

Construction Regulations in Athens, 1833-1864: Creating a Metropolis

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After Greece's War of Independence, the country was declared an independent state in 1830 by the Protocol of London. It was during the reign of King Ludwig I of Bavaria's young son, Otto – who assumed the governance of the state after the assassination of Kapodistrias – that Athens was designated capital of the kingdom in 1833¹. The detailed processes leading to the selection of Athens as capital are not known, but the decision raised significant objections, as it had several rivals for the honour, including Nafplio, Corinth and Hermoupolis.

The redevelopment of the new capital was the product of a town planning policy built from the ground up. The fledgling kingdom established new institutions with new people², that completely changed conditions in the city. Over the long centuries of its history, Athens had developed with no planning whatsoever within the wall built during the later years of Ottoman rule and with an irregular road network. Together with the designation of Athens as capital, its first town plan was approved, which had been drawn up by the architects Stamatis Kleanthis and Eduard Schaubert³. This plan laid the new city out in the form of an arc (on the east, north and west) around the old town, which had been badly damaged during the war.

The new capital was built almost wholly on private land, by private initiative and with private capital. There was no public land in the area covered by the plan. Private ownership was the main factor in the growth of construction activity in the reign of Otto and his successor, George I. The state had minimal participation in ownership, a fact that was to have an impact on the city's urban structure. Given the lack of public land, the procedure for acquiring the property necessary to implement the plan made provision for the compulsory expropriation of private properties. To transfer the capital from Nafplio to Athens, the kingdom laid down conditions for the Athenian community, above all its acceptance of compulsory expropriation. The sites designated in the Kleanthis-Schaubert plan for buildings for public use were to be obtained by expropriation, with a pre-determined compensation for the owners. The areas provided for streets and squares were likewise to be obtained through expropriation, for which compensation was regulated on an

¹ Royal Decree (R.D.) 6 (18) July 1833, Government Gazette (GG) 26/1865.

² Regarding the urban transformation of the country in the XIX century, see A. Yerolympos, *Urban Transformations in the Balkans (1820-1920)*, Thessaloniki 1996; K. Kafkoula, N. Papamichos, V. Hastaoglou, *City plans in XIX century Greece* (in greek), Aristotle University of Thessaloniki (AUTH), Thessaloniki 1990; *Neoclassical city and Architecture. Proceedings of a Panhellenic Conference* (in greek), Thessaloniki 1984; *Modern Greek City. Ottoman legacies and the Greek State. Proceedings of an International History Symposium* (in greek), Athens 1985; D. Philippides, *Neoclassical Cities in Greece (1830-1920)* (in greek) Athens 2007; E. Bastea, *The creation of Modern Athens, Planning the Myth*, Cambridge 2000; D. Monioudi-Gavala, *Urban Planning in the Greek State 1833-1890*, Agrinio 2012.

³ Architects Kleanthis and Schaubert arrived in Athens in 1831 and began working on their plan. The plan was approved by R.D. 6 (18) 1833, GG 26/1865.

individual case basis. In the section of the old town described by Kleanthis and Schaubert as a region of archaeological excavations, lots were also expropriated, but with specified compensation. This regulation however was abolished by the Klenze plan that followed, owing to the state's inability to pay the owners' compensation. Owners of lots in the new city were obligated to build on their land within a period of six years after January of 1834⁴. A later decree ratified these provisions⁵.

The new capital consisted of the old town, with buildings as well as a significant number of ruins, and the new, as yet unconstructed city that surrounded it. Within a few decades, Athens witnessed intense construction activity and a significant increase in its population. The number of its inhabitants rose from 4.000 in 1831 to approximately 30.000 by 1850 (Table 1). Parallel to the rapidly growing population, the price of real estate skyrocketed, despite which there appear to have been no conflicts over the occupation and use of urban space.

Evolution of the City of Athens⁶

Year	1853	1856	1861	1870	1879	1889	1896
Population	30.590	30.969	41.298	44.510	65.499	110.262	123.001

Table 1. Growth of the Population of Athens in the second half of the XIX century.

