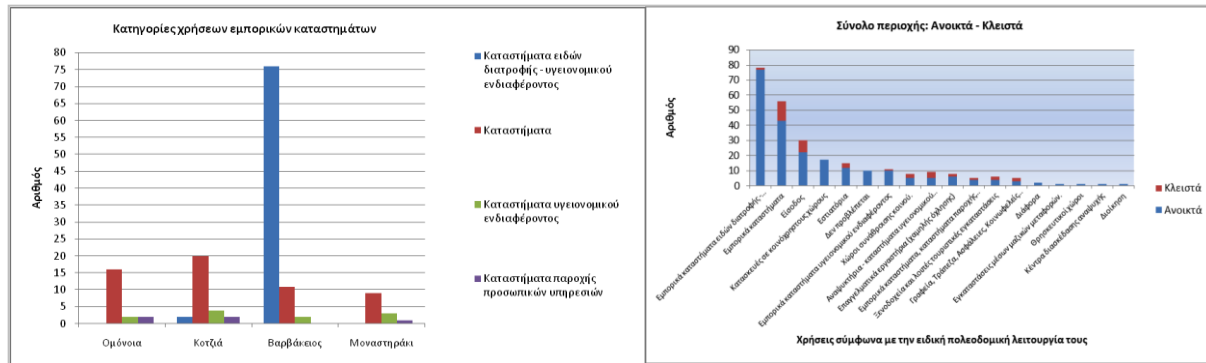


Figures 3, 4. Spatial organisation of specific land uses in the surrounding area of Omonia-Kotzia-Varvakeios squares (left) and Monastiraki square (right) [28].

3.3 Business adaptations: the commercial character of the four squares after the redevelopment projects [25]

The methodology is based on the precise recording of all ground floor spaces of the buildings located in the perimeter of the four squares under study. All records were categorised according to their specific land use categories as defined by the Greek town planning legislation. The aim was to assess the degree and type of commerciality of the four central squares of Athens after the redevelopment projects.

The specific land use category “stores” with 150 records, out of a total of 289 in the four squares, constitutes the most popular one (51.90%), while the second in number category is the use “restaurants” with a percentage of 5.79%, with all the rest presenting lower percentages. Concerning the category “stores”, this includes the sub-categories: “grocery stores”, which presents the highest percentage (52%), simple “shops” (37.33%), “food and drink stores” (7.33 %) and “personal services” (3.33%). An interesting finding resulting from the analysis of the land use “stores” in the ground level is that Omonia and Kotzia squares present a similar type of commerciality, since in these squares a greater pluralism in the various kinds of stores is recorded, as opposed to Varvakeios square where the category “stores” is almost exclusively limited to the kind “grocery stores”, with most of them being greengrocer’s or other types of food sale shops. In Monastiraki Square the “stores” seem oriented to serving visitors of the commercial city centre mainly for recreation or tourism (fig. 5). Therefore, the ground floor uses seem to be largely matched with the specific character and profile of each square, in the co-shaping of which, along with other factors, have contributed decisively. Indicative for the present situation mainly reflecting the impact of the economic crisis is also the recording of open and closed “stores” (fig. 6).



Figures 5, 6. Sub-categories of the specific land use category “stores” by square (left) and open and closed ground floor spaces by land use category in all four squares (right) [25]

The distribution and type of outdoor commerce is also interesting to examine. In particular, the type of outdoor commerce developed and recorded in the four squares partly determines the general characteristics of each square, as these are shaped by the everyday habits of the passers-by, who mainly constitute the clientele of the street merchants. In fact, the street merchants of Kotzia Square seem to trade products related to the type of commerce developed in Eolou Street, in which their benches are located. On the contrary, in Monastiraki Square outdoor commerce is mainly addressed to passers-by users of the metro but also to tourists and visitors of the square. In the other two squares, namely Omonoia and Varvakeios squares, it seems that there is no interest in this activity.

