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# Ancient Logos as Influence on Urban Planner Constantinos A. Doxiadis

Constantinos A. Doxiadis (1913–1975) was a world-famous, 20<sup>th</sup>-century Greek urban planner and architect, one of the most influential practitioners of development urbanism of the 20<sup>th</sup> century globally. Starting from the 1950s, until his untimely death in 1975, he created for himself an exceptional role on the world stage and has remained a leading figure in the history of urban planning and of science.

Over this astonishingly short period, his name was linked to countless settlements and new or old towns that he was involved in establishing or in reshaping. He founded Doxiadis Associates in 1953; this was a private firm of consulting engineers which grew rapidly to the point of having offices on five continents. Five years later, in 1958, Doxiadis founded the Athens Technological Organization and in 1963 the Athens Center of Ekistics. From 1958 to 1971 he taught ekistics at the Athens Technological Organization and lectured at universities all over the United States as well as at Oxford and Dublin. As representative of Greece on the Housing, Building and Planning Committee of the Economic and Social Council of the United Nations in New York, he was Chairman of the Session on Urban Problems at the UN Conference on the Application of Science and Technology for the benefit of the less developed areas which was held in Geneva in 1963<sup>1</sup>.

Doxiadis soon distinguished himself as an urban planner and was recommended for his ability to provide solutions to developmental and housing problems. Consequently, he designed master plans for American cities in the context of President Lyndon B. Johnson's "Great Society" policy [21]. Further, Doxiadis Associates provided development studies, urban planning and architectural projects in more than 60 countries in North and South America, Africa, Asia, the Middle East and Europe. Some of these countries were decolonized or founded at around the end of World War II. After British India was partitioned into the independent dominions of India and Pakistan in 1947, Doxiadis Associates were called to design the Pakistani capital city (see below). Besides, Doxiadis Associates defined the future of large cities and impacted regional as well as national prospects. Compare this with Le Corbusier, a famous architect influential in urban planning, a founding member of the Congrès International d'Architecture Moderne (CIAM), whose single involvement in urban post-war design was the masterplan for Chandigarh, capital of the state of Punjab in India. Given that C.A. Doxiadis was intensely involved in processes of post-war decolonization and of the establishment of new states, it can be firmly argued that he is part of the history of global socioeconomic development and planning after World War II.

Doxiadis applied his theoretical skills to create design methods based on the extensive and detailed empirical analysis of data. He conceptualized the study of human settlements as a sci-

<sup>&</sup>lt;sup>1</sup> See https://www.doxiadis.com/projects.php?region=155. On post-war decolonization, see https:// www.iwm.org.uk/history/britain-and-decolonisation-in-south-east-and-south-asia-1945-1948

ence, using mainly quantitative methods; yet his purpose superseded quantification. Doxiadis aimed to respond comprehensively to a whole spectrum of human needs across cultural, geographic and socioeconomic divides [43]. Using information technology, which he introduced in Greece [32]<sup>2</sup>, he ultimately attempted to ascertain happiness for urban dwellers. It should be recalled that this attempt was congruent with the western post-war euphoric trust in urban planning as vehicle for state intervention towards rebuilding the devastated European cities. These programs were guided by the principles of modernist planning disseminated through the influential International Congresses of Modern Architecture (CIAM), which were based on the ideas of art and architectural historian Siegfried Giedion, of Swiss architect Le Corbusier, and on the German Bauhaus. Also, on the "garden city" concept, first devised by urban planner Ebenezer Howard in his 1898 book *To-morrow: A Peaceful Path to Real Reform.* Suffice it to mention the 1946 New Towns project in the United Kingdom, based on the latter concept, or the projects of architect Georges Candilis's office, such as the expansion design for the Le Mirail (1961) district of Toulouse, among others.

Beyond the above input, Doxiadis conceived of human settlements as living organisms following laws which were defined by five key elements: Nature, Anthropos (Man), Society, Shells and Networks. Because natural and human-made aspects of the urban environment are interdependent, he proposed that they be re-conceptualized in tandem and as a continuum, following ancient Greek city principles. In other words, Doxiadis believed that the ancient Greek city could provide modern architects and urban planners the key to a balanced coexist-ence between urban nature and culture [43]. Doxiadis's original combination of design comprehensiveness, informatics and ancient wisdom turned him, I would argue, into an apostle and visionary of the new information modernism at the service of human happiness.

