ANASTASIA PASCHOU

GEBÄUDETYPLOLOGIE DER GROSSTADT
eine Analyse der Griechischen Metropole Athen
"...because beautiful is what attracts me, personally, and I feel comfortable with"
Kengo Kuma

For the ones who feel comfortable in big, dense and irregularly structured cities like Athens

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This study is an attempt to analyse the image of Athens as seen through the typology of its basic building component, the "poly-katokia" (block of flats), which no matter how much has been blamed for lack of aesthetics, lack of space qualities or for urban malfunctions, remains the main association to the name of this city as far as its architectural landscape and its urban fabric is concerned. This interest to analyse the dubious quality of this image derives from the feeling that this image has been misunderstood as considered to be of no (architectural) value, or has been treated so far as if it does not worth of being studied and even worse has been promoted mostly literately (romantic pictures of an organic fabric). Our position is that a typological study of "polykatokia" could fulfill successfully the demands of a research concerning the identity of Athens; therefore we have tried to isolate and analyse methodically the specific characteristics of these buildings.

It's been, anyway, quite a long time now that the turn from globalisation to locality has been concrete accepted, and cities like Athens, who never took seriously their own post-war urban identity, should finally look upon their own inheritance and benefit from the "lack of modernity", that is the fortune that due to their incapability of following modernity they developed a domestic (and unique) version of it.

We should make finally clear that the examples taken to documentate this research are the exceptionally good buildings from central streets and furthermore from selected areas. The mass of buildings that consists Athens is the imitation of it, but never the less the structure is originally copied from the presented examples.

The procedure of analysing "polykatokia" is formed as following:

1. The general history of the building type and its social and political background from the beginning of the 20th ce until today.

2. The volume articulation of polykatokia after the "General Building Law" with all its alterations from 1928 until 1995.

3. The facade composition and its evolution through time from the stiff central European prototypes of the beginning of the century up to the "made in Greece" product conquered by balconies after the war.

4. The facade styles as formulated from structural or decorative motives and their evolution through time, starting from the neoclassical architectural expression, passing through modernity (early and late) as this was from the Greek engineers interpreted and finishing with the recent "Greek postmodern" version.

5. The combination of the two previous themes: which architectural styles are to be found for every facade combination.

6.A The introducing of "areas of study": the most central and therefore representative in quality- parts of locations who share certain common urban features, to which they own their uniformity. They are selected because of their representative capability to explain various urban atmospheres in Athens directly connected with the various types of houses.

B. The geographical distribution of the already presented types of polykatokias on the map of the main city and their concentration in relation to the selected areas of study.

7. The sizes of the houses and their interior identity as revealed from their floor plans. Special attention to the formulation of the ground floor, its use and its relation to the public space (street).

8. A proposal of three houses in today empty plots of Athens and the wish to apply the previously analysed picture and to combine it with a well ordered floor plan, a tide volume shape and a positive relation of the multifunctional part of the building (ground floor or even first floor) to the public space.
ATHENS AND POLYKATOKIA

Once seen from an aerial view Athens would not surprise its visitors: the order of a grid that one remarks from that distance and the regular succession of main and secondary streets, expected to be found in a European city are still there (fig 1). It's rather a closer view from the top of the surrounding hill which reveals the unusual picture of this city: an infinite disorderly shaped mass of almost identical concrete particles, a restless landscape dominated by one single building type, the "polykatokia" (apartment building). This is what the deepest identity of Athens consists of. A mosaic of unusually shaped volumes, mostly characterised by their uniform balconies, their one, two or even three last floor setbacks, their narrow light pipes extracted from the sides of the main volume and their secondary, but never the less important, accessories, such as their terraces and solar water heaters on the roofs, set altogether an "organic" urban result, whose mechanism of production is worthy of being explored, fig 2.3.

The birth of a 19th century city.

In 1830, after 400 years of occupation from the Ottoman Empire, Athens was selected to be the capital of the newborn Greek state. At that time there was nothing more arpoled Acropolis than a small village with few hundreds of inhabitants. However, the monument of Parthenon and the grandeur of ancient Athens determined this selection. Arcadian scenes of shepherds surrounded by their animals, sitting on ancient columns thrown here and there, were often featuring the gravures of that time and fascinating the European travellers.

A Bavarian king was submitted to rule Greece after an agreement among England, France and Germany, the countries that helped the Greek revolution against the Ottomans and took over even since the role of "protectors". This king brought with him officers and engineers to contribute to the evolution of this retarded country. A Greek architect who studied at Berlin, S. Karantzis and his colleague E. Schaubert were assigned to work out the first town-plan of Athens, which was presented in 1834 (fig 4). According to it the centre of the city would be estabished in a triangle of boulevards with important public buildings along its sides and the most highlighted squares at its vertex. The sides of this triangle would also generate the basis direction of future grids, among which different potentials could already be anticipated: an expansion towards north would meet the natural obstacle of the rock of Acropolis, while southwards the boulevard bisecting the triangle could, and finally do, lead to a promising expansion. This original plan was only partly realised, either because the state could not afford to fulfil all expectations in the first place, or because a number of issues were not given the proper attention:

- The placement of the new town was so close to the old one, that the discovery of ancient ruins often postponed a lot of contemporary projects— even today these
“Intermissions” of past memories remind of isolated islands in the rest of the tissue: The already existing “village” north of the Acropolis, long lasting and prospering, was never cleared up for the sake of the ambitious new plans, and today one can fortunately feel this contrast of the old irregular and narrow urban tissue “implanted” in the rest of the triangle.

- The old Byzantine churches, originally supposed to be torn down, were afterwards to be preserved as monuments and remained accidental leftovers, irregular positioned to the rest of the tissue;

- The interests of the landowners and their influence in a family-business-stable-situation-system, combined with the weakness of the state to satisfy their financial demands every time an expropriation should take place, led to a constant stagnation of the original plans, and a decisive pressure for private profit was barred to the urban space and determined its future. As examples to the private conflict against public interest, one could mention the following examples:

  - the previously described inconvenient placement of the new city close to the old one was not the original intention, but it was chosen to satisfy the ones who already owned there properties and were anticipating to raise their values;
  - almost all the public spaces that the primer plan proposed were reduced in size-width of streets and area or number of squares - after protests of the plot owners, who had benefits to preserve for themselves the most possible urban surface instead of selling it to the state;
  - the irrational expansion of the city in the following years was not based on a need for space or a plan preparing this expansion, but on the hopeful increase of plot-values once they would be included in the new city’s boundaries. In spite of this the city-centre developed a European elegance by the beginning of the 20th c. with classical and neoclassical public buildings and residences, even smaller and poorer than their architects’ vanity, but decent. The public spaces, obviously less luxury equipped than their equivalents in the European cities and reduced in size because of private interests, as explained, were still expressing the anticipations of the 18th century urban qualities. At that time the urban town was mostly inhabited by rich Greek families, people serving the court, officers from Bavaria and their families, traders and a rest of low class population, serving the previous ones or living on workshops. The weather either owned houses or rented rooms in multiunit houses that were designed in such a way, that they looked rather like villas owned by one person, than apartment buildings inhabited by many (fig 5).

The differentiation of the Greek urban reality

The big gap between the potential development of this in European terms “provincial” capital and the development that really took place is related to domestic political events and their following financial pressure, combined with a lack of an infrastructure, that determined urban development in the rest of Europe.

Before explaining more about these political events and their effects, one should become aware of the meaning of this missing infrastructure. There was no industrial revolution in Greece -400 years of living on agriculture or animals under the Ottomans, and as a result of this there was no bourgeoisie. The state of social welfare, social housing and questions about forming an effective industrial city did not really exist, since the economy based on family enterprises, trades and handicrafts. Actually all the basis of industrial society and its social extensions had once and for all passed by Greece. One can still observe today, in this global post-modern or post industrial culture in which this country wants so eagerly to take part, that attitudes, trends or financial mechanisms are “second hand” experience, imposed and instilled, but never originally developed from the start. The other important detail, or even the counterstatement to this absence of state, was a strong individualised society, which produced its urban environment in such a direct way, as we will see, that the rest of Europe thanks or because of its strong programmatic policy never experienced. The visualization of this social and economical distinctiveness was best performed in the development of the state urban plans and the political events related to this development are concentrated in two moments of the New Greek history: the late 20s and the two decades following the middle 50s. The connection between them, is that what really happened in the 20s was the profile of the incidents that took place in the 50s and 60s, when the contemporary landscape of Athens is and the mechanism of its production were established.

The birth of the flat and the polykatoikia in the 20s is definitely related to the sudden and extraordinary growth of population in Athens from 1920 (453,000 inhabitants) to 1928 (500,000 inhabitants). However this should not be compared to similar events in European cities: incoming Greek refugees from Asia Minor were responsible for the rise of these numbers and not a gradual inflation of rural population to a developing city. Furthermore these refugees were settled in a range of some kiotismatich (“safer distance”) from the city limits. The city itself did not feel directly the impact of this crowd; the urban land did not become more rare or expensive. This national insecurity, though, was washed with the loss of the Turkish Minor brought soon the repatriation of all the Greek families from the formal Hellenic colonies of east, and their small-medium budget buying habits, led to a yet unexploited field and the only way out of investing these budgets, given that the instability of the international market and the lack of any other profitable enterprise in Greece would discourage other experimentations. Besides, there was already an incoevolution expansion of this area which resulted to the benefits of the landowners described previously. The non-sufficient network of streets and means of public transportation was not enough to serve a new urban area, and concentrating the density of the city seemed to be a solution. Finally the upper-middle class (mostly government employees) was seeking for modern standards of residence. The time for the
Apartment building had come. The new building type of polykotokia was introduced to adapt a modern, tidy picture of a 20th century city (fig. 6) Soon the financial prospects of the investment "polykotokia" became obvious: although the product "flat" itself was luxurious, affordable only by a minority, it proved to be a very safe and profitable investment. Even most of the (few) industrial or ship ownership capitalists were absorbed by these types of buildings. The 85% of them until the 2nd WW were built and owned by one single person, who could afford to hire an architect and cared for the result.

This selectiveness of users did not, never the less, perform such big changes in the structure of Athens as it was hoped. It was only thirty years later that flats and polykotokia became a theme, or better an enterprise, concerning everyone and dominating the picture of the city.

