# 5. The regeneration of Lycabettus Hill

## An example of resilience planning

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#### **Abstract**

Urban areas increasingly have to deal with systemic transitions in response to climate change, such as adaptation for extreme precipitation and heat, which require interventions to mitigate and adapt. In the case of Athens, since 2010, these challenges have been dealt with in a context of urban crisis and austerity governance, which exacerbated available resources for the management of public spaces and green areas. In response to these challenges, the municipal administration of Athens of 2010-2018 has engaged in innovative urban initiatives and formulated strategies for promoting urban resilience (CITY OF ATHENS 2017; CITY OF ATHENS 2018). A key component of these initiatives was creating synergies with social stakeholders and promoting participation and collaborative action. The Program for the Regeneration and Activation of Lycabettus Hill initiated by the Municipality in 2018 assumes all the above characteristics since it involved the collaboration of two universities, the Municipality as well as numerous local and international experts and engaged more than 200 stakeholders with support from the 100Resilient Cities network that Athens forms part of. The program focused on issues of adaptation to climate change, mobility, sustainable environmental management and ecological design for Athens' major touristic landmark and urban forest. The text presents the rationale of the strategy developed by the National Technical University of Athens.

Setting the problematic of resilience planning in the case of Lycabettus Hill The hills of Athens form an integral part of the identity of the urban landscape. Lycabettus, as the largest and most central hill, is the rival of the Acropolis, an emblematic touristic landmark and vital urban forest at the heart of the city. Over the last 15 years, the hill has been facing complex problems such as dealing with soil erosion due to increased intensity of precipitation, the decay of infrastructure and general abandonment. The call for a comprehensive strategy to revitalize and activate such an important urban resource is a unique opportunity for visionary and strategic planning. Rarely do we have the opportunity to touch upon the 'sacred' objects of the city that played a constitutional role in the formation of its particular identity. And such a venture inevitably involves dealing with important legacies, such as the city's history, collective memory and environmental capital, especially at a time of systemic transitions.



Fig. 1. View over Athens from the top of Lycabettus Hill (Church of Saint George) (own photo)

The public policy applied so far in Lycabettus has used almost exclusively the instrument of regulatory planning. The hill is thus covered by a framework of legal protection that prohibits virtually any action or intervention with potentially negative content. As designated green space in the statutory city plan, Lycabettus is also protected by forestry legislation that significantly restricts any alteration of the balance between hardscapes and

softscapes in great detail that extends to the use of materials. The same protection status also applies for the built structures. the most celebrated example being the open-air theatre that is a listed monument of recent architectural heritage with the Ministry of Culture. There is no doubt that the hill needs to be protected. However, trying to fix things as they are and preventing change is not sufficient to promote resilience. Firstly, an ecosystem that is in constant metabolism needs constant corrective interventions to keep it in balance. This applies both to natural processes, such as renewal of vegetation and dealing with the effects of soil erosion, as well as to anthropogenic related to maintenance of infrastructure, ensuring safety and providing services to visitors. Secondly, such an emblematic landmark in a touristic city like Athens demands innovative thinking. The renegotiation of a city's relationship with its past and future and the consequent redefinition of its identity happens at specific moments in its history as a result of a combination of specific political conditions and circumstances. Such a process cannot be designed and implemented within the narrow constraints of the regulatory framework. It is, in fact, a 'violent' change that puts things on a new trajectory that, once installed, becomes the new normality.

The image of well-known European cities that no one would dare to alter today has, in fact, resulted from successive such structural changes in the urban landscape that took place in different historical periods in response to specific demands as they arose at the time. Interventions such as the construction of the Gürtel Ring in Vienna, or the embankment of the Seine in 19th-century Paris, embody the element of visionary thinking and violent redefinition of the state of things in response to a new ideal (Choay 1969). This brought obviously irrevocable changes in the identity of the city. The experience of the practice of landscape architecture in countries where this is well-established, such as Spain, teaches us that landscape is not something "sacred" that we do not touch, but it is an essential object of design, often with the aim of restoring the past damages with today's better understanding of ecological processes and the value of cultural landscapes (Goula et al. 2012). Lycabettus is, after all, a typical example of a 'man-made' landscape.