Land use changes were also investigated based on data obtained from the questionnaire survey addressed to professionals established in the four squares areas. The previous (before the redevelopment project) and current use, as recorded in the questionnaire, were represented in tables for each square. The evaluation of the results did not show any significant shift from one specific category of land use to another, except in the case of Monastiraki Square. Thus, in Omonoia and Kotzia squares there are isolated cases of land use change mostly of the same category, and in Varvakeios Square in all cases the previous and current use is of the same category, that is “grocery stores”. On the other hand, in Monastiraki square, there is a change from the use “stores” mainly towards the use “cafes and restaurants”, which could be interpreted as an adaptation of urban land uses in the current situation as defined by the everyday life of the square.

3.4 Political and scientific discourse: necessity, objectives and social acceptance of the redevelopment projects [24]

The analysis of political and scientific discourse aims to explore issues related to the necessity, objectives and social acceptance of the urban projects under study. It was based: (a) on secondary and primary sources (articles, published interviews, archival material etc.) and (b) on semi-structured interviews addressed to people that have a responsible position in the relevant public agents of the squares redevelopment projects design and implementation (for more details see [23]).

The objectives, the character and the expected results of the redevelopment projects are differentiated and evolve in correspondence with the nature of the problems, as well as the evolution of the approaches on urban interventions. The earlier interventions at Kotzia and Varvakeios squares attempt in the first place to resolve, as mentioned above, the practical issue of the lack of parking in the city centre, but at the same time they aim at: the creation of

public spaces that could contribute to the social life of the neighbourhood and the city, the improvement of the quality of life, the enhancement of the archaeological findings or/and the listed surrounding buildings, as well as the provision of green spaces. More specifically, concerning the Kotzia Square which was excavated at that time due to the archaeological research, one of the main objectives of the Municipality was to limit the uncontrolled use of the space and the delinquent activities taking place by marginal groups. Regarding the redevelopment projects of the Omonoia and Monastiraki squares, the main objectives on the part of EAHA SA, were: the regain and enhancement of the historic city (historical and cultural value), the enforcement of the place identity, the functional improvement of the public space with emphasis on facilitating pedestrian movement and sitting, the aesthetic upgrading of the public space and the integration of the metro works, as well as the aesthetic upgrading of the surrounding building stock and monuments.

Although the objectives and, in some cases, the general character of the redevelopment projects are exposed in a clear and often extensive manner, their necessity and, in particular, its social dimension is not explicitly stated, nor are the aims of the interventions in the social level. That is, in the rhetoric of the projects, the resolution of issues related to social inequality and exclusion is only marginally raised. However, the social dimensions of the necessity of the projects somehow exist in the reasoning of the public agents and designers. Thus, the intention to reinforce the use of the squares as places of circulation and meeting of the citizens and deal with the social problems of the squares is apparent. Moreover, it is interesting to mention that in the case of Omonoia Square the strengthening of the emotional relationship of the citizens with this specific place constitutes one of the project objectives. The second redevelopment of Varvakeios Square, which aimed at creating an ensemble of spaces of cultural and recreational activities together with sitting and green spaces for the overall upgrading of the square surrounding area, was precisely derived from the need to solve the social problems created by its original design. As part of this redevelopment, the issue of the public space accessibility, in particular by people with disabilities, is also made clear.

In the framework of the research, the integration into a wider urban strategy for the successful outcome of an urban intervention and the multiplication of its positive effects has emerged as a commonly accepted need and goal of urban projects, regardless of their type or scale. Regarding, in particular, the public open and green spaces, their networking and unification at neighbourhood, district and city level so as to maximise their accessibility and the environmental benefits arises as an important tool for the overall upgrading of the urban space, especially in the context of the discourse on urban green infrastructure.