An uncommon process of modernization
The expansion of Athens continued started in the 50s this time derived from an immigration of rural population to the promising city. The realization of this procedure took place in the biggest Greek cities and mostly in Athens after a boom of the Greek economy. Polykotokia was the instrument of this modernization, the ultimate modern cell: a concrete frame where the flat is inserted, a version of the Corbusian dom-ino system, where the placement of the staircase-elevator and the light pipes for bathrooms and kitchens are all that determines the floor plan. (fig. 7)

The distinctive point of this modernization was the absence -once more- of the state and its replacement by small contractors. The proper legal frame was set by the state with its blessings, explanations are following in order to facilitate this mechanism: the law of "antiparrk" allowed a small construction company with no grade budget to build on a plot without paying for it, but offering in exchange part of the resulting space. A direct exchange of services between plot owner and contractor was established. Both of these two factors were considering quantity more important than quality, or precisely, their quality anticipations were restricted to the interior of the flat itself and not to the articulation of the building or its position in the city. Architects were hardly involved in this procedure. One should also not forget that the mass of the population sheltered in these houses were not having experience of living in big cities and an urban attitude of collectiveness or a need to express such a thing was not observed. The running hot water and the central heating were already enough to satisfy them.

This "business" was accessible to a vast middle or even low class population: the next generation of these refugees who occupied the so-called flats. Athens in the 20s were the ones who had suddenly the chance not only to own a new flat for their accommodation, instead of their self- made miserable old houses, but also, several square meters to rent, depending on the size of the polykotokia that would occur (fig. 8) Therefore the maximum building height, the maximum covered ground and the minimum cost became a quite common interest, a reason to fight for, to present false plans to the town-planning office, to make a small "gesture" to the proper public service to use the family connections among people with political influence, who would excused an "exception". Yet buying flats was, and still remains, the most favored investment for every household. Their purchase has always been considered as the last placement of the small budget of a family and the income obtained from renting the rest ones is always substantial. Between 1960-9 the 9.5% of gross national product came from the field of residence. At the same time the savings of every family were financing the production of residence without any cost in the hands of one single organization for the state. On the contrary the taxes collected from these properties were "feeding" the national budget. (fig. 10) Even some weeks ago the front page of a popular Greek newspaper was making known the rising prices of small flats in Athens. Involving the national population in the system means also a new political status, which favored the unknown income from rents satisfied and relieved a lot of potential voters, who should normally fight for more social security benefits. The exploitation of the city supplanted the insufficient pensions, provided the unmarried daughters with the right amount of space and a trip abroad, covered the expenses of the children’s studies. Moreover this raising class became constrained with the mentality of the small ownership, and its reaction was easy to predict or even to direct: when the drachma was in danger of devaluation twice in one year (July 1976 and January 1977) the government let on fake rumors about future laws constraining the maximum possible built area, so that the present building activities were stimulated and even new, popular in the hopes of the landlords. This sudden mobility of drachma saved its values.

The effects on the city
The mass-production of polykotokia defined the contemporary structure of the city and its size, where once stood family houses with gardens, now 6-floor volumes with empty roofs (fig. 9). The urban tissue and the plot sizes were overloaded. The streets and their pavements soon proved to be disproportionately small, the squares and the parks not enough. The architectural identity was also altered: the monumental neo-classical houses, poor or not, were almost eliminated and today their sad leftovers are printed on the common walls of the neighboring polykotokia. The parking lots in the center are best witnesses of the contrast of these different eras with their representative houses, as well as the “back view” of the city, the one revealing the random set back of walls with balconies and the neglected inside space of the block. (fig. 10,11)

Regardless of the functional potentials of polykotokia everything has been embraced: residence, office space, public office, shops, supermarkets, cinema, theatre, coffee shop, bar, workshop, car station. (fig. 12) The urban benefits of this multifunctional model is a continuous and vivid public space, which is primarily sheltered at the ground floor (usually 5 meters high) but also busts out to the street, diffusing the limits of indoors and outdoors. This concentration of activities was not planned, but occurred from the lack of other building types and the absence of zoning. One could say that polykotokia is "attacked" by fundators: others could argue that its ground floor flexibility -or lack of identity- (1) attracts them. In both cases the result
remains the same. The social mixture in these buildings is also worthy of attention: the lower floors accommodate less wealthy inhabitants than the upper ones, and the penthouses are occupied by people who can afford even more. The different quarters may keep their own status and have different prices for the same spaces, but almost all the classes are welcomed to the most parts of this city. This healthy social distribution has created such psychological bonds to the neighborhood, that often the change of income may be directly connected to the change of residence, but not to the change of quarter or even building. One should exclude though the most central quarters of the town: the feeling of suffocation in this concrete mass explains partly the domestic transfer of the wealthiest population to the more spacious suburbs in the last twenty years. The wave of foreign immigrants from the former east block and Asia in the 90s and their establishment in some of the most central and cheap quarters of Athens explains this segregation even better.

In the suburbs the same building type keeps performing its leading role: the construction, the details, the sizes of the flats and the public spaces are more generous, but the pattern remains the same (fig 13). In case of a more generous investment the attempts of improving these houses is consumed in embellishing the facade (colors, patterns of plaster, expensive window frames, delicate bars at balconies...) and impressing the possible customers. The morphological result of the mass of polykatoakia may be uniform in its general articulation but remains compatible with private interaction in smaller scale: roofs turn out to be private gardens, balconies are occasionally shut with glasses and turned to loggias; door or window frames exercise the color tastes of the inhabitant. The spacious frame in which everyone is allowed to participate (not always completely legal, but commonly accepted) is both the blessing and the curse of this urban freedom that promotes individual action but does not help to perform bigger gestures; the lost trust to the state and a personal fight for one owns interests.

The last years Athens is experiencing the unknown scale of big projects related to the Olympic Games of 2004. Either the lack of experience or the lack of vision or even private interests have prevented both the metro and the new airport (some of these big projects) to undertake an architectural identity. A strange combination of continuity and non-continuity in Athens is also a result of this morphological uniform. On one hand the whole mass of concrete looks identical, and spreads like a sea of repeated volumes, but a more experienced eye would locate differences of scale in the buildings, quality of materials and construction, more or less decorated shops at the ground floor and several kinds of accessories for the streets. The city is indeed all over generated with the same pattern, but the identities of areas are printed inconspicuously through the differentiations of the same building type. The whole and the parts are strongly bounded, or even overlapping each other. Today the system of "tangibles" goes on at all the Greek cities. The same patterns are being repeated, the small contractors are doing the same job once more (sometimes they hire architects for a decorative facade or for a computer aided visualization); the people are still not that discriminated to an urban collectiveness, their expectations end no further than the limits of their property, and they are strongly concerned only when a new street or park would influence the objective value of their houses. Perhaps this behavior is dictated from the liveliness of the Greek cities once the street and the ground floor, so directly connected to each other, shelter successfully all the necessary activities of a community, and through this way express directly an unconstrained collectiveness, then no one confronts himself with the need of an architectonically articulated city.

Kenneth Frampton calls Athens "the modern city par excellence" and Kees Christiaanse considers it "a very beautiful example of the "Cinematic City" of Rem Koolhaas. Never the less this city is a proof that the human activity is stronger than the attempts to plan it, its organic disorder can generate such a vivid result, that design cannot always guarantee or sometimes even spoil, and that "beauty" goes beyond "elegance" and finds a new meaning among autonomous, unexpected actions born in a flexible frame.

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THE VOLUME SHAPE AFTER THE BUILDING LAW

The volume articulation of polykatoikia was mostly dictated from a compulsatory and stiff law frame, that in general terms favored the concentration of buildings to exploit the last possible square meter of a floor plan. The most important building laws were published in 1928, 1955 and 1985. In between there have been alterations, but the main module of polykatoikia was in these three decisive laws defined.

The features of the building laws in Greece could be distinguished in categories of first and second priority sizes: the first-priority sizes were covering the allowable percentage of the plot area to get built and the maximum height of the building and its façade (the difference of this two numbers was covered with porches in set backs) according to the size of the street and the area of the city where the building was situated; the second-priority sizes were referring to the minimum surface of light pipes, around which secondary rooms -kitchens and bathrooms- were situated, the distance of the building from the plot limits, the floor heights, the stairs regulation and the maximum extension of balconies or other façade elements.

The first restrictions for the height of the buildings according to the width of the street were published in 1915. Remarkable is the lack of any reference to the amount of the plot area that should be left free. For the first time also the pent house is assessed.

Few years later, in 1928, Athens was divided in three zones of building heights regarding to the width of the related street: the zone A included the biggest and most central streets, the zone B the rest, and the last zone C referred to the exceptional areas within neighborhoods, important architectural monments and therefore building heights were lower. The minimum non-covered area of the plot was for the first time also defined.

In 1929 the history of polykatoikia officially begins with the independence of land property from the flat property. The building law of this year is the first one that covers systematically and explicitly a wide range of technical standards of the neoclassical type of polykatoikia. This attempt expressed a strong state will to promote these buildings to the main urban cell of all the Greek cities and therefore had to face the difficulties of the multiplied volume sizes in the existing small plots and secure the efficiency of hygienic, static, and aesthetic.

In 1934 the state decided to change the building heights: the city was divided in eight sections: for every of these sections a factor of relation between building height and street width was settled, as well as maximum and minimum allowed building heights. In some of these sections one extra floor was permitted as penthouse in set backs. This was the first attempt for an urban planning confrontation of polykatoikia: in comparison to the previous years the maximum heights were reduced and in other cases increased, but altogether the intention of this regulation was to increase the heights at central areas, were the demands for bigger polykatoikia appeared, and reduce it at the rest ones. This gesture of dividing the city in sections was the beginning of an urban segregation and its perspective definition of plot values. A last esthetical change worth of being mentioned is that the oriels (“orkers”) that were conquering the facades up to this moment were drastically minimized.

In 1955 the numbers, which defined the sizes for every section, got more detailed and increased. The fruitful period of polykatoikia was just starting, but the estate itself was not only recovering but also blooming for the first time after the war and the rural depollution was driving masses towards a rapidly growing Athens. The “box” in which polykatoikia developed was strictly defined and any possible inspiration was expended on the façade articulation. The regulations about the set backs, the obligatory arcades for the shops and the extraction of the corner in case of obligatory arcade were the most courageous determinations for the volume formulation. The rest of the sizes -light pipes, backspaces, floor heights-...were demonstrating the intention of exploration of the urban space.