Taking a brief look at the past, one can distinguish three characteristic episodes of strategic visioning and change, where the identity of Lycabettus and its relationship with the city have been redefined. The first is the period of Neoclassical Athens until early 20th century, in which Lycabettus was transformed from a pasture and a guarry used for the growing needs of construction into an urban forest (an "airy healing clinic" to use the words of Bayarian architect Ernest Ziller) and beloved promenade destination for the emerging bourgeois population seeking to escape the dusty streets of Athens (Kardamitsi-Adami 2006). The experience of the newly created urban forest was enjoyed mainly by the privileged residents of the city center and distinquished guests who accessed the hill by foot. The designation of the hill as green area whose ownership was taken over by the Municipality was anything but smooth with intense clashes with a multitude of private interests, such as the shepherds who wished to continue using the hill as grazing land, the owners of the guarry and the landowners in the periphery of the hill who wished to construct parts of it.

The second episode when the identity of Lycabettus is being redefined takes place in the post-War period with modernism, the cosmopolitan atmosphere of 1960s Athens and the promotion of tourism through the newly founded National Tourism Organization and the Athens Festival (Alsopos 2015). During this period. Lycabettus is transformed from a promenade destination of the bourgeoisie to a recognizable landmark of metropolitan importance. The changes on the hill are fueled by the enthusiasm and perseverance of charismatic public figures like actor Anna Synodinou and architect Takis Zenetos. This is the period that leaves a legacy to the hill its tourist infrastructure, namely the underground funicular that leads to the belvedere restaurant of St. George, the open-air theatre and the large outdoor parking that was created at the site of the former quarry, a symbol of the dominance of the private car, typical for the period. The first tourists arrive at Lycabettus to enjoy the view and the evening performances in the theatre begin, attracting a large number of visitors.



Fig. 2. View of the created forest of Lycabettus and the open-air theatre at the site of the former quarry (own photo)

The third episode refers to the present period with the explosion of tourist arrivals marking the exit from the crisis, the widespread of Airbnb rentals (BALAMPANIDIS et al. 2019) and the establishment of Athens as a year-round city-break destination that will be further enhanced by cruise boat tourism in the near future with the prospect of Piraeus becoming a home port. During this period, Athens' tourism product is being redefined through the various technological applications that promote personalized city discovery experiences, such as 'cultural walks', in ways that blur more than ever the boundaries between the experience of visitors and everyday life of regular residents (URRY & LARSEN 2011). These challenges are addressed in the frame of urban resilience, understood as a way of responding to increased natural threats and socio-economic pressures under conditions of limited available resources which call for mobilization of collaborative processes.

The research program undertaken by the National Technical University of Athens (2018) attempts to set up a strategic framework for short-term interventions as well as long-term planning goals embarking upon current conditions. The purpose is not so much to invent new elements, nor the holistic redesign of the hill on the basis of a 'masterplan', but rather highlighting

Lycabettus' essential features that have 'lost their edge' and repositioning them in the contemporary urban context through existing or newly created linkages. The proposed strategy is organized in 29 thematic fields that are presented in a series of diagrams. This text summarizes the main points in three sections. The first reexamine the relationship of the hill with the city of Athens and enhances the transitions from the city to the hill. The second explores the internal properties and potentials of the hill as revealed by site analysis by use of various techniques and mappings. The third engages in constructing a new narrative for Lycabettus in response to present conditions and challenges.

1. Evaluating the importance of the hill for the city of Athens (land use, accessibility and integration in the urban context)

The starting point of any attempt to formulate a strategic vision for Lycabettus embarks upon understanding its importance for the city of Athens. Lycabettus is what it is, primarily due to its location and its organic integration to the life of central Athens, which is structured through multi-layered physical, functional and mental connections.