Athens in the XIX century, in its redeveloped form as the nation's capital, manifested both similarities and differences in relation to other European cities. Some of the differences noted were as follows:

- In the Kleanthis-Schaubert plan and in those that followed, the old town was not separated from the new city by broad new thoroughfares, as was customary in European cities.
- The space occupied by the demolished Haseki wall was incorporated into the new city blocks.
- The legislation was drafted by the state rather than by provincial or municipal authorities. A characteristic effort was made in Otto's reign to keep state matters centrally controlled, especially in the highly sensitive realm of town planning and architecture.
- There was no legislated relationship between building height and street width, such as was in force under the corresponding European law as early as the XVIII century.
- In Greece in the XIX century, there were no special building regulations for every city, as there were in Germany. Instead regulations were instituted either for the state as a whole, or for Athens (or Hermoupolis), and were then extended throughout the country.

This was one of the main similarities with contemporary European town planning:

- Following Western models, Athens was organised to ensure order and hygiene, with straight streets of a constant width, squares distributed throughout the city, and public buildings on selected sites. The main feature of the new plan was to regularise the road network on a rectangular basis. This regularisation was first applied to the old town, selectively in the beginning, through construction of the main streets (that were given the ancient Greek names of Ermou, Athenas, and Aiolou) and then gradually, by building and straightening roads all over the city.

⁴ Otherwise, they were obliged to hand over their property, upon payment of its estimated value, or for eighty *lepta* per 64 sq cm to anyone who would build on it within a year.

⁵ R.D. 10 (22) Dec. 1833, GG 26/1865.

⁶ G. Dertilis, *History of the Greek State, 1830-1920* (in greek), Athens 2009, vol. II, p. 1054.

Construction Regulations in Athens, 1833-1864

The successive plans for Athens were those of Kleanthis-Schaubert in 1833 (figure 1), Klenze in 1834 (figure 2), Hoch in 1837, the committee in 1847, and many local plans: amendments in the old town and extensions to the new city. The state's aim was to implement urban plans. An effort was made to transfer the classical rationalism characteristic of European town planning to Athens and to Greece in general. This classical rationalism, with its straight lines, symmetry, perspective and organised network of roads and squares, subsequently evolved into ordinary regularity. This in turn facilitated the distribution of land, the immediate settlement of inhabitants and, above all, it signalled the country's modernisation and Europeanisation, thereby distancing it from its Ottoman past.

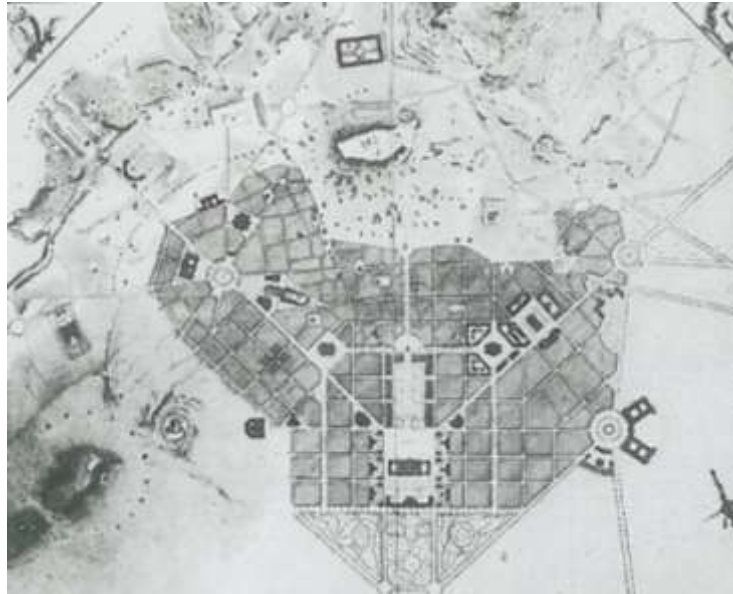


Figure 1. The plan by Kleanthis and Schaubert.