In 1968 the center of the city was quite full. It was the moment for the urbanization of the less central neighborhoods. The state allowed a considerable supplementary increase of useful square meters for every section up to 40%. At the same time the contractors were advertising the benefits of a better-equipped polykatoikia (aluminum casings, generous balconies, new materials such as rough concrete, bricks, glass green walls...), often formed like a villa in a less suffocating environment. This will be the current trend for the 70’s, but the few luxurous examples in some suburbs cannot compute the mass of cheap imitations that take place in big quantities at the less central suburbs and finally characterize the decade and the areas around the center.

In 1973 took place a reformulation of the 1955 building law. The real changes, though, did not influence the single type of polykatoikia, but the sizes of it, and not any more at the center of the city, but at the still not fully built suburbs. A packet of “special arrangements” for big scale polykatoikias was meant to favor complexes of flats, to motivate contractors for more generous buildings against the so far squeezed and small-scaled urban cells. The result was obvious: examples of complexes disproportional big or tall, pushing up among a mass of polykatoikia still produced from the traditional small-scale contractor.

In 1985 a big section to the evolution of the volume took place. The building was allowed to stand free on the plot with a maximum fixed distance from the plot limits. Obligatory pilotis was introduced: parking space (for the first time regarded as necessary) and entrance were found at the ground floor, when the back space was accessible through the street via the pilotis! All the free spaces of the plot should be accessible from a common use space of the house and were meant to communicate with the neighbor ones. The volume should be enclosed in a notorial sold defined from the size of the street and any shape (in these boundaries was allowed. The facade could be arranged with no restriction as far as every of its elements was not exceeding the limits of the notorial sold. All the above led to a new plastic attitude, but in urban terms destroyed the continuity of the street front, the multi-functional potentials of the ground floor and the uniform, easy to identify, urban face of the buildings. Anyway, these new possibilities were applied at the suburbs and did not influence the center of the city, unfortunately, though, they set a discontinuity between the advantages of the urban module that bloomed in the center for over twenty years and the new hyper-plastic module of the suburbs, which was meant to facilitate a suburban behavior than a future urbanization.
Note 1: The news about Athens selected as capital of Greece motivated the Athenians to buy more: they wanted to be seen as the Greek colonies to buy Turkish landed properties in very low prices and establish themselves there. In reality this decision was disadvantageous for the development of Athens. [...] It would be possible for the king [...] to place the new city not on the ancient one, but nearby, so that later extensions would not interrupt anything [...]. From a financial point of view this would also be more reasonable for expropriation. But the owners of the old city and the new land buyers were exactly the ones to whom the given solution, while interested in increasing the value of their property.

Note 2: "When the necessary area for expropriation was counted and decided to be paid off for 0.2 drachmas per "pith" while the prices at the free market had already reached the 2 or 3 drachmas per "pith", the group of owners reacted severely. They proceeded to an assembly... and asked from the regency to reduce the area of the expropriation [...]. The regency agreed to this solution, which would also reduce the state expenses. Indeed, a lot of changes to the original plan took place, by reducing the width of streets and the size of squares. Even the size of the plots of the future public buildings was also reduced."

Note 3: "The surface of the city, which was 956.505sq.m. before 1834 and was expected to be 2.211.125sq.m. according to the L. Nizan plan, is estimated to 2.030.312sq.m." Essay for a new plan of Athens, under P. Kalligas, 1919. "The existing additions and reformations (to the original plan) are being approved by plans consisted of small urban parts or single streets. The number of the decrees, through which the additions and reformations are being approved, is raised over 500. [...] Those approvals of expanding the city were not imposed by urban needs, but to satisfy the interests of the landowners at the periphery of Athens." Essay for a new plan of Athens, 1924.

Note 4: "The existence of one and only owner of the building was expressed with facade compositions, where the principal of the "arch" dominated the design, and was signed through the articulation of basis, body, and ridge of the house, as well as the use of some decorative elements extended all over the facade. "The urban polykotokia between the two wars in Athens", E. Maramaros, 1985.

Note 5: "Already from the beginning of the 20s the most successful way to invest the incoming capital from the returning Greeks was the raising of buildings to rent. [...] Among their circle this was supposed to be the best investment, since the profits of the rents was bigger than the bank rates [...]. The alternatives for those people were limited: their money were not that much, their knowledge of the market was small, and the domestic stock market was not promising the proper stability." "The urban polykotokia between the two wars in Athens", E. Maramaros, 1985.

Note 6: The following text describes the reaction of the public to the first big and organized in floor plan according to the modern standards polykotokia in Athens in 1932. "Remarkable was the demand for renting the new residence. Even before the completion of the building the renting of flats had already started. In the first three months all 40 residences were rented, while still a lot of them were not yet finished." Note 7: Source: "The housing as a developmental factor for the Greek economy", technika xronika, June 1972. by K. Triantafyllidis


Note 9: "In order to satisfy the wealthier that wanted to live inside the city, a successfully applied combination was found: the last few floors of a polikotokia were turned to a pent house, so that its inhabitants would still live in the center without being disturbed from the noise and the dust, and would enjoy the view from a big terrace." "Tensions of modern architecture", by K. Kitakis

Note 10: At first glance, one could view Athens as the paradoxical place of modernism in the so-called post-modern era: because there is, perhaps, no other capital in the world where one can find such a wide acceptance of modern architecture, both as a functional program and a formal language. Athens is for certain the modern city par excellence, in the sense that the model neo-classical city of the 19th century was gradually replaced and expanded from the early 50s onwards, by an equally determined modern typology, a typology, which continues to be practiced today with nearly the same shapes as in the 1930s. From "Introduction to the Greek Edition", Modern Architecture: A Critical History (1985)

Note 11: "As far as public space is concerned, I am thinking of Riem Koole’s concepts, in “Bigness” and “Genetic City”, when he states that the city has become a system of interiors which are connected by traffic systems... I think that the Greek city is maybe a very beautiful example of what you call a “Genetic City”. But I think public space in Greece is the street, there are some streets, of course, which are developed in western terms, but if you go to the periphery you find a very large variety filled in with life (e. g. cafes, restaurants, bars...). Perhaps it is also worth studying that particular way of organization which defines a more linear and rational sense of public space." From a discussion between Kees Christiaans and Yorgos Simeonidou in Berlin, published at “The contemporary Greek City”, metapolis 2001.

Bibliography:
- "The contemporary Greek city", metapolis 2001, Aespos, Simeonidou, eds
- "Athens", 1985, Kostas Misiris
- "The urban polykotokia", technika xronika, June 1932, by Kipartinos Misiris
- "The urban polykotokia between the two wars in Athens", phd, E. Marmaros,1985
- "The commercialization of housing. Its effect on house and city form", architectonica themata, 1978, by G. Sargianis
- "The development of polykotokia in the post war Athens", architectonica themata, 1978, by A. Tzikou
- "The contemporary Greek city", metapolis 2001, Aespos, Simeonidou, eds
- "The housing as a developmental factor for the Greek economy", technika xronika, June 1972, by K. Triantafyllidis
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<th>1929</th>
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<td>9 &lt; Hmax = 1.65S &lt; 23</td>
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<td>(S(m) Hmax &lt;24(m))</td>
<td>(Pd(m) D(m))</td>
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<tr>
<td>&lt;6 12</td>
<td>&lt;6 10</td>
<td>&lt;12 0</td>
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<td>7.5 17</td>
<td>15 2.5</td>
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<tr>
<td>&gt;7.5 17.5</td>
<td></td>
<td>&gt;25 2.5+1m for every</td>
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<tr>
<td>Zone A</td>
<td>Zone B</td>
<td>3m higher than 25m</td>
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<tr>
<td><strong>BF, E</strong></td>
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<td>3.44 &lt; BF(Zone A) &lt; 6.94</td>
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<td><strong>h...</strong></td>
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<td>* for ZONE A,B see page</td>
<td>* for ZONE A,B see page</td>
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<td></td>
<td></td>
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<tr>
<td>section</td>
<td>Hmax/S</td>
<td>Hmin</td>
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<th>1934</th>
<th>1955</th>
<th>1973</th>
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<tbody>
<tr>
<td>e &gt; 1 x 1m, b &gt;1,25m</td>
<td>kitchen &lt; 4m</td>
<td>e &gt; 1.2 x 1.2</td>
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</tr>
<tr>
<td>h &gt; 2.80m</td>
<td>kitchen &gt; 4m</td>
<td>e &gt; 1.5 x 1.5, e = 2+v</td>
<td></td>
</tr>
<tr>
<td>h &gt; 4m (one floor shop)</td>
<td>staircase &gt; 3 floors</td>
<td>e &gt; 3</td>
<td></td>
</tr>
<tr>
<td>h &gt; 5m (floor and attic shop)</td>
<td>staircase &gt; 4 floors</td>
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</tr>
<tr>
<td>he &lt; 3.0m</td>
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<td></td>
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</tbody>
</table>

20% < Emin <30% of plot area

Emin > 30% of plot area

D = 2.5 x 0.05 Hmax
NOTIONAL SOLID
Hf = 1.5 \( S \), the projection of the same (red) lines define the upper volume limits
all possible volume plasticity proposals in the limits of the notional solid

pilotis area > 50% plot area not included in BF
parking at pilotis not included in BF
E > 30% of plot area
D = 3xH\text{max}
free plot area always next to plot limits, accessed from public space
all parts of free plot limits have to be connected
distance from neighbor houses with light pipes 2.5m

General restriction
BF, H\text{max}

<table>
<thead>
<tr>
<th>BF</th>
<th>MaxH</th>
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<tbody>
<tr>
<td>0.8</td>
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<tr>
<td>1.2</td>
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</tr>
<tr>
<td>1.6</td>
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</tr>
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<td>2</td>
<td>24</td>
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<td>2.4</td>
<td>27</td>
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<tr>
<td>&gt;2.4</td>
<td>12BF &lt; 32m</td>
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tor kitchen \( E_k = a \times b > 2m^2, a,b > 1.2m \)
tor bathroom \( E_b = 1.2 \times 1.2m \)
tor staircase \( E_s = a \times b > (0.3 \times H\text{max})m^2, a,b > 1.2m \)

notional solid: 1985 - 2000

particular restrictions

light pipes

maxh

main floor 2.4m
secondary floors 2.2m
Volume shape after the building law
Regulation for arcades

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
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<td><strong>Ah</strong></td>
<td><strong>S</strong></td>
<td><strong>Aw</strong></td>
</tr>
<tr>
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<td>4</td>
<td>&lt;7</td>
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<td>10-14</td>
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<td>4</td>
<td>14-19</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>4,5</td>
<td>&gt;19</td>
<td>4,5</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>for squares</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td><strong>Hmax, S, D</strong></td>
<td></td>
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</table>

For corner plots with obligatory arcade on one side only the first set-back is moved forward up to the facade with the arcade. The rest set-backs are following.