A look at the exact manner in which ancient Greek thought, seen as a major intellectual but also as a spiritual substratum, influenced Doxiadis's oeuvre, is the subject of the present analysis. More particularly, it will be shown that, through his ancient settlement theory, molded under the influence of ancient logos, Doxiadis pursued a general, interdisciplinary theory of human settlements. He believed that drawing from this deep ancient source as well as from modern science would allow him to detect human needs optimally and perceptively, in order to meet the challenge of elevating city-based human prosperity on a global scale.

#### Doxiadis's formation and thesis

C.A. Doxiadis was all three: extremely ambitious, talented, and hard working. During his formative years at the School of Architecture in Athens of the mid-1930s, this city was claiming an important place among European capitals, especially concerning architectural, archaeological, monuments' restoration and aesthetic issues [25, p. 98]. In this enthusiastic atmosphere, a number of articles appeared in the journal *The Third Eye* on harmonious space arrangement in ancient Greek sanctuaries like the Acropolis of Athens. *The Third Eye* was the most avant-garde fulcrum for the busy, creative Greek Generation of the 1930s [13, p. 182; 25, p. 46]. Relevant articles were written by young Doxiadis and Dimitris Pikionis, his mentor, a distinguished Professor from the School of Architecture in Athens.

<sup>&</sup>lt;sup>2</sup> In the 1960s, his firm conducted the "Human Community" project, a survey of Athens residents that measured their adaptation to the emerging rhythm and spaces of the post-war city, using a supercomputer of the time. Questionnaires were distributed to eighteen Athenian neighbourhoods and focused on citizen views in regard to the level of happiness in their everyday urban life [43].

Doxiadis's entourage, in particular Pikionis, was fascinated with theories on space and visual perception<sup>3</sup>. His theory, articulated in his doctorate which he acquired from a German academic environment in 1936, namely from the Berlin Charlottenburg Technische Hochschule, was preceded, as expected, by current discourses on space — geographical, architectonic and artistic. To begin with, since early 19th century, geography as academic discipline forged national identities, pursued national superiority and facilitated colonial mercantilism [24]. Antagonisms between national schools like the French and the German affected geographic, aesthetic, cultural and archaeological issues [24; 25]. Differences include the very definition of culture and civilization, the field of geography, with the clash between the French geographical possibilism and the German environmental determinism, as well as archaeology, with clashes around the acquisition of ancient artefacts, the presence of foreign archaeological schools in Greece, as well as disciplinary interpretations of world-famous monuments like the Acropolis (see [24] on geographical thought; [25] on archaeological issues). In the artistic arena, cubism, molded in early 20th century Paris and linked to non-Euclidean geometry and the fourth dimension, revolutionized space perception and representation across Europe and beyond<sup>4</sup>.

Geographical determinism differed from other theories focusing on art- and architecturerelated space form, perception and organization of German origin, which emerged in architecture, art, philosophy and history during the second part of the 19<sup>th</sup> and into the 20<sup>th</sup> century. Many were devised by German aestheticians, philosophers, physiologists and psychologists, who inquired perceptions of space and form after Kant [31; 40]. Psychologists in particular explored the pleasure inherent in form and space perception.

In terms of art history, chief among these contributions were the theories of historian August Schmarsow, articulated in *Grundbegriffe der Kunstwissenschaft (Fundamental Principles of the Science of Art*, 1<sup>st</sup> ed. 1905) which followed closely the publication of Alois Riegl's (1858–1905) treatise *Die Spätrömische Kunst-Industrie (Late Roman Art Industry)*, 1901. Riegl stressed perceptual bonds with the objective world through space<sup>5</sup> reflecting on the role of space and its expression in a particular period of history. Others, like Konrad Fiedler proposed detachment from space<sup>6</sup> as a means for objective contemplation<sup>7</sup>, thus stripping art of lived experience. Others yet, like Gottfried Semper, explored structure and ornament, namely core and surface in architecture<sup>8</sup>.

<sup>&</sup>lt;sup>3</sup> According to architect Alexandros Papageorgiou, Pikionis's associate and son-in-law, Pikionis enjoyed *The Perception of the Visual World* by James Gibson [17].