The topographic feature of Lycabettus, due to its significant height and size, has played a decisive role in the urban structure of central Athens, both in terms of defining the urban grid and in influencing the socioeconomic character of the surrounding neighbourhoods. Hence, the presence of the hill has determined the layout of central arteries which also form the backbone of the public transport network. The regulation of traffic obviously affects the structure of land use due to the important metropolitan functions that are located along the main axes. These are not evenly distributed around the hill but rather are concentrated south-west along the Vassilisis Sofias and Panepistimiou avenues with Syntagma being the epicenter. From this point of view, it can be said that the hill is characterized by a "front" side that includes Kolonaki and Syntagma and a "rear" side which is formed by the neighbourhoods towards Alexandras Avenue.

Looking at the land use structure at a macro level, it is noted that the urban fabric around the hill presents a tripartite structure associated with the terrain. The flat parts along the big arteries, where most of the important city-level functions are

located, have the character of Central Business District As we move towards the direction of the hill, where the slope of the terrain increases, the typology of mixed-use, typical for Greek condominiums (polykatoikia), takes over with commercial uses in the ground floor, offices in the lower floors and housing in the upper floors. Finally, as we approach towards the hill perimeter, where the terrain becomes steeper, commercial uses are gradually diminishing and the character becomes purely residential. The zones in direct proximity to the hill, which have an excellent view, are typically occupied by higher income groups particularly towards the districts of Kolonaki. This spatial structure defines in general lines as well the differentiation of the social character of the neighbourhoods that surround the hill.

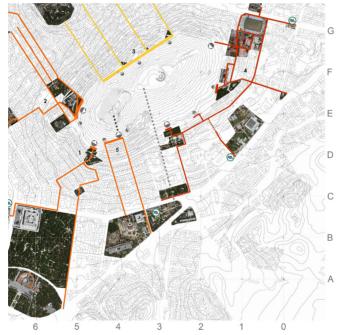


Fig. 3. Lycabettus connection to major urban landmarks and metro system (NTUA 2018)

A primary concern of the revitalization and activation strategy is identifying and reinforcing the hill's linkages to the surrounding urban context. This is attempted at two levels. At the macro level are identified the linkages of Lycabettus to key landmarks of Athens city center. At the micro-level, the interweavement

of Lycabettus with the daily practices of the local population is enhanced by increasing the interface between the hill and adjacent residential zones. At the perimeter of Lycabettus, there are twenty-one entrance points linked to the network of paths. Two of them serve the vehicular traffic, one is the existing funicular and the remaining eighteen are reserved for pedestrians. The proposals for improving connectivity focused on changing the character of the existing perimeter belt into a one-way road, thus freeing space for creating a walking and cycling corridor. The aim of the interventions is for the ring road to cease being a hard boundary, and becoming a promenade for the daily needs of locals, workers and visitors offering easy access to the hill at selected points (urban thresholds) (see Figure 4).

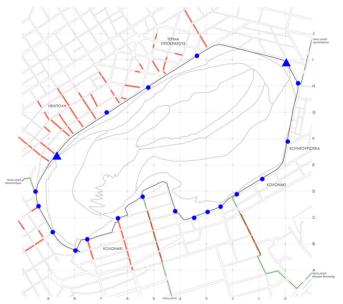


Fig. 4. Lycabettus entrances and pedestrian accessibility (NTUA 2018)

Besides local connectivity, the improvement of supra-local accessibility is also an important priority especially with regard to aspects of sustainability and resilience, as it is a determining factor for the type of activities that can be developed on the hill (from hiking to concerts), the potential users (locals or tourists) but also their expected numbers (from few visitors to large groups). It is also directly related to the question of redefining