For corner plots with obligatory arcades on both sides the first set-back is moved forward up to the facade. The rest set-backs are following.
<table>
<thead>
<tr>
<th>BALCONIES</th>
<th>ORELS</th>
<th>BALCONIES</th>
<th>ORELS until 1973</th>
<th>BALCONIES</th>
<th>BAY-BALCONIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>b</strong></td>
<td>&lt; 3/4F</td>
<td><strong>b'</strong></td>
<td>&lt; 1/3F</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c</strong></td>
<td>&lt; 1.1m</td>
<td><strong>c'</strong></td>
<td>&lt; 1.1 [or S&gt;15, c&lt;1.4]</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>c' &lt; 0.40 since 1934</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>d</strong></td>
<td></td>
<td></td>
<td>d' = c', but d' &gt; 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>e</strong></td>
<td></td>
<td></td>
<td>e1 &lt; 1/5 facade area</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>x</strong></td>
<td></td>
<td></td>
<td>x &lt; 1m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**1929 & 1934**

**1955 & 1973**

**BALCONIES**

*for h > 3, x' < 1/2S < 0.40m
for h < 3, x' < 0.15m
x < 1m*

**ORELS until 1973**

**BALCONIES**

*all possible volume placticity proposals in the limits of the notional solid

*Note: The table provides a simplified representation of the volume shape rules for balconies and oriel windows in 1929-1934 and 1955-1973. The rules include various measurements such as the horizontal projection of the area, length of the balcony, and distance from the plot limits, among others.
These balconies still occupy only a reasonable part of the facade; at the rest new forms of openings are applied, such as long horizontal windows and window/door. The fight between these two types goes on all the decade of the 30’s. Already at the end of the 30’s a conservatism of classical style, which never really gave up, even at the highest moments of modernity (1937, 11.24) gained ground again (type 5). Just before the war and exactly afterwards (40’s and 50’s) the volume articulation gets quite stiff again: openings symmetrically placed to a solid facade; balconies enclosed in outstanding frames, as earlier oriel were formed. The nouveau riche after the war, as well as the pessimistic and insible political climate was no further favoring the avant-garde architecture.

After 1955 and for few years more the symmetry, the strong edges with windows and the grouping of oriel inserted in the volume stay the main feature of the facade articulation (type 6). Again the classical articulation habits, as basis, s cape and atto-door are to be found combined with the post-war architectural vocabulary. The first floor over the basis and the last one before the set-back are differentiated with other sort of openings or balcony-types and heavier decorated than the rest. Still the product that is not accessible to everyone, one can tell from the detailing on the plaster and the leftovers of motives such as the formulation of column in ancient Greek rhythm.

It is not earlier than the 50’s that the corners of the buildings lose their weight and the zones of balconies get multiplied and flexibly combined with rows of windows (type 7). The walls are treated finally as panels, and often are strongly projected out of the main structural body of the building. At the same time the polykatokia makes really a step towards everybody. Therefore the balconies at the (floor plan and facade) get from that moment and on simplified. Soon after zones of balconies will be found even at the corners of the volume remarking the featuring role of the balcony at the façade or better the quantity (the amount of n2 of a balcony is to be seriously considered (type 8).

The total conquer of balconies from one side of the façade to the other starts from the type 9. Still, though, balconies are grouped and framed as a unity added to the main body. This technique of formulating the balconies is close to the traditional Greek architectural vocabulary, where the main stone building is separated from the light wooden over hanged balconies and was dear to many engineers and users.

What was next was the easiest application of the slabs of balconies as main elements of the façade (type 10); it was this moment when the polykatokia found the most (in quantity) applied type, which forms today the familiar urban landscape. This cheap version of the box with the horizontal balustrades spread all over the city. It is not over exaggeration if we accept this module as the abstraction of all the more or less fine designed examples in Athens.

The building law of 1955 defined the obligatory formulation of the ground floor with arcades for a quite expanded net of central streets, in order to facilitate the commercial activity with some extra space for public circulation. The corners of the buildings which had to form their ground floor with arcades were obligatory extracted as deep as the arcades had to extend. This case (type 11) was combined with all the other types and interesting results came up, according to the use of openings or balconies at the two sides free of the missing volume.

The latest type 12 is a product of a mixture of a miss understood post modernity vocabulary and the high ambitions of the constructors on the (floor plan and façade) demands of the users. Remarkable is also the fact that these latest houses are built not in the centre of the city, but at the suburbs, where both investors and users were willing to spend more on the product flat. The construction of these houses is high standard, from time to time luxurious, and the form of balconies and openings as well as the colours and some plaster decorative motives prove the raise of money invested on real estate.
PREMATURE POLYKATOIKIAS
beginning of 20th century

- Solid volume distinctly separated in basis, shape and finishing.
- Copestones mark the above division.
- Entablature crowns the building.
- Floor height is generous.
- Width greater than height as far as opening proportions is concerned.
- Ornamental window or door-sills and entablatures over the transoms underline mostly the horizontal dimension.
- Balconies, if any, are tight and heavily decorated, mostly with consoles.
- Basis is formed in greater dimensions and consists of two floors: half-basement and elevated ground floor, which is heavier decorated than the rest of the building; this floor shelters shops.
- Size of building in means of expanse is quite big.

Type 1
most of the 20's

- Solid volume, which gradually obtains plasticity thanks to orielts ("eker" in the German architectural vocabulary) starting from the first floor, extended up to 1m and extended up to 1/3 length of the façade.
- Distinction in basis and shape through copestones remains as well as entablatures, but both simplified.
- Basis also distinguished by being formed in a solid way (plaster imitates stone construction), often with the previous scheme of half basement and elevated ground floor for shops.
- Balconies are again few and tight.
- Often round edges at balconies or plaster motives around window frames.
- Ornaments are reduced to decorative window-frames, mostly windowills.
- Vertical dimension of the openings is still stronger than horizontal.
Type 2
end of 20's-beginning of 30's

- Balconies comprised with the previously mentioned oriel, which now turn smaller and chamfered.
- Principally bay windows extend all over the oriel, demonstrating the potentiality of concrete beams. 
- Volume remains classically articulated, with distinguished basis and scape, which is formed either symmetrically or with rhythmical repetition of balconies and oriel in turns.
- Balconies are formed mostly with breast walls than bars, still tight, mostly horizontally extended.
- First-floor balconies are often unified and decorated with balustrades, slightly exerted from the basis, underlying the beginning of scape.
- Decorative windowsills or balcony-sills from marble, copestones and metal elements (bars or parts of doors) influenced from art nouveau trend.
- Often found round edges.
- Entrances marked with marble frames. Plates of marble also mark the finishing to the pavement.

Type 3
main 30's

- Erkers and balconies are unified in a single over hanged volume frame.
- Double-volume plasticity offers a variety of corner solutions.
- The outstanding scape strongly distinguished from basis.
- Over extended entablature marks the end of the scape volume.
- Balconies are formed almost exclusively with breast walls, only the finishing with bars in decorative motives.
- Mostly openings extend all over the length of oriel: performance of beton-beam technology. The façade formed either with motives of fascias or plain plaster, which is found in relief form for the grater surface and in fine finishing for the edges. Fascias also found at the bottom of balconies. Marble finishes the breast walls of balconies, the windowsills, the entablatures.
Type 4
main 30’s
- Unpartite volume: no oriels, no secondary overhanged volume.
- Symmetry or rhythmical repetition of elements is to be avoided.
- Balconies lightly formed with a plane thin bottom floor and simple bars, either totally excised or slightly inserted in the main volume.
- New types of openings: long horizontal non-stop windows and windows in form of balcony doors.
- Penthouse is formed in setback. Its volume is enclosed in a frame of beams and columns, which continue the shape of the building up to the last floor.
- Fine plaster finishing gains ground against relief. Sills consist simply of a marble plate.
- No decoration motives.

Type 5
end of 30’s, also 40’s
- Reversion to classical forms: volume once more formed in socle, shape and finishing: symmetrically formed façade.
- Ornaments return as a combination of ancient Greek architectural elements and Italian neo-realistic style: prostyles with Ionian columns for marking the entrance, imitation of stone in plaster at socle, strong entablatures at the end of socle and scape, flower beds group windows per two or three, balconies again solid (as greater flower beds) with fascias and decorative bars.
- Often balustrades.
- Penthouse in set back.
Type 6
main 50’s

• Quite solid but this time plastically formed volume composed with symmetry: the scape consists of solid edges with a length of couple of meters, in the middle of which windows are always placed and a volume slice of almost one-meter depth is in between extracted, were balconies are gathered, half inserted, half exerted.
• Basis slightly inserted from the scape, either accommodating residence or shops. In most cases horizontal and vertical scotias follow all the four boundaries of the openings.
• Entablatures mark the beginning and the end of the scape.
• Often edges are formed with a frame of fine plaster few cm exerted, the rest of the surface with rough plaster.
• Multiple frames again from fine plaster around the openings, strong windowwalls, fascias-formed forehead of balconies, balustrades or decorative motives of bars.