<sup>&</sup>lt;sup>4</sup> For a detailed commentary on the connection of non-Euclidean geometry and the fourth dimension with cubism, see [16]; it is claimed that only about in the 1910s widely circulating ideas could be equated with the new "cosmic consciousness" and appropriated in an artistically and philosophically productive context. See also [26].

<sup>&</sup>lt;sup>5</sup> Riegl proposed that perceptual relationship with the objective world accrued from both the senses (vision, touch) and the mind. He suggested that history alternates between tactile periods emphasizing space, optic periods de-emphasizing space, and normal periods favoring both tactile and optical qualities [18].

<sup>&</sup>lt;sup>6</sup> Exploration of the perception of form and space expressed a new emphasis on them as dimensions of artworks with possible manipulable properties [31].

<sup>&</sup>lt;sup>7</sup> Fiedler denied space as a bearer of lived experience and material existence. This allows contemplation and visualization, which stand outside ourselves, relinquishing art's immediate relation to knowledge and stripping it of all relation to desire [31].

<sup>&</sup>lt;sup>8</sup> These are first studied in the context of 18<sup>th</sup> century French texts that address the distinctions between an exterior and an interior space from the point of view of how these two spatial entities work on the viewer,

A bit later, in terms of cultural criticism, spatial and visual perception also informed explorations of the new "optical unconscious", propelled by the metaphysics of the camera-human eye association, which were launched by Walter Benjamin —himself also part of the German academic environment [20; 3]. Apparently, this German Zeitgeist conduced to a specific spatial perception of architecture which primarily translated it as pure optical forms [40].

Let us now return to Doxiadis's doctoral thesis. Having started his research as an undergraduate in Athens, Doxiadis submitted it within just a year, which must have broken a record. Aided by Pikionis, he sought to define the compositional principles governing sacred Greek architectural complexes from the 7<sup>th</sup> to the 2<sup>nd</sup> century B.C. Doxiadis's thesis was a sensational response in the years after the 4<sup>th</sup> CIAM, which took place in Athens in 1933 [43]. He suggested that spatial layout depended on a polar coordinate system, the focal point of which was the entry of such precincts, where an observer could perceive the entire space (Ill. 101). According to Pikionis's article in *The Third Eye* explaining his student's thesis [34], a rhythmical division of space into concentric spheres radiates from the spectator. In the Acropolis, the vantage point is the center of the Propylaea façade, the magnificent gate to the precinct. Supposedly, a spectator would obtain from this vantage point the whole image of the Acropolis ensemble, seen in absolute unity with the surrounding nature, so that all points of the horizon became parts of the composition.

Doxiadis wanted to arrive ultimately at a generally applicable urban design system. Avowedly, his analysis was based on a theoretical hypothesis and on archaeological plans of the chosen sites, rather than on personal local observations [43]. This neat and visually appealing account catapulted Doxiadis at the forefront of archaeological and planning preeminence in Germany and Greece, establishing his international career and influence.

Doxiadis was conversant with ancient philosophers, scientists, historians and geographers like Anaximander, Plato, Aristotle, Euclid, Proclus, Plutarch and Pausanias. It seems that a number of *stimuli* underlie his hypothesis, not all of which were conscious. First off, both Aristotle and Strabo state that sanctuary construction followed an internal regulation<sup>9</sup>. Then, Doxiadis's hypothesis concerns the triangulations between major ancient Greek sanctuaries. Ancient astronomer Hipparchus had asserted that he used geodetic methods to determine every point on earth [29]. The use of mathematics, including the golden section principle, was exemplified in the proportions of temples and in the aqueduct designed in mid-6<sup>th</sup> century B.C. by Eupalinos on Samos, recognized as one of the finest achievements of ancient civil engineering [8].

Yet, for all this emphasis on mathematics and the capacity for major structural achievements, which could focus brilliantly on an isolated structure, Greek antiquity avoided system-

and then in the context of the later German theories on the subject [5].