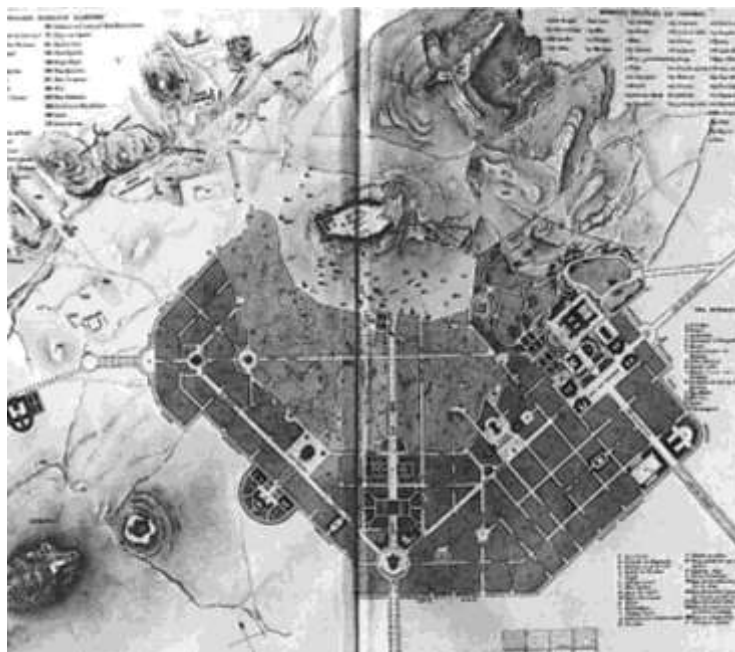


Figure 2. The plan by Klenze.

Such then were the intentions of the state, but what was the attitude of the public? Archival evidence bears witness to the division in Greek society. Implementation of the city plans had both supporters and critics. For example, publications in the same newspaper denounced, on the one hand, the “amputations” of buildings carried out in implementation of the city plans (the building and straightening of roads) and on the other, mocked the interventions of Klenze at the expense of the geometricality of the plans. According to the former view: “The Bavarian plans have made all buildings in the upper and lower town acute-angled, multi-angled, unstable and amputated”⁷. The latter view stated that: “The great Bavarian architect Klenze, in his few days studying Athens, has spoiled all the city streets and made it a true labyrinth; he was drawing crooked (not straight) lines even in Munich.” But the great sacrifices required from property owners (tying up their land for years until the state finally decided on the location of buildings for public use, and the meagre compensations that were delayed for long periods) enabled the city to acquire a road network with a geometric form. Straight construction lines were drawn, and streets with a constant width replaced the serpentine, irregular Ottoman network.

Regarding the regulation of construction matters, decrees were issued that covered the state as a whole (1833, 1835) as well as special decrees for Athens (1836). It should be pointed out that the general and special regulations were the same. As noted above, the special regulations for Athens were later extended to all Greek cities. The regulation of issues related to the construction of buildings in Athens and in other cities was uniform, with remarkable chronological continuity. It likewise extended to regions that were incorporated into the nation later (Ionian Islands 1864, part of Epirus, and Thessaly 1881), and remained, with minor supplements, until the 1920s.

No more than a small number of construction regulations were contained in royal decrees. Monitoring of private construction, which constituted part of the broader regulations of urban space, was rudimentary:

-They began with the 1833 decree⁸ on determining the penalties for violations of the municipal law regarding public hygiene, foodstuffs and buildings which applied to both the capital city and the country as a whole. It was one of the first decrees issued during Otto’s reign and preceded all decrees regarding the transfer of the capital to Athens. Was it accidental that a decree stipulating penalties for violations of municipal law preceded all the others? The fact is that the state imposed its decisions by force if necessary. This decree declared that a construction permit was required for every new building or repairs to an existing one, which had to comply with the town planning regulations and conform to the specified position of water pipes from houses and roofs and the obligation to maintain the building. Failure to apply the regulations of this decree was described as a violation of municipal law that entailed penalties ranging from fines to imprisonment.

-The main decree regarding construction – which applied not only to Athens but to all cities and towns, large and small, throughout the country – was that of 1835 “Re: hygienic construction in cities and towns”⁹. It laid the foundation for town planning policy, expressing the state’s views about the manner in which its settlements should be planned and developed. This framework decree set out the principles of town planning, its building and morphological precepts, and systematised the basic terms of construction. It typically provided instructions about the rectangular form of the road network, the orientation of streets (from an angle in relation to the

⁷ Newspaper *Athena*, 386, 30 Oct.1835.

⁸ R.D. 6 (18) March 1833, GG 10.

⁹ R.D. 3 (15) May 1835, GG 19.

Construction Regulations in Athens, 1833-1864

points of the horizon, so that all buildings would be sunlit), and the width of streets and squares. It required a building permit in the form of approval of the plan by an “experienced technician”. It stipulated a maximum number of two storeys, owing to the risk of earthquakes. It contained some details of a technical nature as regards the construction of buildings, and specifically the best place for the chimney and the sanitary areas, giving priority to issues of fire safety and hygiene. It protected homes from annoyances and downgrading, by making specific reference to uses that were prohibited in residential areas, and those for which a permit was required from the police and neighbours. A distinction was made between cities and villages. Judging this decree by the data and practice of town planning at that time in Europe, it proved to be a “first class town planning document”, as Lavedan wrote¹⁰. It has been fully analyzed in the Greek literature and no extensive reference will be made to it in the present study.