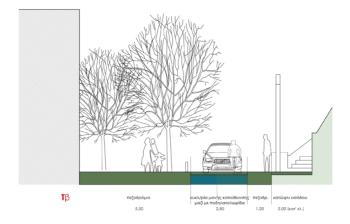


Fig. 5. Proposed interventions along the ring road of Lycabettus (NTUA 2018)  $\,$ 

the identity of the hill, given that accessibility is not just an operative means but an essential part of the overall visitor experience. Upon reconceiving the way of approaching the hill, the main goal is to promote multimodal accessibility given that Lycabettus does not have a single destination point, where visitors are heading to, but three. These points are accessible in different ways from different areas. The funicular, for example, serves well the peak of St. George from Kolonaki, but it is not convenient for accessing the theatre even less if one is coming from the metro network. In addition, the prospect of the open-air theatre becoming again operational after many years of abandonment creates new travel needs which affect the image and the function of the site in a variety of ways.

In the first phase of the research, the conditions of accessibility by means of public transport have been analyzed. Following from there, alternative scenarios were explored, taking into account functional parameters related to changes in vehicular circulation as well as qualitative ones related to the visitor experience. Specifically, two innovative design interventions have been proposed with regards to adaptation to climate change. The first one involves unsealing the asphalted surfaces of the parking at the top and converting the internal asphalted route into a pedestrian promenade, organically integrated with the

natural landscape. The second proposal introduces a new cable car connection that would provide access to the open-air theatre directly from the metro system (station Evangelismos), thus providing an eco-friendly alternative to car travel.



Fig. 6. Proposed cable-car connection to the open-air theatre from Evangelismos metro station (NTUA 2018)

2. Revealing territorial potentialities (topography, views, linkages, suitabilities)

An important parameter for the activation of Lycabettus is its capacity to host a variety of uses and activities. In the first phase of the research, investigations were carried out by means of field survey and web research that revealed through mappings the existence of a wide range of uses, as well as unexploited potential still. Activities fall in two categories, those that exhibit stable and organized operation linked to existing hard infrastructures and those that are spread across the hill for which no special infrastructure is required. The first category is concentrated mainly in the southwestern part of the hill, particularly at the peak of the church of Saint George and the open-air theatre where the highest number of tourists is noted.

The second category is scattered uses, spatially and temporally, with varying frequency and periodicity. The most widely spread activities, which refer almost exclusively to the residents of neighbouring areas, are jogging and walking (with or without pets). At the same time many other formal and informal activities are recorded, such as gymnastics, cycling, skateboard and roller-skating, amateur modelling, demonstration of motor skills (cars, motorcycles), picnic, parties and many more.

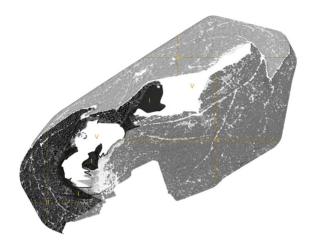


Fig. 7.Lycabettus User Zone Analysis (NTUA 2018)

On the hill take place also seasonal activities, such as annual ceremonies for national holidays and religious functions, sporting events (running, biking), but also unique events, such as outdoor artistic performances and caving. In the second phase of the research, a more systematic investigation of the spatial and temporal pattern of activities was carried out which revealed the way that the hill is used during different parts of the day and by whom. The main findings are summarized below:

- Some age and social groups are excluded (namely children and the elderly population as well as persons with mobility constraints).
- The two main user profiles (local residents and tourists) coexist in harmony and without conflicts.
- Most uses are low intensity referring to individuals or small groups. There is no infrastructure for large groups, such as concerts and events.
- Most uses present a spatial pattern of low complexity associated with single points.
- Most activities are related to recreation and nature-loving.
- The most frequent and widespread activities are: enjoyment of the view, running, walking pets, hiking, dining and organized tourist sightseeing.