<sup>9</sup> Aristotle says in his *Politics* (VII, 1331a) [2]:

But it is fitting that the dwellings assigned to the gods and the most important of the official messes should have a suitable site, and the same for all, excepting those temples which are assigned a special place apart by the law or else by some utterance of the Pythian oracle. And the site would be suitable if it is one that is sufficiently conspicuous in regard to the excellence of its position, and also of superior strength in regard to the adjacent parts of the city. It is convenient that below this site should be laid out an agora of the kind customary in Thessaly, which they call a free agora, that is, one which has to be kept clear of all merchandise and into which no artisan or farmer or any other such person may intrude unless summoned by the magistrates. It would give amenity to the site if the gymnasia of the older men were also situated here — for it is proper to have this institution also divided according to ages, and for certain magistrates to pass their time among the youths while the older men spend theirs with the magistrates; for the presence of the magistrates before men's eyes most engenders true respect and a freeman's awe.

atic perspective, and, by extension, systematic, namely coordinated, fully pre-arranged spatiality on any level and scale. The constant avoidance of systematic perspective by ancient Greek culture should be probably attributed to a number of parameters, some of which I proposed recently [27]<sup>10</sup>. Philosophical explorations, myth, political processes and respect for the natural environment shaped a visual feeling which was plastic, multidimensional, participatory and kinetic, not fixed in space and time; these parameters also led to a direct and clear spatial feeling. We will see below how quite this spatial feeling has shaped the Acropolis of Athens.

In *Timaeus*, Plato (c. 428 - 348 B.C.) conceived of vision as a metaphysical process, which transforms humans into transmitters of light. Vision takes place, writes Plato, when rays of the eyes' inner fire meet the object towards which they are directed, when, that is, the object is ignited by a momentary gust of the eyes. Matter is transformed into internal spirit. Fiery rays inscribe mental images assisted by the soul. Following a long line of Greek thinkers, mathematician Euclid (c. 325 - 270 B.C.) adopts this endogenous origin of light hypothesis. This notion, later embraced by the Roman architect Vitruvius, is a cultural perseverance of both the ancient Greek and the Roman world. Euclid's field of vision is limited by the flaming visual "cone" which is topped by the eyes and based on the specific object observed. The gaze devotes itself to the seen object by removing collateral objects from pivotal attention. Recent investigations into brain functions propel ontological association between the brain and the object of observation.

Herein lies a contradiction in Doxiadis's theory; for all his belief in the potential of Greek antiquity towards a civilized collective and personal urban life, his hypothesis partly perceived monumental ancient Greek complexes through the eyes of a modern subject. Specifically, in the use of a spherical coordinate system, he was preceded by Descartes. In the Cartesian system, the position of any point in space can be specified by its angular direction and its distance from the observer's eye. Descartes reduced all of space perception to the problem of determining the distance from the eye of a point in space. He wrote: "As to the manner in which we see the size and shape of objects, I need not say anything in particular, inasmuch as it is all included in the manner in which we see the distance and the angular direction of their parts" [cited in 36, p. 2]. Also, Doxiadis's system evokes systematic Renaissance one-point perspective which pursues a linear register of the subject's vision [30, pp. 200–291; 27]. Perspective enforces the freezing of pictorial time and the establishment of a fixed relationship between subject and object of vision. This leads to visual control and the concomitant cultivation of a hegemonic visual ideology of the conquering powerful subject [26, p. 113; 19], which differs radically from Plato's vision and Euclid's Optics. Further, as suggested above, antiquity avoided person-focused, systematic perspective, which reached its apotheosis in Versailles, whereby everything is in its strictly intended place and controllable by the monarch's gaze. Stress on the individual observer in Doxiadis presupposes a distinction between subject and object of vision that was absent in the ancient way of looking [see also 40, pp. 268–271].

#### The Acropolis plateau: Divergent site interpretations

The Acropolis layout has concerned generations of modern architects. In 1845, the Prixde-Rome French architect Alexis Paccard stated that there was never "a general aesthetic arrangement either to relate the buildings together, or to arrive in a worthy manner to the different levels on which the temples are built" [11, p. 155]<sup>11</sup> In 1849, the Scottish James Fergusson (1808–1886) stressed the asymmetry and lack of parallelism in the Periclean Acropolis. French Auguste Choisy (1841–1909) was the first to discern, twenty years later, in 1865, that there is a purposeful arrangement of the Acropolis temples amounting to an ingenious balancing of asymmetrical masses resulting in "une dissymétrie géométrique" (Ill. 102a) [4, p. 415]. Choisy argued that the architecture of the Parthenon and the site design of the Periclean Acropolis are the greatest of architectural achievements [9; 11]. Architect and archaeologist Francis Cranmer Penrose (1817–1903) noted that absence of parallelism obviates the dry uniformity of too many parallel lines while producing exquisite varieties of light and shade.