Type 6 - variation
main 50’s

• A variation of the previous type, where the openings are placed the other way around: solid facade with windows in the middle, slices of volume extracted from the sides for balconies to be placed there.
• Or: a more complex version with the basic motive of windows at the sides and a whole with balconies in the middle, plus lanes of balconies at the far sides. Façade retouch as described in type 6.
• Often oversimplified plaster treatment in cases of older examples, round edges at breast walls of balconies or rough plaster, see also type 3.
• Also found over decorative motives at the slabs of balconies or balustrades, see also type 5.
Type 7
end 50’s, beginning 60’s

- Volume obtains lightness composed from panel walls; the edges of the volume are dissolved in non-meeting planes.
- Still slices of volume extracted for balconies to join in. Often thin slices of extracted volume shelter also groups of windows.
- Openings in form of balcony doors appear often.
- Beton columns and/or beams slightly projected out of the facade.
- Zones of balconies combined with windows and balcony doors in turns and without symmetry.
- Most often shops found in ground floor and two setbacks mark the finishing of the building.
- Rough plaster not so often found. Soft plaster with colour, if necessary, marks the panel walls or the different planes of walls.
- Balcony slabs and bars simplified.

Type 8
end 50’s, beginning 60’s

- Balconies for the first time turn around the corner.
- Still in turns zones of windows, balcony doors and balconies placed where slices of volume are extracted.
- The plaster treatment is a poor version of type 7.
- Less worked out finishings around the openings.
- Often foreheads of balcony slabs or beton slabs dressed with marble.
- Less differentiated planes formed from beams and columns.
- Ground floor again with shops, slightly inserted from the rest of the floors.
Type 9A
main 60's

- Balconies occupy the whole façade. They are grouped with thinner metal columns which are formed in a grid (this motif of lighter balcony articulation overhanged from the main volume derives from traditional Greek architecture: stone walls and wooden balcony extensions).
- Panel walls of type 7 and projection of beams out of the façade remain.
- Windows no more found, at least not at the façade covered with the balcony-grid.
- Metal bars of balconies are found with light motif.
- Occasionally a row of balconies has breast walls instead of metal bars.

Type 9B
main 60's

- Balconies occupy again the whole façade. This time they are grouped with a solid beton frame.
- Often the grater frame is divided with columns and wall breasts in smaller frames.
- The first and the last floor of this frame are marked with different bars or breast walls which continue the plane of the frame.
- Beams orland panel walls combined with this type.
- Even slight extruded parts of the main volume.
Type 10
end 60’s, 70’s

- The slabs of the balconies extend all over the façade (minus 1m obligatory distance from the side limits): the most characteristic type of the urban landscape of Athens.
- The formulation of the slab-foreheads is decisive for the outcome picture: marble, glass breast wall, paint on plaster.
- In order to continue the horizontal lines of balcony slabs, the outer beam of the balcony.
- Almost always beams are erected, sometimes also columns.

Type 11
continuously from 1955

- The law defines obligatory arcades at the ground floor of the houses built on specific central streets in order to facilitate commercial activities. The corner of the houses have to be extruded as deep as the arcade extends.
- All previous types after 1955 are to be found in combination with arcades and extruded corners.
- The two wall sides left free from the extruded corner undertake multiple solutions as far as openings are concerned.
Type 12
after mid 80’s

- Freedom for the facade and volume plasticity
- Pilots for the ground floor entrance, parking, way through to green back space.
- Main volume situated in redraw from the front of the other houses.
- Balconies quite solidly formed with breast walls, very often curved, most of the times grouped in frames with betton columns.
- The grouping of balconies is not so strict any more, both vertically and horizontally different groups are formed.
- Set backs are also grouped in one frontage.
- Plaster motives frame windows, sometimes with over exaggerated motives (triangles, circles...), or imitate stone.
- Unusual colours for exteriors (pink, soft blue, strong orange...).
A time diagram defining the evolution of the facade types of Polyeidotika: regularly the types are overlapping each other; exceptions are types 3 and 4, who are running parallel to time and type T1, who was applied continuously in several posterior types. The most important dates are:

1930: when officially start the history of Polyeidotika.
1955: when the main frame of the law that decided for the granted amount of Polyeidotika was first published.
1985: when the national solid emancipated the main shaping of the volume.
ARCHITECTURAL STYLES

The first polykatoikias (neo-classical architecture) were houses that few members of the upper class could afford. They were owned by individuals, who wanted to express and establish a social image through their property. The plots where these houses were raised were central located and big, cut out from the very early urban tissue of Athens as capital. Finally they were meant to be the jewellery of the newborn Greek capital, at the moment when neo-classical architecture, deriving from ancient Greek tradition, was seducing all the rest of Europe and was reasonably seeking an honorable position back at the New Greek city. Therefore they were as generous in sizes and as rich decorated, as the financial circumstances of the poor newborn country allowed them to be.

Quite a considerable number of houses belonging to this early type were slightly differentiated from the strict classical rhythm; they bared the eastern decorative taste of the formal Greek colonies in Turkey and Egypt (eastern influence on neoclassical architecture), brought with the rich Greek refugees coming from these colonies at the beginning of 20’s. They considered the real estate in Athens as the most solid and profitable investment of their medium big budgets and launched a market of smaller but still well off houses with flats to rent. By the end of 20’s a simplification of the facade decoration took place. The co-existence of coepestones and strong window-sills with plain plaster and horizontally extended openings (transition to Modern 1 and 2) was prolonging a new architectural vocabulary.

The modern movement of the 30’s came to Athens with the Greek architects who studied in central Europe, mostly Germany. It was them, and not their Greek-educated colleagues, who were assigned to design the greater amount of this new generation of polykatoikias: the time

had come for the product “flat” to come closer to wider social groups. Unfortunately this gentle hopes of reforming the town to a European-standard metropolis with social housing were not achieved. What finally happened, is that but few architectural streams developed parallel under this modern spirit of the 30’s: the plain modern houses clean of ornaments and decorative motives, with a Spartan elaboration of materials, faithful to the belief of the social accessibility, and the luxury version of Bauhaus, with a rich retouch of plaster, marble and an-nouveau motives in metal accessories, also generous in their interior details and sizes. The first ones (plain modern Bauhaus) are located behind the area of Polyteknich School, which got strongly connected with the revolutionary generation of this decade and all the ones following, and who expressed and rooted themselves at this quarter of the town ever since; the second ones (decorative Bauhaus) are located at Kolonaki, the rich quarter of the centre.

The 40’s and the beginning of the 50’s were times of low building activity. The war and the economical crisis contributed to a pessimist and conservative attitude in politics and culture. Polykatoikia this time was the possession of the nouveau riche after the war, which wanted eagerly to show off rather their wealth than their taste. The architectural trend of this period has been ironically named “Louis XV” style (decorative modernity 1), after the bumpy decoration variety found in Greek motives on plaster all over the facade up to cheap - but still exaggerating- decoration of balconies restricted to balustrade motives. The luxurious houses were found on the axis of Vassilissis Sofias, the forefront of the city, while the cheaper versions on the smaller streets at the background.

After the new building law of 1955 and until the beginning of 60’s a more optimist era turns up. Still the end of 50’s bared the rich fassias around the openings, the stratified walls and the embelished balcony slabs (decorative modernity 2). Again here can one rich and poor cases distinguish. The main axis of Vassiliss Sofias Str. and Patission Str. got the biggest share of the most remarkable houses, while few streets further and for whole quarters the cheap imitations sheltered the greater amount of people.

Since the 60’s the constructive vocabulary of modern architecture shaped a new form of facades (structural modernity 1-2), where gradually the structural elements themselves (columns and beams) are featuring the facade arrangement. The first years the strong frames around the openings or balcony slabs insist, but the elements used for this “brutal” framing derive from the overly dimensioned slabs, breast walls and breast summers, who form vines of pumped up boxes in exceeded plains from the rest of the facade. Soon later simplification -out of financial reasons- also diminishes all the unnecessary plates: only concrete slabs and beams are differentiated from the plain of the brick-filled walls, supplementary marked with other kind of plaster and/or colours.

At the beginning of the 70’s and up to the 80’s the interests on plasticity decline. The structural element that overtakes is the forefront of the balcony and its possible decoration (structural modernity 3).

It is only the last 15 years that a new wave of decorative streams blooms in Athens. A misunderstood postmodernity expressed with round balconies, triangle plates over the windows, pink or light blue colors on the plaster undertakes the suburbs and the users who have raised their expectations as far as construction quality, facade plasticity and decoration accessories, generous sizes of floor plan and the related costs for them.
Neoclassical architecture

- Decorative elements of classical architecture.
- The openings are crowned with entablatures. Even stronger ones crown the openings of the first floor.
- Balconies strongly embellished with consoles and decorative motives of metal bars.
- Vertical zones of windows and balcony doors are repeated in turns.
- The vertical dimension of the openings features over the horizontal.
- Imitation of stone structure on the plaster, real stone found mostly at the ground floor.
- Heavy copestone segregating the ground floor -and highest- from the basis. A lighter one marks the finishing -and lowest- floor.

Eastern influence on neoclassical architecture

- Fancy decorative motives brought with land investors from east formal Greek colonies.
- Curves strongly promoted in oriels, corners, openings.
- Plaster decoration concentrated around opening frames and entablatures.
- Some openings grouped per two or more. Still the vertical dimension of openings is stronger.
- Balconies rare; if found, then consoles and bars are as found by the neoclassical buildings.
- Also often plaster seen without decoration, but still with curved elements. Entablatures then minimized in slices of plaster consecutively in recess. copestones also simplified.
- As seen in neoclassical buildings, ground floor and finishing floor segregated from the basis both with copestones and proportionally differentiated in height.
Transition to Modern (1)

- Simplified, but still classical articulated, eastern influenced, buildings.
- Curves previously mentioned feature quite a lot.
- Almost all the decoration motives disappear. Main building surface with plain plaster.
- Simple plaster frames around openings.
- More balconies appear, they turn to be even longer than earlier, no consoles any more.
- Still some openings grouped per two or more.

Transition to Modern (2)

- The Bauhaus movement appears strongly.
- Oriels dominate the facade.
- Windows for the first time extend horizontally, all over the length of oriel (performance of concrete potentials).
- Quantity of balconies mostly in balance with windows.
- Copestones and windowsills significantly present.
- Often art-nouveau elements at balconies.
Decorative Bauhaus

- Rich elaboration of facade with plaster, marble and metal.
- Variety of surfaces slightly exerted from each other, marking the finishing of balconies, grouping openings, framing parts of the facade.
- Marble used for window and balcony sills, art-nouveau motives for metal bars.
- Balconies with breast walls, whose surface is treated as continuation of oriel.
- Combination of rough and fine plaster for greater surfaces and finer frames respectively.
- Windows show off the constructive freedom of concrete particularly at corners.
- Imitation of wood pergolas at the penthouse floor with concrete beams.