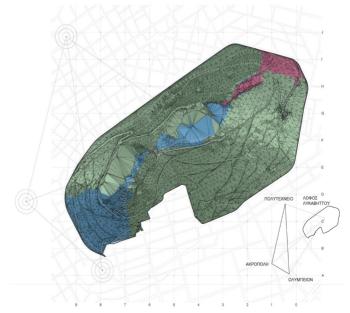
- The hill is used almost exclusively during the day.
- The main parameter constraining the spatial distribution of activities is the topography.
- The element that affects most activities directly or indirectly are the panoramic views.

Along with the mapping of activities, analyses of the hill morphology were carried out in order to identify the qualities that the topography itself provides. The results were used to explore emerging forms of spatial organization with the aim to tackle unexploited territorial potential. The following types of mappings were carried out:

**Slope analysis** through algorithmic calculations has led to the identification of areas that are suitable for different types of activities

Views analysis through isovists has made it possible to examine the hill as an active field of views, both externally and internally, and to classify the different views according to their formal characteristics.

**Path analysis** through space syntax revealed the level of integration and interconnection of the hill with the urban fabric enabling the forecasting of expected visitor traffic and recognition of spots that could be programmatically enhanced.



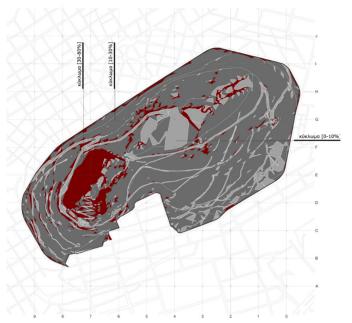


Fig. 8. Lycabettus slope and visibility analysis (NTUA 2018)

The findings of spatial and visibility analysis were used to formulate the proposal of spatial organization, which is structured upon a network of main routes (trails) and poles of activity. The network of main trails aims to improve the visitor experience and orientation as well as safety. The activity areas enable the reprogramming of space and organization of services and amenities with the aim to make their operation more sustainable. Three main service areas are planned linked with the presence of existing infrastructures, namely the restaurant and viewing platform at the peak of St. George, the new recreational pole of the theatre combined with a large belvedere park at the site of the former parking (so-called Athens Plaza) and a third linear zone situated on a natural balcony above the historical square of Dexameni which comprises the popular church of Aq. Isidoroi, the ex-military shelter proposed to be converted into an art venue and the reconstructed café of the Green Tent. Besides the main poles, a system of secondary ones referring to spontaneous and organized activities are organized as points (nodes), pocket activity areas (platforms) and larger zones (activity areas).

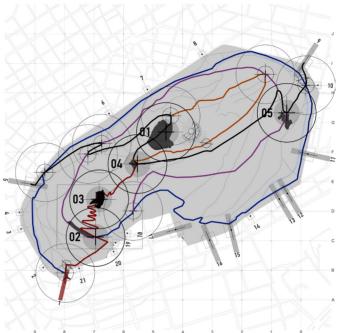


Fig. 9. Lycabettus proposed network of main promenades and poles of activity (NTUA 2018)

### 3. Constructing a new narrative about Lycabettus Hill: The Athens Eye

According to the Common Modern Greek Dictionary, visioning means "creating an idealized goal upon which hopes are focused or actions are pursued". Throughout the long duration of History (Braudel 1969), the rhetoric about visioning remains intense. From the pre-modernist visionaries, which the literature today re-examines as early social reformers in the sense of the Renaissance ideal, to the great Utopias of the Enlightenment, the pioneers of Modernism and the post-Modernist critiques and narratives, we reach the contemporary significations of the term. In the present conditions of sudden intercultural proximity. the discourse about cities and their visions articulates around the concept of identity. Realizing the term in the post-industrial environment of international trade, we can talk about branding. At the same time, the discussion focuses on the so-called iconic architecture, that is, the ability of architectural and urban design to produce not only narratives but also intelligible and understandable forms by all representations. In this context,

<sup>&</sup>lt;sup>1</sup>This section is based on the chapter "The Athens Eye: Reflection on the myth of Lycabettus" written by Myrto Kiourti (NTUA 2018)

the search for a new vision for Lycabettus is not only timely but imperative, and its construction presupposes an appropriate narrative and then its smart representation.