The regulations governing the construction of buildings in Athens were concise and incorporated into texts of a more general nature. Throughout the country, as in Athens, the main requirement was the implementation of the town plans, with the stipulated straight lines and geometricity. The special issues in Athens that were regulated by the legislation of the period were:

-Determination of the completeness of lots. A specific minimum area was instituted first for lots on the main thoroughfares of the old town and on all streets in the new city¹¹ and then for the minimum façade and depth of lots¹². When completeness was approved, the land could then be divided into small lots.

-Shape of lots, buildings. The obligatory modification of lots was instituted, and boundaries redrawn to make lots rectangular in shape in relation to the street line so that the sides of the building would be rectangular. This obligation was initially applied to buildings on the three main streets of the old town¹³ and was later generalised.

-Building height, number of floors. On pre-determined streets, houses could have no more than two floors, and had to be built in the continuous system¹⁴.

-The gabarit of buildings. The minimum dimensions for a house (façade and depth), were stipulated, leading to building volumes with a rectangular parallelepiped shape¹⁵.

-Fire safety measures were imposed¹⁶ by designating acceptable building materials and prohibited flammable ones. The use of mud bricks and later fired bricks on chimneys and fireplaces was imposed, and the use of timber hitches in blacksmiths', bakeries and paint shops etc. was prohibited. For fire prevention reasons, the decree of 1842 specified stone, ceramic tiles, metal and suchlike as construction materials for building shells. Fire safety issues were frequently repeated in subsequent legislation.

-Building morphology. Here, too, there were regulations for the entire country and special ones for Athens, which were not differentiated. It was recommended that building heights not exceed two storeys. In earthquake-prone regions in particular, buildings with more than two storeys were prohibited. Arcades were permitted only on squares and wide streets¹⁷. There was even a regulation for the colours used on building interiors. “Bright” colours of red, deep yellow and

¹⁰ P. Lavedan, *Histoire de l'urbanisme: Époque contemporaine*, Paris 1952, p. 198.

¹¹ R.D. 9 (21) April 1836, GG 20.

¹² R.D. 12 (24) Nov. 1836, GG 91.

¹³ R.D. 9 (21) April 1836, GG 20.

¹⁴ R.D. 9 (21) April 1836, GG 20.

¹⁵ R.D. 12 (24) Nov. 1836, GG 91.

¹⁶ R.D. 9 (21) April 1836, GG 20.

¹⁷ R.D. 3 (15) May 1835, GG 19.

white¹⁸ were forbidden. We know nothing about the colours of buildings in the first half of the XIX century, however this decree must not have been enforced, since the chromatic models of Pompeii were very popular among architects then. There were no further regulations on the morphology and height of buildings, with the exception of determining the distance between the balcony and street level¹⁹ and the imposition of arcades on certain streets. There is a characteristic reference in the 1833 decree to the instructions that were to be given to anyone erecting a building with regard to its height and façade. In any event, at that time, the technology and materials available allowed few options other than the customary ones.

-Protection of residences from annoying uses²⁰. The regulations were included in the 1835 decree. Buildings with annoying uses such as stables, hospitals, reformatories, mental hospitals and prisons were not permitted in residential neighbourhoods. Certain industrial and technical plants could be built near residences, but only with police permission and the neighbours' consent. Cemeteries, slaughterhouses and tanneries had to be located outside the city.

The decrees that determined the completeness of lots resulted in the large-scale division of land into small lots. The main features of XIX-century housing were small properties and detached houses. The obligatory gabarit led to the building of homes facing the street, extending toward the back, and adjoining one of the side partitions. The typical Athenian house was in the shape of a Γ, on which the front of the building had a small entrance into a narrow passageway leading to a broader courtyard. From there, exterior staircases (usually wooden) led to the upper floors. Parallel to this common type, there was also the "closed" type of façade, entered through a inward-looking cube-shaped structure. These were the two main types of houses belonging to middle-class Athenians. The height of the buildings rarely exceeded 14m, and the interior height was 4m. The technology of the period (stone masonry, wooden floors with timber or iron beams) did not permit greater height. Nor did the prevailing regime of vertical ownership conduce to many floors. The new feature of the period's architecture was the desire to create a more formal façade on the street (figure 3) to replace the gated fence of the sheepfold. Needless to say, the traditional morphology was later replaced by neoclassicism, which was associated with the visionary goal of national regeneration and the revival of the classical Hellenic architectural model.