Plain modern Bauhaus

- All facade surfaces treated plain and solidly. No decoration needed, no plaster motives, only slightly differentiation of rough and thin plaster as described previously.
- No strong frames around the openings, a feeling of solid volume with wholes.
- Balconies without breast walls, appearing as plain slab of concrete.
- Metal bars of balconies as simple as possible.
- No entablatures or copestones.
Decorative modernity (1)

- Turning back to old fashionable decorative motives.
- Although vocabulary of openings taken from the current trend (combination of windows, window-doors and balconies long extended), facade worked out with plaster motives.
- Fascias serve as guiding lines for the horizontal and vertical limits of the openings.
- Balconies grouped, partly inserted in volume and framed with entablature motives.
- Decorative balustrades replace the bars, the balcony slab also embellished.
- Imitation of stone construction found at ground floor, often with plates of marble.

Decorative modernity (2)

- Innovative use of structural elements-major or secondary- projected out of the main facade surface as decorative motives:
  - foreheads of concrete slabs and beams or columns slightly in excess form grates panels, in which openings are placed;
  - window-sills and breast summers exaggerate in thickness and form outstanding frames, extending out of the openings to the in-between formed panels;
  - balcony slabs and its breast walls treated as detached rectangular motives.
- Rough and smooth plaster demarcates again the greater surfaces from the frames.
Structural Modernity (1)
(slabs in recess)

- No more decorative motives.
- Forefronts of concrete slabs slightly in recess, marked with fine plaster or colour, sometimes also with marble (uncommon expensive solution).
- Same material follows the foreheads of balcony slabs.
- Outstanding panels correspond to brick fillings, are covered with rough plaster.
- Forefronts of concrete beams exert or recede at part of facade related to balconies and to window-doors; demarcated with rough or fine plaster or colour (cheaper version).
- Rarely thin lines of fine plaster frame edges of facade-panels.

Structural Modernity (2)
(slabs in excess)

- Forefronts of concrete slabs slightly exerted, covered mostly with marble or marked with fine plaster or colour (uncommon cheap solution).
- Same material follows the foreheads of balcony slabs.
- Forefronts of concrete beams exert or recede all over the openings/ windows, window-doors, balcony pendants; demarcated as previously described.
- Window-doors replace gradually windows; their bars are simplified metal handrails.
Structural Modernity (3) (panels of openings)

- Facade organized in surfaces-panels in recess, where openings or balconies are grouped.
- Panels for windows/window doors in recess of few centimetres.
- Secondary panels corresponding to concrete beams or brick fillings pointed also with surfaces in further recess and marked with different plaster or colour.
- Panels for balconies in stronger retreat, also there beams or columns marked as previously described.
- Normally rough plaster for the greater facade and fine one for the panels in recess, rarely the other way around.
- Corners of the buildings dissolved in meeting point of solid wall and panel with openings.

Structural Modernity (4) (slabs and beams in recess)

- Concrete slab and concrete beam joined in one surface and treated as one continuous horizontal forehead in recess or excess.
- Blind wall-panels strongly projected out of surface of forefronts from slabs and beams.
- Facade panel related to balconies strongly in recess.
- Balcony slab also treated as a forefront, dressed with marble or fine light plaster.
- Balcony breast walls quite solid, either built up with bricks of out of glass panels.
Structural Modernity (5)

(ostrovorous beams)

- Concrete beams starting as forefronts of balconies extend and grasp all around the volume; dressed with plates of marble or worked out with rough plaster and thin finishing.
- Elevation non-planar, the continuous beams either free standing or attaching to balconies.
- Forefronts of slabs or beams or both of them in recess, marked again with different plaster or colour.
- Panels of wall related to balconies further inserted.
- Glass panels instead of balcony bars reinforce the horizontal lining of the facade.

Structural Modernity (6)

(balcony "bells")

- Forefronts of balconies exaggerated in height run non-stop around the volume and conquer the facade. Mostly covered with marble or later (70's) with decorative geometrical motives of plaster.
- Second non-stop forehead of glass over the marble one as breast wall of balcony.
- One last horizontal forehead: the concrete beams exerted from the main volume.
- No windows or window-doors, only balcony-doors.
A time diagram describing the evolution of the facade styles of Polykatoikia: the styles S.10.11 that appeared between '90s and '70s when the most interesting ones and mostly remodelled from the mass of houses of this “golden” decade, when the decline for the total amount of houses, since the greater amount of polykatoikia was at that time built. On the other hand the style A11 (the kinovia or balconies built all around the facade of the house) was the most persisting in time for the after-war period.
LOCATING POLYKATOIKIAS IN THE CENTRE OF ATHENS
Introducing a method

A. Areas of study
In order to have a more overall picture of the distribution of polykatoikias in the center of Athens according to their architectural features we previously wanted to focus on specific "areas of study": they are the most central -and therefore representative in quality- parts of locations who share certain common urban features, to which they own their uniformity. These features can be named as following:

1. Timing
Every area has a hot spot of high building activity in a specific moment and façade techniques or styles of treating the structural elements are then featuring to the greatest amount of houses.

2. Maximum allowed exploitation
The quantity of exploitation of urban land is found out to be related to the quality of the houses. The most central streets of the sections 5 and 6, where the allowed heights were the biggest possible, attracted some of the most well designed houses of Athens from 50’s until the end of 60’s. From the beginning of 70’s, though, the relation of exploitation and quality changed the other way around: the high-density suffocating center was no more attractive, it turned to be cheaper than the closed range suburbs, where the low building factors and plot cover percentage was promising better living conditions.

3. "Urban attributes" (C. Fournari, A. Rosi)
Important squares, public buildings, proximity to transportation axis, landscape qualities or physical and fictional borders (ex. hills, train lines,...) influenced the establishment of specific users (with the certain income and taste) and consequently the types of houses that represented best their users. An attempt to justify with numbers and solid data the development at every study area as far as the first urban feature (timing) is concerned failed because of realistic reasons: the archives of the architectural plans after the war have been either falsified or partly destroyed on purpose. The engineers were presenting false plans to the related urban office and later they were employing their "proofs" that the real building does not follow the legal frame. So far there have been researches for the buildings before the war, which inherit trustworthy information. For the situation after the war the assumptions of the author are not based on a concrete source. Hopefully the next years the national land register will be completed (so far there was none), and one can recall the necessary data to argue for the present statements.

The other two urban features (maximum allowed exploitation and urban attractors) are explicitly demonstrated at the next pages.

B. Maps of distribution
The distribution of polykatoikias at the areas of study was decided to be presented through the location of the façade types rather than the styles, since the first ones are estimated to be more representative of the general urban picture that polykatoikias stand for than the second ones. For a further idea how the styles were distributed, one can combine the information of the maps for types with the correlation of types-styles (see p. )

A quite documented picture for the period before the war was obtained thanks to the work of M. Marmaras (see bibliography, p. ). Therefore the maps concerning the distribution after the war (40%) which are based on the contemporary Polykatoikias until type 4) are more precise than the later ones.

Another important note is that the presented distribution is a focus to the estimated grater concentration of types on the map and not an accurate charting.

The types 10 and 11 are the ones who are mostly spread: type 10 (p ) is to be most often found all over Athens and type 11 was set strictly by law - concerning the whole of all the central streets of the city center to facilitate the ground-floor shopping activity.

Type 9A and B should be considered as a sophisticated expression of type 10 (and quite believed from the ones who had interests to combine traditional Greek architecture with modernity after the war), and therefore found selectively on the biggest streets of the areas were questions of architectural inheritance meant something.

The next position at the list of frequency is claimed by type 7: the flexibility of combining rows of balconies and windows found a lot of supporters among the engineers and this model was also expanded in its best version among the axis of Patision, Alexandras and Vas. Sofias (Iliisia) while the cheapest version was successfully applied at the "back yard" of the above axes. 

Exactly at this "back yard" is type 8 to be found: the step of the balcony from its modest position next to windows to its absolute conquest of the façade is performed through this type with poor details and constructive expectations.

Type 6 was always a luxurious type and as such one was found on Patision Str mostly, even more at the biggest streets of Kolonaki and Museum area.

Type 5 was quite restricted: at the tight moment, some of specific users after the war (40%) when the upper class could afford the product flat, only areas such as Vasillissis Sofias Avenue and the most central streets of Kolonaki could possibly accommodate such houses.

It was worthy of being noticed that the above comments for the degree of spread of the after-war types of polykatoikias are structured from the latest evolved to the earliest ones, that is the other way around disproportionally. As far as the pre-war types are concerned, one can be more accurate: the size of the city is still restricted. The type 3 was in two styles to be found, the decorative Bauhaus, which was favored in Kolonaki (area 5) and the pure modern one at Elexheia (area 6) together with the progressive type 4. The other pre-war types are positioned in the center, between Omonia Square and Parliament or even at the biggest streets of the old market, simply because only so far were the city's profitable plots expanding.
Maximum allowed exploitation

The distinction of the urban space in sections according to "how much" one could build (maximum building height, maximum facade height, plot cover...) started in 1934 and signaled the interference of the state to the prices of areas in the city and following the quality of the buildings found at each area.

The number of floors and the related heights of every section expressed the will of how the built burden should be distributed. This will was not completely realized, but it definitely guided greatly this distribution.

The sections with the maximum allowed floors are the most central ones: section 4 was always the financial and commercial center of Athens and was meant to bear the highest buildings of the city (9 floors), although the left over of the irregular grid and the small plot sizes did not favor this development; section 10, the second on the list with the highest buildings, included quite differentiated areas: the spacious plots between the Parliament and the central square (Omonia) with old residences and classical office buildings or banks, the area around Omonia Square with hotels and offices not that impressive, and finally the oldest well done axis of residences from the center of the city towards North: Patission Street.