With this in mind, we compiled a narrative that could help to create a new vision for the hill. As is well known, one of the few planning regulations Greeks collectively complied with is the prohibition on building higher than the Acropolis. While the Acropolis rises about 70 meters above the city level, the height of Lycabettus is 110m. It is therefore fair to assume that as long as the international community conceives the Acropolis as the supreme icon of the values of Western civilization, namely Humanity and Democracy, Athens will never get in its centre any skyscrapers higher than Lycabettus. In this sense, Lycabettus can be conceived as the natural Alter Ego of the Eiffel Tower, the Empire State Building or the London Eye. Just as every big metropolis holds its own iconic buildings that offer spectacular views from up high, so does Athens, only here this takes the form of a hill.

The narrative that intends to re-introduce Lycabettus to the international community as the natural analogue of a skyscraper contains elements of visioning, since, as will be shown below, such an ideology responds in a visionary way to three fundamental problematics about the city, namely the negotiation of the city's relationship with history, politics and nature.

The first refers to the genesis of Lycabettus, which according to the ancient Greek legend resulted from Athena's love affair with Hephaestus. Reconceiving Lycabettus as a construction of the goddess of wisdom in the context of her unorthodox and conflicting love affair with the deformed god of technology is coordinated with modern anthropological and psychoanalytical interpretations of the ancient Greek world regarding the symbols of the technique, the intellect and creation and the role that Man regards them. At the same time, such a narrative proposes to a wider audience, a graceful yet subconsciously relieving resolution of one of the most powerful latent phobias that intensify in modern societies, namely the anxiety and ambiguity

towards a dynamic, yet uncontrolled technology. Lycabettus' narrative offers thus a comforting version of the future: wisdom and technology together can regenerate the City of Humanity. The debate over the intertwining of a city's identity with so-called iconic buildings has a strong political tone today. In the quest for various cities to gain a place on the global map of tourism and cultural industry by buying buildings with high cultural value, such as Bilbao with Gehry's Guggenheim, Dubai with Burj Khalifa of Skidmore, Owings & Merrill or Beijing with the stadium of Herzog and De Meuron, criticism today focuses not so much on the form but also on the ownership status (Kaika 2010). In the case of Lycabettus, it can be argued that the hill-skyscraper, both as a reality and as an ideology, does not belong to a giant corporation or a tycoon but to the municipality (demos), that is, to all.

At the same time, Lycabettus, as an oversized collective property, highlights a politically interesting interpretation of the constitution of Athenian Urbanism! (Pagonis 2018). The base of the hill is in fact colonized by buildings, the typical self-financed model of Greek polykatoikia (antiparochi). This idiosyncratic urban development condition that is based on the dispersal of land rent and subsequent fragmentation of land tenure establishes early massive democratization. Lycabettus as an emblem of the 'cumulative' mode of urban development (Mantouvalou 1995) offers thus, in tune with the voices of criticism, a democratic alternative to the privately owned iconic symbols of corporate identity and the skyscrapers of a contemporary monarchy.

In-between the built base of the hill and the peak observatory interferes the natural part of the Lycabettus. It is, in fact, a manmade nature, the result of a century-long struggle that Greek society has fought with itself. Green Lycabettus is thus a cultural conquest of modern Greece and could serve as an example and at the same time as motivation in the constant effort of self-discipline in order to establish a relationship with nature that is not hostile, competitive or destructive. In contemporary debates about sustainability and resilience which are dominated by ecological practices of unsealing paved surfaces or planting

roofs and facades with use of sophisticated technology aiming to reduce the effect of overheating, the Green Lycabettus articulates its own radical narrative of green architecture.

Combining the above, we resume that Athens acquires its own iconic skyscraper, which is ultra-modern because it was built by a woman, an ancient goddess, is entirely democratic, green and, against the symbols of contemporary oligarchy, it responds with a form of satirical criticism.