The legislation of the period concerned primarily private construction in the new Athens. Laws regarding buildings for public use were related to directing their construction, i.e. to managing the construction site. No particular regulations were instituted for them, leaving the initiative for designing them to architects and engineers. Most structures for public use (figure 4) were financed by donations from diaspora Greeks.

¹⁸ R.D. 3 (15) May 1835, GG 19.

¹⁹ R.D. 3 (15) May 1835, GG 19.

²⁰ R.D. 3 (15) May 1835, GG 19.

Construction Regulations in Athens, 1833-1864



Figure 3. Photograph of a street in 1934. Source: I. Travlos, *Urban Planning Evolution of Athens (in greek)*, Athens, Kapon Editions, 1993.



Figure 4. Theophil Hansen, *The "Athenian Trilogy"*, water-colour, 1885. Source: Athens Municipal Gallery.

The legislative regulations for Athens resulted in its being built to a plan characterised by geometricity, the generalised change of properties to rectangular shapes, the redevelopment of the old town (since the existing buildings could not be repaired without rectifying them), and the creation of different façades on a continuous row of structures. The obligatory rectification of lots and buildings and the minimum gabarit, with the shape of a rectangular parallelepiped, conduced to building volumes compatible with neoclassicism. The shapes thus imposed discouraged the type of building outlines used in traditional architecture by laying them out around an internal courtyard. But it appears that the main way in which neoclassicism prevailed was through its implementation on buildings for public use during Otto's reign, rather than through legislative regulations that did not exist then. Decrees containing construction regulations were instruments of a specific town planning policy. To some degree, they limited the freedom of the architect or technician, as well as that of the landowner, chiefly with respect to the placement and volume of the building on its site and as part of the broader environment, thus fostering some beneficial "discipline". The typology and morphology of buildings were in fact the product of their creators'

design skills, not of legislated directives. Despite the organised state control, private and state engineers, experienced technicians and landowners bore a significant share of the responsibility for creating the architectural face of Athens in both the period in question and the one that followed (figure 5, figure 6).



Figure 5. Photograph of Athens in 1865 by Dimitris Konstantinou. Source: National Historical Museum.



Figure 6. Anonymous painting, "The Acropolis of Athens", 1869. Source: National Historical Museum.

At the end of the period covered by this study, the connection of buildings to the various networks was regulated legislatively throughout the country²¹. The law obliged owners to share

²¹ Law TNH "Re: building sidewalks and sewers", GG 50, 1856. Concerned all cities.

Construction Regulations in Athens, 1833-1864

in the expense of building the sidewalks (total) and sewers (one quarter of which was borne by the municipality) in front of their property, to build walls around their lots on the property line of the approved plan, and to plant trees as required.

Athens was the model used for construction in all Greek cities. The main reason for this repetition throughout the country of the way in which Athens was built was the uniform and remarkably consistent legislation. City plans had common principles, and the provisions about monitoring constructed space had a generalised validity. There were no directives regarding architectural creation in the cities of the periphery, although the model buildings of Athens constituted a source of inspiration for creating buildings in other cities, many of which were works by the same architects. Within fifty years, from the beginning of Otto's reign to the late XIX century, the shape of Greek cities changed completely. Properties were regulated by acquiring a rectangular layout, sometimes even through the exchange of sections of lots. Buildings that blocked the implementation of the plan were torn down. Numerous roads were built and areas for public use created. In many cities, construction began on the sewerage system and other infrastructure projects (lighting, water supply). Residential districts were built on private initiative and with significant private capital being invested there. Projects by philanthropists, especially Greeks of the diaspora, provided cities with social facilities (schools, hospitals, social welfare projects, etc). And despite their uniform planning, the expression of the particularities of a community, with their local issues and claims, conduced to shaping a city's identity. The cities created over approximately a century were the result of a gigantic, coordinated effort by the state, the municipalities and local societies. At the urban planning level, the XIX century was a long one for the Greek city.

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