As regards the social acceptance of urban design interventions – both of the large-scale ones drastically transforming the urban environment and the ones of local reach or even of street-scale – it is directly linked to their positive spatial, socio-economic and environmental effects, as well as the way urban transformations evolve over time. It is also decisively related to the degree of co-formulation of urban projects, involving local and civil society in their design and implementation process. Besides, social acceptance has a significant impact on the use of the redeveloped spaces. In Greece, however, both these two dimensions have been systematically and diachronically underestimated and/or ignored by formal spatial planning. In the case of the four squares, the interviewees point out the lack of studies exploring the impact of the urban projects under study before and after their design and implementation. Thus, the identification of the effects, especially the social ones, as well as of the “benefiting” groups, was simply based on the experience and personal judgment of the interviewees. The most important of the social impact assessment criteria reported were: visiting of the space at

different times of the day; attracting users of different profile; restoring residence use together with social mixing; aesthetic, functional and environmental upgrading of the urban space; increasing land values; land use changes; job creation during the implementation; tourism development. At the same time, the lack of know-how and effective framework of consultation and participation process was confirmed. It is worth noting that only in one of the cases under study there was a citizens' participation in the decision making process for the redesign of the public space; it actually concerns the forthcoming third redevelopment project of Varvakeios Square. However, all interviewees argue that the acceptance of the projects by the citizens was positive, although they point out significant problems in the use of the redeveloped squares - mostly delinquent behaviours and lack of respect for the public space resulting in its misuse - as well as in their maintenance. It is therefore vital to establish a framework to evaluate, with qualitative and quantitative methods, the social impact and acceptance of urban interventions, *ex ante* and *ex post*, as well as to institutionalise co-formulating procedures for urban interventions, with the aim of maximising social consensus and acceptance.

4. CONCLUSIONS

The case of the four squares is indicative of the diversity that exists between the various public spaces. Nevertheless, they form a set of significant places within a wider area which includes their surrounding areas, the profile of which presents particularities and diversities that contribute to the social impact of this area as a whole. Also, as the character of each square has been shaped over time by historical, social, economic and urban events, which provided each square its own particular characteristics, a spatial-symbolic aspect may be pointed out here. Of the four squares, Omonoia and Varvakeios are characterised, in a more intensive way, by their special symbolic connotations relative however to their functional ones, as significant "places" of the city, which are not precisely defined in terms of their spatial delimitations but mainly in terms of their actual use. Concerning Omonoia Square is indicative that attracts, either as a traffic junction or in its current form, excessively, in relation to its size or the different form that had in the past, the interest and attention of the public, in whose consciousness it has been recorded as a square-symbol, identified with Athens and its functional centre. In Varvakeios Square, the "place" is identified with the central Athens Municipal Market, which is dynamically imposed on the space, its importance and use, so as to be hard to distinguish today if the square constitutes itself a part of the Market or a Market square with its own dynamic and use.

The study of the four squares revealed a number of key elements for a more likely to be successful public space redevelopment with wider impact on urban sustainability: the methodological approach and study of the socio-demographic profile of the surrounding area as well as of the character of the public space, so as the integration in the local social tissue to be taken into consideration in terms of the involvement of the everyday life of the local inhabitants with the space under redevelopment; the recording and analysis of spatial and precise land use changes in relation to the social as well as the cultural and economic effects before during and after the project implementation; the consideration at the designing level of the continuity and accessibility of the public space and its relation and connectivity to other public spaces within the urban fabric; the integration of the redevelopment project into a broader urban strategy as well as the configuration of a clear vision about the new character of

the redesigned public space; the co-formulation of the urban interventions by the local and civil society involvement.

In this context, the important factors that prevented the regeneration of the wider area of the four squares redevelopment projects, could be summarised as follows: the partial implementation of certain projects and land use regulations included in the broader urban strategy promoted by the Unification of the Archaeological Sites of Athens program; the modifications of the urban design projects during their implementation phase which resulted to a confusion about the new character of the squares; the failure of adequate maintenance as well the subsequent additions and alterations; and especially the lack of an established framework to study the social and spatial impact of the urban projects before, during and after their implementation. Besides, the current economic and fiscal crisis has further undermined the goals and expected outcomes of the urban design projects and, in general, the urban sustainability of the area.

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