In 1336, Petrarch decided to climb Mount Ventoux. Upon descending, he wrote one of the constitutional texts of Modernity, where for the first time in the history of Western civilization, the experience of climbing a mountain was regarded as an opportunity for introspection (Cassirer et al. 1948). Today a new vision for Lycabettus is constructed by tracing a trail on its "body" that is both material and mental. Along with the interventions aiming at the revitalization and reactivation of the hill, there is also the need to adopt a new narrative capable of inspiring Athenians and the 'Friends of Athens' to reflect critically regarding the collective condition upon which the city was built and take action about the challenges of resilience and systemic adaptation that it faces.

#### Bibliography

- Alsopos, G., 2015: Tourism landscapes: Remaking Greece. The Greek participation in the 14th International Architecture Exhibition La Biennale di Venezia.
- BALAMPANIDIS, D., MALOUTAS, T., PAPATZANI, E. & PETTAS, D., 2019: Informal urban regeneration as a way out of the crisis? Airbnb in Athens and its effects on space and society, Urban Research & Practice ISSN: 1753-5069 (Print) 1753-5077.
- Braudel, F., 1993: Ecrits sur l'histoire. Paris, Flammarion: collection Science.
- Cassirer, E., Kristeller, P.O. & Randall Jr., J.H. (eds), 1948: The Renaissance Philosophy of Man. Chicago: University of Chicago Press.
- CITY OF ATHENS, 2017: Athens Resilience Strategy for 2030. Redefining the city. Athens.
- CITY OF ATHENS, 2018: Climate Action Plan. Part A: Mitigating Climate Change. Reducing Greenhouse Gas Emissions in the City of Athens, Part B: Climate Adaptation Strategy. Making Athens a Greener and Cooler City.
- Choay, F., 1969: The Modern City: Planning in the 19th Century, New York: George Braziller. Dictionary of Common Greek, Manolis Triantafyllidis Foundation, Institute of Contemporary Greek Studies, Thessaloniki: 1998, p. 973

- Goula, M., Pérez, P. & Spanou, I., 2012: Tour-scapes or how to convert mature tourism destinations to complex sustainable landscapes; the strategy of the second coast', Ara Journal of Tourism Research (2) 3, ISSN 1197-2520, 43-5.
- Kaika, M., 2010: Architecture and crisis: re-inventing the icon, re-imag(in)ing London and re-branding the City, Transactions of the Institute of British Geographers New Series 35 (4), 453-474.
- Kardamitsi-Adami, M., 2006: Classical Revival: The Architecture of Ernst Ziller 1837-1923. Athens: Melissa Publishing House.
- Mantouvalou, M., 1995: Urban land rent, land prices and processes of development of urban space I: Theoretical notes through the Greek experience, The Greek Review of Social Research 88, 33–59.
- NTUA (NATIONAL TECHNICAL UNIVERSITY ATHENS), 2018: Strategic Planning Framework and Priority Interventions for the Revitalization and Activation of Lycabettus Hill, Research Program undertaken by the School of Architecture (scientific responsible Thanos Pagonis) with support from John S. Latsis Public Benefit Foundation.
- Pagonis, T., 2018: Athenian Urbanism and Urban Resilience. In: Othengrafen, F. & Serraos, K. (eds.): Urban Resilience, Changing Economy and Social Trends: Coping with socio-economic consequences of the crisis in Athens, Greece. Hannover: LUH-NTUA, DAAD, 31-48.
- Petrarch, F., 1948: The Ascent of Mount Ventoux. In: Cassirer, E., Kristeller, P.O. & Randall Jr., J.H., (eds.), 1948: The Renaissance Philosophy of Man. Chicago: University of Chicago Press, 36-46.
- URRY, J. & LARSEN, J., 2011: The Tourist Gaze 3.0., Sage Publishing.