But Choisy went further than these commentators by explaining how order prevailed over apparent disorder<sup>12</sup> on the Acropolis plateau. He suggested that a carefully arranged sequence of scenes was at work, in which the theme of victory over the Persians was repeatedly celebrated by Golden Age Athenians. Each scene is revealed suddenly and fully (the latter to the extent that votive offerings allowed this to be the case, it should be remembered); asymmetry is balanced; approach is diagonal; platforms are harmoniously used; memory of what is already seen forms part of the composition. For instance, the Propylaea complex represents a balanced asymmetry formed by a majestic central portico with two unequal wings, the larger, Pinakotheke, to the left, and to the right a truncated wing topped by the Temple of Athena Nike<sup>13</sup>. Raised upon a high platform and obliquely positioned, this diminutive temple, which celebrated Greek victory over the Persians, was, and remains, particularly prominent<sup>14</sup>. An extraordinary visual sensitivity underlies a building like the Parthenon. There are practically no straight lines, only imperceptible curvatures, and no orthogonal angles, even though many kinds of arithmetic analogies were applied.

In his turn, Le Corbusier sensed the asymmetrical composition of the Acropolis. Realizing that the bird's eye view of a drawing board is not how axes are experienced on the spot [10, p. 100], he advanced Choisy's interpretation by reading the plateau within the natural topography of the Attic plane according to a visitor's movement, *la promenade architecturale*. Further, he stressed the emotional aspects of the site, the compensatory role of opposites, and the sequence of spaces composing the architectural promenade — the picturesque principles of Greek composition. Inspired by the Acropolis as lesson in creating rhythm from architectural masses, he classified architecture as dead or living by the extent to which sequential movement is ignored or applied [10, pp. 112–14]. He argued that illusory rectangulations provided rich views with subtle effect. The asymmetric masses of the buildings create an intense rhythm<sup>15</sup>.

<sup>&</sup>lt;sup>11</sup> Choisy visited the Acropolis as a 24-year old engineering student in 1865.

<sup>&</sup>lt;sup>12</sup> The Acropolis was rebuilt following destruction by the Persians. Choisy first presented his analysis in his paper "Note on the Asymmetrical Curvature of the Steps along the Western Side of the Platform of the Parthenon" and then in his *Histoire de l'Architecture* [4] as part of a broader discussion of Greek architecture, which he entitled "The Picturesque in Greek Art: Asymmetrical Parts, the Ponderation of Masses". Asymmetries of the Propylaea and of the Erechtheion were now widely understood as following the picturesque principle. It accrues that by this principle Choisy meant taking discerning freedoms to make architecture come alive, as were the oblique view and many visual "corrections" [see also 25].

<sup>&</sup>lt;sup>13</sup> Ponderation, namely visual balance, a term Choisy borrowed from Viollet le Duc, is associated with the most original variety of details [11, p. 157].

<sup>&</sup>lt;sup>14</sup> For further analysis, see [10, pp. 97–102].

<sup>&</sup>lt;sup>15</sup> The spectacle is massive, elastic, edgy, and overwhelmingly dominant in sharpness. The apparent clutter of the floor plan cannot but laugh at the uninitiated. The balance is not miserable; it is determined by the famous landscape that stretches from Piraeus to Penteli. The design has been conceived for a distant eye: The

Temples on the Acropolis subordinated the surrounding landscape to the composition. Thus, from all ends of the horizon, thought is unified. That is why no other architectural works have achieved this greatness. The Doric here reached... the highest region of the spirit: austerity<sup>16</sup>.