The main residence areas are found at sections 5 and 6. Among them section 5 is the originally well done central area, were the most types found their best expression in construction terms. Section 6 could be considered as the "back side" of section 5, the cheap version or imitation of what was already tried out at the most central streets.

Related to this remark is also the fact that section 5 extends often linear along central streets where ground floors shelter shops, while section 6 is spread all over the lines of section 5.

The size of the buildings at section 5 concerns 6 floors plus a penthouse and section 6 is following with one floor less; they are both having a factor of plot cover reaching 75% and these numbers represent quite fear the most general picture of the center regarding polytoliakas. Finally the differentiation of polytoliakas on every section itself is marked from the geographical borders of three axes: Patission Street, Alexandras Avenue and Vasilia Sofias Avenue. Each one of this axis separates areas of different moments of development and therefore different sizes and ambitions. In general terms could be argued that the highest ambition buildings are gathered in the area enclosed from these three axes, while out of them found place either cheap imitations or more simple motifs.
Urban Attractions

At the beginning of the 20th century, the big decisions of placing important buildings, squares or opening big streets in the city were already taken. These urban components formed a specific character for neighbor areas and decided for the sort of development of Athens. They attracted around them specific groups of inhabitants and created a certain urban atmosphere that defined the character of the houses which were there built.

The position of the Palace (1836) attracted the residence of the upper class: the axis of Vasileios Sofias Avenue and the close to the Palace part of Akadimias Street were soon decorated with villas. During the 40’s at this axis again the “Louis XVI” style of the nouveau riche finds its place. The gardens in front of the houses, the generous plot sizes and the strict use of residence and embassies are witnessing the high standards of the two streets. Behind Vasileios Sofias Avenue developed the residence for the quite wealthy citizens: the quarter of Kolonaki attracted very early desertion. A first grade difference was one luxury polykatoikias climbed up to Lakkas Hill and meet its other boundary at Sporou Street, the border between Kolonaki and Exarhia. The Polytechnic School (1868) was always the attractor for the academic classes, which were in Greece traditionally bounded with the zwarva guards in political and cultural terms: the “generation of the 30’s” brought in Greece the Bauhaus movement and tried to find a new expression of it in combination with the traditional Greek architecture, literature, music, and other expressions of art. The houses of the 30’s, which one can find at Exarhia, are the expression of these traits as far as architecture is concerned. Omonia Square (1834) is considered to be the centre of the city. The only European size blocks and streets of Athens are to be found between this square and the Palace. This is not only the boundary of the “in order” plan of the city from the leftovers of the old chaotic urban fabric, but also the limits of the mixed use centre to the primarily residential quarters. Patission Street was set since the first plan of Athens as the extension of the city to the North, since the south was blocked from the hill of Akropolis. This axis was developed in three parts: the earliest one expanded from the centre up to Polytechnic; in 1869 the axis was extended up to Plinou street in the same bright, forming the area of museum; in 1871 one more kilometre extension is approved, while in 1879 the extension goes further for some kilometres, but with a smaller bright. Every one of these extensions was gradually less qualified in terms of urban design; the quality of the houses is also fading as the distance of the centre grows more. One of these extensions meet the Agiou Mellediou Street, where the suburb of Kipseli was built. This suburb as well as the other side of Patission Str extending up to the train lines connecting Athens with its port, Piraeus, can be considered the back yard of Patission Axis. The hot spot in town were poykatoikias was blooming at this area after the war the 50’s. Alexandras Avenue was opened between 1876-1878 to serve the expanding of the city that was already going on between the hills Lakkas and Strelos and to give also a new vertical way out to the street. A first grade difference with Patission Axis is that no “urban attractors” define along its length a different character, while further this axis has always been serving for the car transportation of the center to the suburbs, a fact that kept the dense commercial activity that one can find at Patission far away from this case. The timing of this axis is different: if we can assume that Patission served the first expansion tendency for residences after the war (90’s), then Alexandras Avenue facilitated the second part of our bursting of residence (latest 60’s), that is quarters at both sides of the axis as well as suburbs laying after the end of Alexandras (beginning of 70’s), behind the area of Iliou, while the third generation of suburbs (latest 70’s and 80’s) found place at a wider range direction North after the meeting of Alexandras and Vasileios Sofias.
1. **Axis Patission str**
   The first expansion of the city centre towards North. The plots have always been quite big for the standards of the town, but with the burden of section 5 (big plot cover and heights) is also remarkable.
   The houses were always designed with shops at their ground floor, the ones which were built later than 1955 have also arcades. The character of the axis develops different as long as the distance from the centre grows bigger; close to Omonia Square are the oldest houses, but not that many for residence; at the middle part of the axis are to be found some of the most interesting houses of the 50s; the end of the axis is getting towards the reduced quality of area 7, while the width of the street gets also smaller.
   **Timing:** 50s  
   **Main type:** 6  
   **Main style:** 8, 11

2. **Axis Alexandras Avenue**
   Already in the 60s small flats with efficient access space were the rule for the houses. The detailing of the facades, the materials turn to be not that impressive. Although this axis was heavily used for car transportation, it kept quite good standards of residence. The ground floor served exactly this “passing through” area with a lot of uses: shops, banks, gas stations, bureaux, praxis… Along the axis one can distinguish higher quality houses at the points where small parks exist.
   **Timing:** 60s  
   **Main type:** 7  
   **Main style:** 11, 12, 13

3. **Axis Vas. Sophias Avenue centre**
   The high society residence: conservative houses expressing the after war political climate. Obligatory gardens and ground floors with nothing but residence (or later embassies) “protected” the quality of the area. The axis can be considered as the “front” of Kolonaki, the expensive residence quarter of Athens starting behind Vas. Sophias Avenue and ending up to the hill of Lycabettus.
   **Timing:** late 30s, 40s  
   **Main types:** 2.5  
   **Main style:** 7

4. **Axis Vas. Sophias Avenue Illis**
   One of the first expansion to more spacious suburbs: generous sizes of plots and flats, often designed by architects. Although the timing is the same with Patission axis (area 1), the types and the styles are often some steps further: types 7 and 9 are already appearing and style 11 is found also quite often.
   The ground floors were originally formed with garden to keep residence away from the street, but the nearby hospitals attracted soon praxis-activity, which still today occupies a substantial percentage of the flats all over the area.
   **Timing:** 50s  
   **Main type:** 7, 6, 6var, 8b  
   **Main style:** 8, 11

5. **Area of Kolonaki**
   The traditionally expensive quarter of Athens with small size plots, which were built mostly before the war: art nouveau details, the Lilieux movement in its Athenian version.
   The street sizes and the public spaces are quite small, and the commercial activity that finds today place at the area disproportionally big. Most of the ground floors, which were originally designed for residence, are today occupied with coffee places, shops, banks, galleries…
   **Timing:** 30s  
   **Main type:** 3.4  
   **Main style:** 5, 7, 8

6. **Area of Museum**
   The Polytechnic School attracted from the beginning of its history the avant-garde of the academics; the “generation of 30’s” in Greece brought from the central Europe the modern movement and the architectural expression of it was best in this area performed. The version of polykatoikia was taking a new future for a socially accessible residence, and unfortunately could not get realised without the help of the State.
   **Timing:** 30s  
   **Main type:** 3.4  
   **Main style:** 4.5, 6

7. **Area behind Patission axis**
   The “back part” of Patission axis, whose types and styles were instated in a cheaper version.
   The two sides of the axis have substantial differences: the one side facing west is quite uniform and stops at the train lines, while at the other part one finds often cuts from important buildings, parks.
   The ground floors shelter the local market.
   **Timing:** 30s  
   **Main type:** 6, 6b, 8  
   **Main style:** 9, 10, 12

8. **Centre**
   The part of the city that testifies a glorious and enthusiastic beginning of a European capital, which soon after reduced its ambitions. The ornamental architecture, the classical decoration, the big plots are only in the triangle between the two most important squares. Few but impressive vistas of the beginning of the century and premature polykatoikias describe better the character.
   **Timing:** 30s  
   **Main type:** PP, 1.2  
   **Main style:** 1.2, 3

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**Defining areas of study**

**S O F I A S T R**

**A L E X A N D R A S A V E N U E**

**A R I O N T H I O U A V E N U E**

**P A T I S S I O N S T R**

**A R E A O F M U S E U M**

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**Locating Polykatoikias in the Center of Athens**

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**10**

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**31**
Locating Polykatoikias in the Center of Athens

Geographical distribution of types: predominant polykatoikias.
Geographical distribution of types:

Type 1

Type 2

Type 3

Type 4

Type 5
LOCATING POLYKATOIKIAS IN THE CENTER OF ATHENS
POLYKATOIKIA FROM CLOSER

floor plans

The following floor plans are just an occasion to explain the attitude of exploitation of urban land. The priority has always been the quantity of square meters and not the quality of the house, although before the war the standards of the design are much more respectable.

The following examples are separated in before and after the war cases. The differences are obvious; before the war the sizes of the plots are much bigger, they belong to well-off citizens who invest their money on real estate. The influence from central European architecture is obvious, the hope also that Athens is turning to become a "modern" city runs through the buildings of the time. After the war the one-family-house plots are the ones who get the burden of polykatoikia due to the system of "anti-parohi". The cost of the lack of space and the pressure of quantity leads to squeezed sizes. The floor plan is less clear organized, the common spaces do not have contact to any natural light, the empty part of the plot is divided in small and dark "light pipes". Other luxurious details found before the war, such as a second entrance from the kitchen or even a separate staircase for this part of the house (often combined with room for the house helper) are not any more found after the war.

Other indicators for the tide program that the postwar houses had to fulfill are the shrunk corridors, the small elevators, and the disproportion of access facility to number of flats: when the prewar houses were facilitated with a generous staircase and elevator for every two (2) flats per floor, after the war a number of 4 or 5 flats are with less generous access to be served.

The secondary spaces (kitchens and bathrooms) are always placed around the courtyards, which until the 40's can still be named as such, when later their sizes are minimized to 1x0.80m. The surface of these secondary spaces is also drastically minimized.

The location of the house is not irrelevant with its interior qualities. The big streets of Kolonaki have definitely a grater respect for luxury than Exarheia, and altogether Patission Str. And Alexandras Avenue have even less to offer after the war.

The examples which were chosen to analyze the interior picture of polykatoikia are presented in relation to the time they were built, the area they belong, and their general sizes (plot cover, useful square meters, number of flats and floors...). Attention has been given to the articulation of secondary spaces around the courts- or light pipes later-, the common spaces which allow access to the houses, and the leftovers of the plot: the obligatory free space, whose percentage is obviously diminished in the 60's.

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Vasilisis Sofias Avenue, 1932
area 3
style 4
37x43m plot
82% plot cover
4.0 factor of useful m²
(37x43x4.0=7800 useful m²
6 floors
6 apart. per floor
Big plot at privileged area
Ambitious design, central European architectural influence, well-done details.
Main and secondary staircases.
No elevator.
Combination of internal court and small light pipes.
Kitchens separately accessed from secondary staircase.
Room for the service combined with the kitchen.
Ground floor occupied for residence.

Patriarhou Ioakim Str, 1933
area 5
style 3
17x14m plot
94% plot cover
5,7 factor of useful m²
5 floors
2 apart. per floor
Small plot at central street, quite well done
Light pipes unusually small for the quality of the area.
Secondary staircases despite lack of space.
Arahovis & Themistokleous Str, 1933
area 6
type 3
style 6
4 floors
6 apart. per floor
46x26m plot
87% plot cover
4.4 factor of useful m²

Big plot on the central square of the “progressive” quarter.
Free space is divided in irregularly shaped and quite small courts, although flats are symmetrically organised.
Secondary staircases for kitchens and rooms for the service.
Elevator (luxus for 1933)
Ground floor planned for shops.

Stournari-Zaimi, 1934
area 6
type 4
style 6
4 floors & Penthouse
2 apart. per floor
17x18m plot
93% plot cover
5.3 factor of useful m²

A quite small plot economically organised.
Interior architecture exceptional
Secondary staircases
Light wells small, but effective.
One of the few examples where the building occupies a whole block.
Floor plan in symmetry.
Well organised interior courts.
Kitchens and bathrooms around the courts.
Patison street, 1934
area 1
type 3
style 6
5 floors & Penthouse
2 apart. per floor
13x24m plot
90% plot cover
6 factor of useful m2

The minimum possible free space:
the house is situated close to the center,
the speculation is obvious.

Semitelou Str, 1953
area 4
type 9B
style 11
4 floors & Penthouse
2 apart. per floor
15x13m plot
95% plot cover
5.5 factor of useful m2

A strictly symmetrical well organised floor
plan with grid.
Spacious flats with a modern outlook of
integrated common spaces.

POLYKATOIKIA FROM CLOSER
Patisia & Pipinou str, 1959
area 1
Type B/A
Style 11
5 floors & Penthouse
4 apart. per floor
26x90m plot
80% plot cover
5,4 built area

The new sizes after the war:
four light wells, the two of them extremely small:
compact staircase and corridor to serve 4

Flats.
no more secondary staircase.
the secondary rooms squeezed around
the small light pipes, fighting for an opening

Ground floor designed for shops
There are though small flats at the back space of the ground floor.
All the shops have attics to cover the height of 5m. The facility of WC with a small light pipe is also offered (not found always).
The ground floor follows a squeezed motif of many shops. The ones facing Patission str have also attic. Unfortunately few of them are provided with facilities of back space, but then this space is quite generous (more rooms, probably a small residence). One small single flat, possibly for the caretaker, is situated at the back space of the floor plan. At this house one remarks that the light pipes of the ground floor are even smaller than the ones at the floors.

Patission & Kefallinias str, 1959
area 1
3 floors & Penthouse
5 apart. per floor
5,2 built area

Less but bigger light wells.
Flats quite big for the postwar standards. Still 6/1 flats served with one staircase and an interior corridor.
Patision & Kallifrona, 1962
area 7
type 6
style 7 (cheap imitation)
5 floors & Penthouse
4 apart. per floor
15 x 19m plot
90% plot cover
5.7 factor for useful m²
Small squeezed flats
Light pipes inefficient.
The standards are close to the central houses
of Patision Str, but at the end of the axis

The ground floor formed with arcades.
All the area of it is covered with shops, but
they have no supplementary facilities.
Only the small shops have attics, probably
the corner shops have static difficulties
for such a construction.
The attempt to design some new polykatoikias is only a programmatic effort. The areas which were selected to place new polykatoikias are the ones who mostly occupied this study because of their quality: the axis of Alexandras Avenue, the axis of Patission Str and the axis of Vasileos Sofias Avenue. What was seriously taken in mind at every one of these axes for the new examples was the existing types of facades and the architectural styles and give the character of the area.

Furthermore the already existing uses of the ground floors guided the floor plan decision to a flexible solution, which could allow to the existing urban quality of multi-functionality to survive further. The facade of every house is formed in a way that this multi-functionality of the house (normally consisting of a ground floor that allows this function-flexibility and a main body of the house for residence) is promoted. Big glass facades, although for climatologically reasons should be avoided in countries like Greece, are now used to sign the public use of the house in contradiction to its solid part for private residence.

Another effort was done to "repair" the floor plan mis-functions of the existing houses through symmetry we tried to apply a "clear" floor plan, where the sizes are quite generous. The light pipes that still are necessary are not spread any more in small pieces, but gathered in big interior courts, to which one can have access from the ground floor. The space that facilitates the interior movements (stairs, corridors) are now gathered in a way that more than one staircases facilitate the house, and the element of corridor has been minimized. This interior movements are also combined with the interior courts, so that the light condition is satisfactory.

The flats themselves have been situated in such a way to the ground floor, that they have both accesses to the front and back façade of the house (quite often the old houses separate the "front" expensive flats from the "cheap" back ones, not for the seek of a variation of quality, but because the full exploitation of the square meters of the floor was in this way easier succeeded).

For every flat one or more of the sides of the interior courts we described earlier offer their light and air for the secondary spaces (kitchens and bathrooms) which quite often did not use to have the quality of this access in the old houses (we should remember that the old light pipes for bathrooms could be as small as 0.70m x 1.00m!) Finally the realised sizes of the houses (their plot cover, the number of their useful square meters and their height) have been almost fully applied, but in a way that this houses do not over exaggerate their neighbouring houses: therefore, although the new building law allows through the "national solid" a grate range of plasticity, we have used this offer only in terms of formulating the volume in harmony with the existing atmosphere.
A considerable part of this house is proposed to undertake the burden of office space: its position on the central part of the axis of Pallasion str means great land value and uses that partly contradict residence and therefore should be carefully combined.

The void that accommodates the office is placed quite independently at the edge of the building and clearly projected with a transparent façade. The whole first floor is also devoted to the same use and formed similarly as far as façade is concerned: a glass surface in shape “L” indicates the office space and distinguishes it from the solid formulation of the rest—residential—part of the building.

The solution of atrium was chosen in regard to the metropolitan scale of the plot and to facilitate the two different kinds of vertical access (staircases and elevators) placed opposite to each other, formed directly related to the spaces they serve: a linear extended generous staircase occupying the whole length of the one façade of the atrium and two small compact staircases for the residences.

The ground floor is formed in a way to be accessed in all its depth thanks to the atrium-solution. It is proposed to follow the often found on this street cultural activity of theater. The theatre MINOA is in any case since years sheltered at this plot.

The plasticity of the façade is directly influenced from type 3 (oreils and balconies in one surface). This time, though, this type had to derive from the restrictions of the "national solid" and the solution of pylons that leave between them the necessary gap for balconies to develop seemed an appropriate solution. This between gap at the ground floor is also used for multiple entrances that could serve better a possible theatre or any kind of other open to public activity.
maximum allowed sizes
plot 2460m²
cover 70% 1722m²
height 27m
total area 10330m²
realised sizes
cover 1580m²
height 25.2m²
total area 10280m²

the location
Three new proposals
Case 1

Cas 1

perspective views
Although this area is a passing point for cars on their way to the northern suburbs that have been developing the last 20 years, it always kept its residential character. The ground floor was originally designed to shelter flats, but already from the 70's the pressure of the uses that the big axis attracted pushed a respectable percent of the residence aside. Today one can find on Alexandras Avenue a big variation of uses, such as restaurants, banks, shops, fuel stations, praxis,...

For this plot, standing between houses which still remain today mostly residences (any flat at any floor can turn suddenly to office space) we are proposing only uses that would be absorbed in the house and would not demand their own entrance and which should be gathered all together at the ground floor and be once more indicated with an open façade.

The rest of the house follows the already presented principles of symmetry, generous but compact vertical pipes of movement combined with interior courts (although in this case the sizes of the courts are quite small) and flats laying on both facades.

The style of the structural modernity gave the tendency of the formulation of the façade for slabs of balconies flowing out of the volume and beams as over exaggerating foreheads continuing from one balcony to the other.
maximum allowed sizes
plot 1056m²
cover 70% 740m²
BF 4
height 27m
total area 4232m²

realised sizes
cover 546m²
height 27m²
total area 4200m²

the location

view from the street

types and styles that influenced the proposed building
perspective views
This case is designed on an imaginary empty plot. The intention was to experiment once more with the type of "Louis XV", the luxurious houses shortly after the war situated at the façade of Kolonaki (area of study 3), that is Vassilis Sotas Avenue. The basic elements that form the volume are quite "European": a basis of a ground floor (if not residence the law allows only embassies on this street), an attic with pergolas, were the set back of the earlier buildings could "hide" itself in the general frame of the building, and in between a stiff articulation were balconies are seen as wholes in the volume. The sizes at this proposal exaggerate: the wholes in the volume for the balconies are seriously brighter than the old houses, the openings formed like windows are finally doors, even more grouped every two and the basis of the building is parted form two floors instead of one. The openings are gathered in slightly to each other excessing panels, so that a rythmus is all together applied. This house tries to respond better to the Greek habits for half-side space that the European houses of Vas Sotas Av. did not offer: balconies were not that extended and the openings still not generous proportionally to the mass of the volume. The two entrances for the house are leading to the interior court, which follows the principle of being combined with the staircase.
a view from the street of Vass. Sofias Av.

maximum allowed sizes
plot 1640m²
cover 11348m²
height 27m
total area 8500m²

realised sizes
cover 1137m²
height 26.5m
total area 8454m²

types and styles that influenced the proposal

views from the street