Le Corbusier stressed the unevenness of the Acropolis rock natural topography, which undermines the Doxiadis theory. Erechtheion, for instance, built with its own precinct, unfolds on different levels. Besides, people could enter the sanctuary through either the central or the lateral gates of the Propylaea. Then, there were precincts within the precinct, so visual contact with the main temples from the Propylaea varied. There are strong visual counter-movements and axes at work on the Acropolis Rock [25; 26]. The Parthenon, this stone vessel, is constantly ready to sail according to modern painter Giorgio de Chirico. The great temple floats above land and sea and vet is deeply rooted. It is not just a feeling of majestic freedom stimulated by the conspicuous statue of Athena Promachos and the temples of the Acropolis. It is also the ingenuous majesty of the Propylaea itself, admired in its own time, but reduced in Doxiadis's theory to a simple vantage point<sup>17</sup> (Ill. 102b). Doxiadis's "holistic" explanation and geometric determinism were criticized, especially by American archaeologists in the 1950s, who claimed that ancient terraces, precinct walls and dedicatory statues were omitted [38]. Doxiadis's account was also criticized by Greek aesthetician Panagiotis Michelis who found it mechanistic<sup>18</sup>. As for sanctuary research in general, archaeologists are now looking into many additional symbolic and practical factors, including astronomical alignments in ancient Greek sanctuaries in Sicily [1].

Ironically, doubts or the need for moderations vis a vis the Doxiadis theory were shared by both him and Pikionis, as can be surmised. Pikionis briefly followed western modernism in the 1930s; soon, possibly dejected by the War and the effects of technological civilization, he turned towards a masterful and yet frugal architecture deeply rooted in tradition, both Greek and global, as well as in modern art<sup>19</sup>. The experimental outlook in his famous Acropolis land-scape design is not perspectival but cubist. Considered a critical regionalist by architectural historians like Kenneth Frampton, he introduced multiple perspectives, time as the fourth dimension, plus a deep veneration for the *genius loci*, the spirit of place (Ill. 103) [for analysis, see 25; 26].

On the other hand, spatial relations were never a purely geometric or aesthetic exercise to Doxiadis. He dreamt of *ecumenopolis*, the global urban system built for human benefit, freedom, safety and happiness, not for human slavery and extinction [7]. One of his initial ideas was to develop a theory of urban space where importance lay in the relative, not abso-

Acropolis on its rock and on the walls that oppose it is, as you look at it from a distance, monolithic. Its buildings are gathered in the escapes of its multiple levels [23].

<sup>&</sup>lt;sup>16</sup> [23]. Le Corbusier's response to the Parthenon recalls the following definition of sublimity: "Issuing from the depths of nature, emanating from the divine, the sublime is absolute, imperishable. ... The sublime is like a sudden glimpse of infinity". This outlook experiences the Parthenon as an aesthetic icon, as a creation so perfect that it transcends human limitations [9].

<sup>&</sup>lt;sup>17</sup> Demosthenes in his speech *Against Androtion* describes the victors of Salamis as "the men who from the spoils of the barbarians built the Parthenon and Propylaea, and decorated the other temples, things in which we all take a natural pride" [42]. He thus equated the Parthenon and the Propylaea in significance and associated them with the heroic past. Aeschines, Demosthenes's political rival, also lauded the Propylaea from the Pnyx. He invited the demos to gaze at it and remember the battle of Salamis, as well as the tombs and trophies of ancestors [42].

<sup>&</sup>lt;sup>18</sup> Choisy's account was rejected by Doxiadis but supported by Michelis. See [13, p. 195].

<sup>&</sup>lt;sup>19</sup> His Lycabettus project is relevant.

lute positions of objects [22, p. 29]. He often emphasized the importance of the links between space and movement in his texts. This also associated him with space-time relations, which concerned contemporary socio-economic geography, among other disciplines ([22, p. 28] mentions geographer Torsten Hägerstrand).

### The Doxiadis legacy: Planning as global—scale experimental modernism

Research on ancient Greek cities was conducted by the Athens Center of Ecistics under the joint direction of Doxiadis and historian Arnold Toynbee, involving an excellent group of Greek and foreign researchers. Pursuing schemes of ideal street patterns, Doxiadis later turned towards rectilinear grids. His theory inspired theoreticians like Vincent Scully, who accounted for the importance of the surrounding landscape in the formation of Greek sanctuaries [11].

Studies into ancient urban planning shaped the design of Aspra Spitia in Greece as well as Islamabad in Pakistan. Doxiadis is the "father" of Islamabad for which he provided the original master plan, still followed today; his company went on to construct the first residential neighborhoods at a time when the Islamic facet of national identity appeared compatible with aspirations of modernization and the country became a poster child for global development<sup>20</sup>. This city exemplified new possibilities of governance and of participation in global processes. Unlike even recent precedents, his project for Islamabad (Ill. 104) prioritized a centerless network of services designed to meet scientifically established needs of the local people and to honor the ancient Indus Valley civilization with its emphasis on community—minded population instead of the Muslim identity of the country –though the latter goal was rejected. The Korangi Project, a flagship development enterprise that followed the developmental logic of the period, was also planned and overseen by Doxiadis<sup>21</sup>.

His approach is acknowledged as simultaneously meticulous, thorough and altruistic, reversing priorities for capitals of "developing countries" established by the 1950s [6, pp. 1–30]. It exemplifies respect for human scale, democratic dignity, not always shared by the governments comprised among his clients, interdisciplinarity, plus an ecological attitude towards building, especially in regard to the use of local materials and traditional building methods. As such, it broke new ground concerning both the western outlook on post-1947 global development as well as local cultures of urban and political life. Some commentators argue that quality of life in Islamabad is attested by the satisfaction of local people and its attractiveness to the Pakistani population [15] and that the plan for Islamabad allows gradual expansion and growth without losing sight of the human scale in the urban space. Others complain about the inequality of resource distribution among Pakistani cities or Doxiadis's inability to anticipate squatter development that ensued decades after his planning<sup>22</sup>.

<sup>&</sup>lt;sup>20</sup> Doxiadis personally chose the location of the capital. He started advising on the location and planning of the new capital in 1955 when he submitted his first report. In March 1959, the president of Pakistan named Doxiadis adviser to the special commission on the location of the new capital. Doxiadis proposed a site he visited in the summer of 1959, which was finally approved, and which lies west of the Idaspis (now Jhelum) river where Alexander the Great defeated king Poros [15].

<sup>&</sup>lt;sup>21</sup> [6, pp. 1–30]. This plan involved the Ford Foundation and the United States International Cooperation Administration, the forerunner of USAID, as sources of finance, and attracted visitors and imitators from "developing countries" alike.

<sup>&</sup>lt;sup>22</sup> [14] and [21] respectively. Conversely, it is argued that deep distrust emerged among local functionaries whenever results turned out to be either too successful or not successful enough [6]. The issue here, name-

What is clear at this point is that Doxiadis's efforts to create ideal conditions for human settlements may have fallen victim to later explosive cultural, political and religious conflicts, to brewing post-colonial nationalisms or to subsequent evolutions; however, the immense experiment that his work represents remains a steady point of reference and an extremely valuable contribution to our current concerns<sup>23</sup>.

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ly the agents and definition of modernization and the culture-development junction, seen globally, however interesting, are outside the scope of this paper.

<sup>&</sup>lt;sup>23</sup> The interest Doxiadis showed in classical antiquity did not make him a sterile admirer. In a text "The Ancient Greek City and the City of the Present", he supported the view that the form of the ancient city was a skin that developed outwards [22, pp. 32–33].

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Title. Ancient Logos as Influence on Urban Planner Constantinos A. Doxiadis

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**Abstract**. The famous Greek architect and urban planner Konstantinos Doxiadis (1913–1975) was a 20<sup>th</sup> century spatial scientist with great vision and important contribution to spatial planning on various scales throughout the globe. Indicatively, in the 1960s he was the lead architect of Islamabad, the new capital of Pakistan. Gifted with sharp intelligence and with superb strategic talent, Doxiadis mobilized state-of-the-art technology to design new cities and whole areas, but also to contribute imaginatively to the advancement of knowledge during a period of postwar and postcolonial restructuring and of absolute trust in the positivist

promise of technology. As he said, "what human beings need is not utopia ('no place') but entopia ('in place') a real city which they can build, a place which satisfies the dreamer and is acceptable to the scientist, a place where the projections of the artist and the builder merge."

However, many of Doxiadis's other proposals did not materialize, due to unfavorable political and economic constraints. Doxiadis was also known as "the father of ekistics", which concerns the science of human settlements, including regional, city, plus community planning and dwelling design. The concept of ekistics not only encompasses all scales of human habitation, but also explores the archaeological and historical record of both great cities as well as of settlement patterns.

Doxiadis never succumbed to blind trust in science and technology, choosing instead to prioritize human values and vision, real as well as transcendental. Towards this stance, he was prepared by his education and constant references, moral, scientific, philosophical and literary, both ancient and contemporary. In this, he followed the lead of his distinguished mentor, architect Dimitris Pikionis, Professor at the School of Architecture in Athens. The subject of the present analysis is a critical look at the exact manner in which, on the one hand, modern art and architectural theory, and on the other, ancient thought and architecture, a major intellectual substratum, influenced Doxiadis's oeuvre, spatial conceptions, and deeply compassionate attitude. Recently, a fresh round of disagreement broke out in regard to the Acropolis, as a new concrete pathway across much of the site was deemed necessary to facilitate disabled visitors. This addition has been controversial, though the pathways are reversible, cushioned, not directly attached to the surface of the Sacred Rock, and approved by UNESCO. Critics argue that the Rock as a natural monument is devalued. Following the analysis here, a further point may be that the ensuing strong, two-dimensional linearity, which, starting from the Propylaea, frames the Periclean monuments, strengthens a visual manner that evokes Doxiadis's criticized proposal. But, as we suggested, Doxiadis duly distanced himself from it in later stages of his career, because it contravenes the ancient visual principles and spatial feeling.

**Keywords:** C. A. Doxiadis, architecture and urban planning, ancient logos as creative legacy, ancient vs modern visual perception, visual and spatial arrangement of ancient precincts, divergent interpretations of the Athenian Acropolis, ekistics, ecumenopolis, Islamabad, Doxiadis and global postcolonial development

**Название статьи**. Влияние античной философии на градостроительные решения Константиноса А. Доксиадиса

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Аннотация. Греческий архитектор Константинос Доксиадис (1913–1975) вошел в историю архитектуры XX в. как вдумчивый исследователь пространства, чьи наблюдения внесли огромный вклад в решение градостроительных проблем разного масштаба по всему миру. Показательно, что именно он в 1960-е гг. был главным архитектором Исламабада — новой столицы Пакистана. Доксиадис использовал самые передовые методы своего времени не только для проектирования целых городов и отдельных районов, но и для того, чтобы обогатить их образную составляющую в период послевоенной и постколониальной реструктуризации и позитивистской убеждённости во всемогуществе технологий. Он утверждал, что «человечеству нужны не «утопии» (отсутствие места), а «энтопии» (пребывание в месте) — реальный город, который можно построить, место, подходящее мечтателю и удовлетворяющее ученого». К. Доксиадис также известен как «отец экистики», концепция которой не просто охватывает все сферы жизни человека, но также исследует археологические и исторические свидетельства больших городов и структуру поселений. Своей погруженностью в проблемы современности и живым интересом к античности он следовал подходу своего учителя — архитектора Димитриса Пикиониса, профессора Архитектурной школы Афин.

Ключевые слова: К. А. Доксиадис, архитектура и градостроительство, античный логос как творческое наследие, античное и современное визуальное восприятие, визуальная и пространственная упорядоченность древних территорий, различные интерпретации афинского Акрополя, экистика, экуменополис, Исламамбад, Доксиадис и глобальное постколониальное развитие



Ill. 101. The Athenian Acropolis after 450 B.C.: Analysis by C. A. Doxiadis. Source: Creative Commons. Available at: https://mitparch.mitpress.mit. edu/pub/9wmtnuyc/ release/1



Ill. 102a. The Propylaea and Athena Promachos. Source: Elaborated from Auguste Choisy Histoire de l'Architecture, 1899



Ill. 104. Islamabad. Elaborated from The Doxiadis Archive. Available at: https:// www.doxiadis.org/ Downloads/Islamabad\_ project\_publ.pdf, p.6



Ill. 102b. The restored Propylaea on the Athenian Acropolis. Source: Wikipedia



lll. 103. An aspect of Dimitris Pikionis's most famous landscaping overlooking the Sacred Rock of the Athenian Acropolis. Source and ©: Argyro Loukaki, 2022